# THE DAWNING OF CREATION IN THE CENTRAL MEXICAN HIGHLANDS: INTERPRETING OLMEC STYLE SYMBOLISM AT THE FORMATIVE PERIOD SITES OF CHALCATZINGO, OXTOTITLÁN, AND JUXTLAHUACA

by

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#### **ABSTRACT**

By 900 BC, Middle Formative Olmec influence had projected into the central highlands of Mexico. This became clear with the 1930's discovery of Chalcatzingo and its monumental bas-reliefs created in the Olmec style (Guzman 1934). Additionally, Olmec style symbolism appeared in the modern state of Guerrero with outstanding examples likes the awesome architecture of Teopanticaunitlan and the cave paintings of Oxtotitlán and Juxtlahuaca (Donjuan 1994; Grove 1969; Gay 1967). This thesis will iconographically analyze the Olmec style symbolism of Chalcatzingo, Oxtotitlán, and Juxtlahuaca, which include bas-reliefs carved onto mountain tops and polychrome paintings executed within sanctums of mountain caves.

On the one hand, my hypothesis is that these periphery centers incorporate heartland symbolism and ideology to validate and link their elites to those of Olman. This symbolism is expressed through themes of rulership, and it relates to exchange networks between this highland region and the gulf coast heartland (Reilly 1990). At the same time, the symbolism displayed at the aforementioned sites can be linked thematically, which shows a unique socio-political fluoresce within this highland periphery. Thematically, the highland symbolism relates to greater Mesoamerican cosmology of a cyclical and shamanistic worldview where the duty of human society, through ritual and worship, is of maintaining harmony of the human world, the natural world, and the spiritual world. Specifically, the highland symbolism depicts a ritual intensification, or cult, unique to the highlands. This ritual intensification consists of sacred mountains as water shines that birth the winds and clouds of the rainy season, that empower shamanistic elites who travel through mountain caves of sky and earth, and that birth ancestral deities who emerge from the primordial caves at the Dawning of Creation.

#### I. INTRODUCTION

In this chapter, a brief introduction to the subject will be illustrated, which includes: (1) an overview of the cosmological focus of the thesis, (2) a description of the physical setting of focus, and (3) an introduction to Olmec art and archeology. In Chapter two, I provide a methodology for interpreting Olmec art that includes archaeological, art historical, and ethnographic schemas. Chapter three surveys previous archeological and iconographic studies of the Central Mexican highlands. In chapter four, the iconographic corpus of the thesis is outlined and analyzed in the structural method. Chapter five lays out the tableau of each site to illuminate ideological narratives. These sequences are compared to one another to reveal iconographic patterns, and these patterns are referenced to ethnographic studies. Chapter Six summarizes significant findings, and it provides broader implications and future research questions for Olmec studies.

## **Mesoamerican Cosmology of Mountains and Mountain Caves**

The ability to travel between worlds, between the living and dream world or the spirit and material world, is a theme within the practice of Shamanism. This *cosmic travel* allows a spiritually trained personage, in techniques of ecstasy as Mircea Eliade described, to contact the supernatural- the realm of spirits, ancestors, and forces of nature (Eliade 1964). For Mesoamerica, shamanism was central to life for over three thousand years- from the Formative Olmecs to the Post-Classic Aztecs (Freidel and Schele 1992: 45). This thesis analyzes the shamanistic art of the Olmec culture within sacred and 'Other-world' landscapes. That is, the iconographic corpus consists of monumental sculpture and polychrome mural paintings that are composed upon sacred mountain peaks and within mountain caves. Depicted upon the mountain summits, and depicted

within subterranean caves, are images of sacrifice and bloodletting, transformation of elites into were-jaguars, contact of ancestors and the supernatural, and mythical deities relating to wind, rain, and plant fertility. The sites focused upon are located within the central Mexican highlands and are called Chalcatzingo, Oxtotitlán, and Juxtlahuaca.

At the center of the shamanistic worldview of Mesoamerica is the *axis-mundi*the World Tree that connects the tri-leveled Cosmos of the watery underworld, the fertile
earth, and the celestial heavens (Reilly 1995: 38). Linda Schele (1995) illuminated the *axis-mundi* as the cave-mountain-tree complex. In particular, the cosmogram includes
two features: (1) a clefted volcano that sprouts a celestial tree, and (2) a cave at the
mountain's base that releases sacred waters (Headrick 2007: 30). Similarly, the Olmec
World Tree is typically shown as: (1) a crocodile whose tail sprouts maize, (2) a
sprouting maize plant or a trefoil headdress (Reilly 1996: 38), or (3) a mountain that rests
upon three stones and includes a cave at its base as well as a tree in its upper register
(Headrick 2007: 28) (Figure 01).

For the ancient Maya, this mountain-tree was conceived of as the symbol of creation itself. The clefted mountain was the place First-Father, the Maize God, resurrected from the underworld to raise the World Tree and separate sky from Earth (Freidel et al. 1993: 132, 138-139). For the Olmec, the same image was discovered between the clefted peaks of San Martín Pajapan, a volcano located in the Tuxtla mountain range directly west of the Olmec heartland (Blom and La Farge 1926-1927: 45-46). At the center of the saddle between clefted peaks, an Olmec stone monument (Mon. 1) showed an Olmec ruler in the act of raising the World Tree (represented by a staff of maize held by the figure) (Freidel et al. 1993: 132) (Figure 02). Elite rulers at the Middle

Formative Olmec site of La Venta erected an earthen pyramid to represent the same mythical mountain of creation. At its base, there are four monumental stelae, Monuments 25/26, 27, 88, and 89, which depict images of the World Tree in the form of the Maize God (Freidel et al.1993: 134; Taube 2000: 310; Taube 1996a). The stone tree stelae form the Mesoamerican quincunx, which identify the earthen pyramid as the central mountain-tree axis of the world (Reilly 1999: 19). By the Classic Period, the Maya inherited this sacred cosmovision and erected pyramids to represent the same primordial mountain. The mountain represented the giver of life (i.e. maize), the spring of water, and the source of creation of humans beings. They called this mountain *Yax-Hal-Witz*, the 'First True Mountain' (Freidel et al. 1993: 138-139; Reilly 1999: 19).

The cave at the base of this primordial mountain was the mountain womb and spring of sacred water. At Teotihuacan, a mural of the Tepantitla apartment shows the mountain womb as a 'Great Goddess' whose vaginal cave births the waters that cascade into terraced gardens below (Headrick 2007: 29) (Figure 3). Indeed, Teotihuacanos conceived of mountains as large ollas of water (Headrick 2007: 49). Likewise, the Maya believed that caves within mountains were houses of rain gods and ancestral spirits (Moyes 2005: 286). Mayan myth, for instance, tells of precious maize being located at the heart of the cleft mountain in a pool of water (Freidel et al. 1993: 139, Vogt and Stuart 2005: 175-176). Archaeologically, this image appears around 100 B.C at the site of San Bartolo. Within chamber caverns of the San Bartolo pyramid, ancient Mayan artists painted the birth of the Cosmos with images of the young Maize God emerging in resurrection from the underworld (Pringle 2008: 10-11, 27). Therefore, mountain caves

(and caverns of pyramids) were viewed by the ancient Maya as mythical places that birth precious water and precious maize.

Mesoamerican ritualism associated with the watery cave at the base of the primordial mountain can be traced back to the Early Formative Period at the shrine sites of El Manatí and La Merced. The El Manatí site included offerings of anthropomorphic busks of wood, sacrificial stone knives, green stone celts, rubber balls, and bones of infants that were likely sacrificed (Ortiz and Rodríguez 2000). The La Merced site, located directly nearby, included offerings of over 600 lime stone celts, polished mirrors of hematite or pyrite, and two green stone celts that featured Olmec-style baby faces and clefted heads (Rodríguez M. and Delgado C. 1997; Diehl 2004: 44) The offerings of the two sites were placed within a spring that forms a bog at the base of cerro El Manatí (Ortiz and Rodríguez 2000). The sites are located near the site of San Lorenzo, and the offerings were dated to the Early Formative Period, from 1600 BC to 1200 BC (Kerpel 2010: 12). Interestingly, the area around cerro El Manatí floods during the rainy season, which makes it resemble an island like volcano that rises out of the riverine environment of the local area (Figure 4). Hence, as the clouds gather and bring rains, the cerro emerges to resemble a primordial volcano that connects the watery bog with the rainy heavens above. Included at the mountain's base was the source of virgin water in the form of a spring. In addition, the clefted green stone celts of La Merced, symbols of maize (Taube 2000), evoke the Mayan myth of precious maize originating in a pool of water at the heart of the first mountain (see Freidel et al. 1993: 139, Vogt and Stuart 2005: 175-176). In this way, the offerings revere cerro El Manatí as the primordial mountain-womb of life- i.e. the womb of life- giving waters and precious maize.

In Mayan cosmology, caves are portals to the supernatural realm and the three levels of the *axis-mundi*. Caves were the abode of gods, creation events, and the earth owners that provide clouds, lightning, and wind for the natural world (Vogt and Stuart 2005: 179-180). The Tzotzil *municipio* of Chenalho, for instance, identify mountain caves as the abode of the Rain God, *Anhel*, who is described as the rain god, the lord of the mountains, the corn-giver, the master of beasts, and god of the waters (Vogt and Stuart 2005:169, Guiteras-Holmes 1994: 60-62).

In similar fashion, Robert L. Williams (2009: 87) identifies caves as supernatural axes that transcend the planes of existence for both the Formative Olmec and the Post-Classic Mixtecs of Oaxaca. Williams identifies three associations of caves that are shared between the Olmec and Mixtec: (1) caves are associated with fertility rituals involving the control of natural weather phenomena, (2) caves are associated with creation events and supernatural mythologies, and (3) caves are used as empowerment rituals by elite rulers (Williams 2009: 86). Hence, caves were highways of the 'Other' realm that were occupied by supernatural beings and ancestors. Mixtec elites, for example, are depicted in codices interacting with mummy bundles of ancestors as a form of prognostication (Headrick 2007:51; Williams 2009: 154). Often the Mixtec bundles are placed in tombs or in caves (Headrick 2007: 62), and this seems to be a widespread Mesoamerican practice. For example, the Huichol placed ancestral bundles in caves (Burgoa 1989: 372; Lumholtz 1902; Pohl 1994: 75), the Aztecs frequently associate caves with ancestors (Heyden 1981:15), and Teotihuacanos may have placed mortuary bundles within the cave below the Pyramid of the Sun (Headrick 2007: 62). In like fashion, the shamanistic ability of Olmec rulers was shown through jaguar nahualism, i.e. human to animal

transformation. This allowed an Olmec ruler to safely travel through 'Other' realms like caves and thereby contact ancestors and deities of rain (Kappelman and Reilly 2001; Gutiérrez and Pye 2010).

### The Central Mexican Highlands of Morelos and Guerrero

Gutiérrez and Pye (2010: 46) define the Central Mexican highland region as "the southern half of the State of Mexico, all of Morelos, central and eastern Guerrero, as well as western Puebla and Oaxaca." This highland region features a dynamic topography with volcanic mountain ranges, mountain caves, and river valleys. As David Grove put it, it resembles "crumpled paper cast on a map" (Grove 1987: 19). In ancient times the region would have been traversed, by foot or canoe, through interconnected mountain passes, ridgelines, and river valleys. Contrasting the tropical climate of the gulf coast lowlands, this highland region is generally more cold, and it features a more dualistic seasonality marked by wet summer months and dry winter months (Grove 1984).

The site of Chalcatzingo is located in Eastern Morelos within the Amatzinac river valley. This eastern region of the state is the more arid with less agricultural potential (Grove 1987). However, the site functioned economically as a "gateway city," as it is founded within a major mountain pass that connects to the Basin of Mexico, the gulf heartland, southern Puebla, Oaxaca, and Guerrero (Grove 1984: 163). It also lies at the base of two prominent, island mountains that tower above a flat valley to form the sacred cleft (Figure 5). The mountainous region of Guerrero lies to the south and closer to the Pacific between the Basin of Mexico and the modern state of Oaxaca (Figure 6). Michael Coe (1968: 102-103) (Figure 7) hypothesized that the Olmec influence of Guerrero related to highland sources of serpentine and jade, which are located along the Balsas

River- a major river that migrates south west from Puebla and passes through Guerrero to the Pacific Ocean. For instance, the famous Formative site of Teopantecuanitlan and its monumental sculpture is founded along the Rio Balsas drainage in central Guerrero (DonJuan 2010). The sites of Oxtotitlán and Juxtlahuaca are located approximately 30 km from one another and approximately 75 km south of Teopantecuanitlan. They are located along the Rio Atentli and the Rio Blanco. The Rio Atentli, which flows next to Oxtotitlán, connects with the Balsas river and Teopantecuanitlan to the north (Figure 8)

Culturally, the Central Mexican region during the Formative Period featured exchange networks between highland centers of Morelos, Guerrero, Oaxaca, Puebla, and lowland centers of the gulf coast (Grove 1984: 163, Reilly 1994b, Don Juan 2010). In the Early Formative Period, for example, Olmec artifacts in the San Lorenzo style were discovered at the Central Mexican sites of Tlatilco, Tlapacoya, Coapexco, and Las Bocas (Covarrubias 1943: 41; Diehl 2004: 160; Coe 1968: 94). By the Middle Formative Period, population increased all across Mesoamerica, which led to an expansion of interaction networks from an increased demand for highland resources like greenstone and cacao (Grove 2010: 71). This interaction sphere included Chalcatzingo in Morelos, Teopantecuanitlan and Zazacatla in Guerrero, and La Venta in the gulf heartland (Reilly 1994, Donjuan 2010). Overall, this settlement pattern is not unique. Instead, it defines the development of Mesoamerican civilization, which thrived through the exchange of materials and ideas due to its extreme variation in ecology and geography.

Ideologically, Grove defines the Olmec style monumental architecture of Chalcatzingo as alliances commemorated in art (Grove 1984). Similarly, Reilly (1995: 28) explains the widespread appearance of Olmec inspired art throughout Formative

Mesoamerica as, firstly, due to long distance trade networks and interaction spheres to redistribute lowland and highland goods. Secondly, the ideological purpose of the exchange was displayed on sacred objects, like greenstone objects in particular. As ritual paraphernalia, these objects displayed an iconographic symbol system that functioned in Formative Period rituals to validate emerging elites (e.g. Grove 1993; Reilly 1995, 2005a). On the other hand, Gutiérrez and Pye (2010: 46) outline a more particular ritualism, or cult, that may stem from the mountainous region of Central Mexico. This highland symbolism included a great network of mountain top shrines where rituals of human sacrifice were performed to venerate gods of rain and wind (see Duran 1984: 166). The network of fertility shrines also included mountain cave sites, which in Guerrero included the Formative sites of Oxtotitlán and Juxtlahuaca (Gutiérrez and Pye 2010).

# **Olmec Art and Archeology**

Renowned for their expert carving of jade and famed for their monumental sculpture, the Olmec legacy is of artistic genius and beauty as well as monumental and expressive power (Berrin and Fields 2010). As engineers, the Olmecs transported colossal stone heads over 60 kilometers from the Tuxta mountains to the major center of San Lorenzo by the Early Formative Period (Heizer 1966; Berrin and Fields 2010: 19). In sculpture, Olmecs carved monumental stone trees, called stelae, that were placed near their earthen pyramids as commemorative monuments (Ladrón de Guevara 2010: 27). Out of basalt, they transformed igneous boulders into awe inspiring, colossal portrait heads and massive, royal thrones. Their life-sized sculptures, which usually depicted elites, were carved in the round with a naturalistic style that would rival sculptures of the

ancient Greeks. They also transformed blue-green jadeite into hand-held objects that included surrealistic celts, jaguar faced masks, and elaborate figurines. These smaller, green stone objects were executed to show monumentality, and, ritualistically, they symbolized sacred and elite authority (Berrin and Fields 2010:19). Out of fine clays, Olmec hands molded ceramic vessels with images of zoomorphic creatures, laughing babies, and acrobatic figures. The Olmecs were Mesoamerica's first carvers of monumental stone sculpture (Guernsey and Clark 2010; Grove 2010; Berrin and Fields 2010: 19), and they defined Mesoamerican civilization as cultures that thrived in the arts.

The term *Olmec*, on the one hand, refers to an archeological culture whose home land resides in the tropical gulf-coast lowlands of present-day Veracruz and Tobasco, which developed between 1800 and 400 BC (Berrin and Fields 2010:19; Pohorilenko 2008; Grove 2010; Diehl 1989; Reilly 1994). In addition, the term also refers to the widespread art style of the period that becomes associated with exchange networks during the Formative Period (Reilly 1995: 28). The first to encounter Olmec remains was an explorer named Jose Maria Melgar, who discovered a stone head in 1862 that displayed a unique style never unearthed in Mesoamerica (Melgar 1869; Reilly 1987:6; Smith 2017). The head is now known as Monument A at Tres Zapotes, and colossal heads continue to fascinate tourists and scholar alike. The culture was given the name Olmec during a Tulane expedition in 1925, which was headed by Franz Blom and Oliver La Farge (Blom and LaFarge 1927; Reilly 1987; Smith 2017). The monumental scale of the Formative deposits they witnessed led the early explorers to ascribe the remains to the Classic Maya (Coe 1968: 40). In the 1940's, however, Matthew Stirling would unveil the Olmec in his survey of La Venta, Tres Zapotes, and Cerro de las Mesas (Stirling 1940a,

1940b, 1946, 1947; Smith 2017). Stirling first hypothesized that the Olmec predated the Maya and could therefore be understood as the mother culture of Mesoamerican civilization (Reilly 1987:16).

Today, many scholars continue to argue that the Olmec represent the Mother Culture of Mesoamerican civilization (Blomster 2005; Diehl and Coe 1995; Clark 1997; Hammond 1989). However, other scholars view the Olmecs as a sibling to other developing Mesoamerican civilizations of the Formative Period (e.g. Demarest 1989; Flannery and Marcus 2000; Graham 1989; Grove 1981, 1989, 1997; Reilly 1995, 2005a). As previously mentioned, Reilly (1995: 29) defines the widespread art style of the Olmecs as a shared ceremonial complex that becomes associated with long-distance trade networks. Economically, the trade would have exchanged low land goods like marine shells and tropical bird feathers for highland goods like green stones and obsidian (Reilly 1995: 28). Ideologically, the ceremonial complex displayed onto sacred objects an iconographic symbol system that functioned in shamanic rituals to validate emerging elites across Mesoamerica (Grove 1993: 103; Reilly 2005a: 31, 36). Therefore, the interaction sphere is defined as economic trade that is combined with ideological ritualism of elites (Reilly 1995).

Reilly (1995: 30) further defines the artwork of the Olmecs, as well as the Middle Formative Ceremonial Complex (Reilly 1990), as ritual objects that functioned within an ideological system of institutional shamanism. Like the Classic Maya, Olmec elites validated their right to rule through shamanic authority (Reilly 1995: 30; Schele and Freidel 1990; Freidel et al. 1993). For instance, shamanic themes common throughout Olmec art include (1) a cosmology of a multi-leveled universe centered by an *axis-mundi*,

(2) shamanic trance and Cosmic flight, (3) animal spirit companions, and (4) shamanic costumes that function as a cosmographic map (Reilly 1995: 30; Drury 1989). As shamanic costume, the function of Olmec style objects was "to provide, through the symbolic information they bore, visual validation for the political authority of the rulers who manipulated them in these rituals" (Reilly 1995: 30).

The first scholar to structurally analyze Olmec art and define its formal qualities was art historian Miguel Covarrubias (Covarrubias 1946). He recognized that the Olmec style centered on the human being, who were displayed as powerful, short, and squat individuals much like the physical builds of southern Indians of Mexico (Covarrubias 1957). Michael Coe (1968a) analyzed the Las Limas figure and developed three propositions for Olmec religion and iconography: (1) Olmec worshiped a multiplicity of gods, (2) Olmec deities were prototypes for later Mesoamerican groups, and (3) Olmec religion was based on dualism (Joralemon 1976: 33). Another key figure was Peter David Joralemon who isolated the primary zoomorphic supernatural of the Olmec- the Olmec Dragon (Joralemon 1976). Joralemon (1976: 33) displayed that Olmec religious art could display supernaturals in full, frontal, or profile views as well as in pars-pro-toto variants (parts equal the whole). Kent Reilly (1990) provided for Olmec art the principle of multiple place perspective, i.e. multiple horizons, which places objects in threedimensional orientation to resemble sections of paper that are cut-out and folded-up (e.g. see Figure 01).

Following the work of Linda Schele on the Classic Maya, Kent Reilly helped define Olmec cosmology, which was "fueled by shamanic magic... [in] a living and interconnected universe (Reilly 1995: 33). Their cosmology uses myth and magic in

rituals to explain natural phenomena- like, for example the cycle of the seasons, the growth of maize, and the motion of the heavens (Joralemon 1976; Reilly 1994a). In their art, the metaphors for such phenomena took the form of supernatural zoomorphs (Reilly 2005: 34; Joralemon 1976). For instance, the Olmec model for the sky realm "was the image of an avian supernatural whose cruelly-hooked beak identified his natural origin as the raptorial birds" (Reilly 1987: 85-86). The watery underworld realm was symbolized by fish, amphibians, and shark supernaturals, and it was entered through mountain clefts, caves, and ritual spaces (Reilly 1989: 129-130). At the center of the Cosmos, within the middle, terrestrial realm, was a ruler whose performance in rituals balanced the dualistic Cosmos and oppositions of nature (Reilly 1991).

In sum, the Olmec ideology blended the ancient, shamanic myths with a religious and political ideology that centered their rulers as mediators of the supernatural. Their Cosmos was dualistic: it was a universe where the source of life stems from the mediator of the opposites of nature. The rituals performed by Olmec rulers not only functioned to balance this dualistic Cosmos. They also validated the ruler by his shamanistic ability to contact the supernatural-the realm of supernatural dragons, ancestors, and forces of nature. The magical substance to create a portal to this 'Otherworld' was blood, as it was for the ancient Maya and their kings that continued the rituals (Schele and Miller 1986: Stuart 1988; Reilly 1995). And like the Maya, the source of life stemmed from a reciprocal offerings between the zoomorphic, supernatural dragons and the blood of kings.

#### II. METHODS FOR INTERPRETING OLMEC STYLE ART

The method used for this thesis is three-fold: it utilizes a direct historical approach to reference later Mesoamerican cultures, it incorporates archaeological data and archaeological trade models to provide greater context, and it follows an iconographic methodology. Overall, it incorporates archaeological, art historical, and ethnographic methods in order to provide ample amounts of contextual data for more robust interpretations. Major theoretical models and concepts that will be discussed in what follows include: (1) up streaming and the concept of cultural continuity, (2) the Middle Formative Ceremonial Complex and the paradigm of the periphery, and (3) iconographic frameworks provided by Irwin Panofsky and Peter David Joralemon.

# **Upstreaming and the Concept of Cultural Continuity**

The concept of 'upstreaming' is an ethnographic approach developed by William N. Fenton that uses known information about a more recent culture to trace back to a more distant, ancestral group (Fenton 1949: 236; 1952: 333). His method relies upon two premises: central aspects of culture remain relatively stable across time and upstreaming works from more recent and more familiar sources to more unknown and distant ones (Fenton 1952: 335). Essentially, his approach is a direct historical approach that works from the known back in time to the unknown. The direct historical approach was first utilized in New World archaeology by Nels Nelson in the American southwest, John Swanton in the American southeast, and William Strong and Waldo Wedel in the American plains (Fenton 1952: 333, Nelson 1914: 9, Swanton & Dixon 1914, Strong 1940, Wedel 1938).

Olmec scholars have utilized the concept of upstreaming to use anthropological data from descendent cultures, like the Classic Maya for example, to trace back to and compare with archaeological data of the Olmecs. There are numerous supporters of this method, which include Miguel Covarrubias (1946, 1957), Michael Coe (1968, 1972, 1977), Peter David Joralemon (1976), Virginia Fields (1989, 1991), Linda Schele (1993), David Freidel et al (1993), and F. Kent Reilly III (1994a) (see Smith 2017). The upstreaming model in Olmec studies follows the continuity hypothesis of Miguel Covarrubias, which proposed that Olmec gods were prototypes of later Mesoamerican deities (Covarrubias 1957, Smith 2017). Peter David Joralemon (1976: 58-59) argues that Covarrubias' continuity hypothesis is more productive than regional models of prehistoric Mexican religious history. He sums up the continuity theory, as follows:

"It is my conviction that there is a basic religious system common to all Mesoamerican peoples. This system took shape long before it was given expression in Olmec art and survived long after the Spanish conquered the New World's major political and religious centers. Like all mythological systems it presents an interpretation of reality. On the one hand, it explains the origins and organization of the world and the birth of the gods and creation of mankind. On the other hand, it establishes the relationship between the gods and man, between man and his fellows, and between man and the natural world. This Mesoamerican weltanschauung exists at the level of deep structure. Although its occurrence in time and space makes it subject to the usual historical processes of innovation and change, its systematic nature allows it to remain relatively stable."

(Joraelemon 1976: 58-59)

As Joralemon noted, Mesoamerica is defined by its shared traditions and cultural continuity. The term "Mesoamerica" was initially defined not only as a geographic region but also as a cultural region limited by aboriginal farming (Paul Kirchhoff 1943).

Culturally, the term has expanded to relate to the continued traditions of Pre-Columbian peoples who "shared a 260 day calendar, religious beliefs including definitions of gods

and bloodletting as the central act of piety, the cultivation of maize, the use of cacoa as a drink and as money, a ballgame played with a rubber ball, screen-fold books, pyramids and plazas, and a sense of common cultural identity" (Schele and Freidel 1990: 38).

For the Olmec, the most amount of evidence of cultural continuity has been established through upstreaming from the Classic Maya. Michael Coe (1977) established several cultural loans from Olmec to Maya pertaining to: warfare, religious deities, bloodletting and other sacred paraphernalia, the ball game, and iconographic symbol systems (Smith 2017). Linguistically, the Maya incorporated numerous Mixe-Zoquean loan words that were derived from the greater Ishmian region occupied by the Olmecs (Campbell & Kaufman 1976, Wichman et al. 2008). Iconographically, the Mayans participated in the pan Mesoamerican "Middle Formative Ceremonial Complex," which consisted of shared concepts of cosmology, political ideology, and an ideological focus on maize (Reilly 2005a). Essentially, the complex was associated with trade networks of greenstone objects that symbolically validated emerging elites throughout Formative period Mesoamerica (Reilly 2005a). The iconographic system utilized to charter these formative rulers continued through Classic Maya ideology and kingship, which is considered one of the strongest examples of continuity between the Maya and cultures of Olman (e.g., Fields 1991, Freidel et al. 1993: 132-143, Grove 1999, Reilly 1991, Reilly 2005a, b, Schele and Miller 1986, Taube 1996, 2005).

Linda Schele and Mary Miller (1986) introduced the concept that the Classic Mayan institution of divine kinship could be traced back into the Late Preclassic period (see Freidel 2008: 191-192). Students of Schele's, including F. Kent Reilly III and Virginia Fields further traced divine kinship back into the Middle Formative period

through the Olmec culture (Reilly 1991, 2005; Fields 1986, 1989, 1991). Specifically, Fields (1989) showed that the Maya borrowed formative period iconographic elements, like the trefoil shaped headdress that represented a sprouting maize seed. This trefoil headdress was used to validate rulership for both the Maya and the Olmec elites (Fields 1989). By comparing iconographic elements, Reilly (1991) demonstrated that Olmec and Mayan rulers validated their right to rule by symbolically controlling the power of nature in ritualistic fashion. Lastly, Karl Taube (1996a, 2005) postulated that the Middle Formative Olmec maize god can be understood as a template for the Late Preclassic Maya maize god, which was personified by Olmec and Mayan rulers.

Other examples of continuity from the Olmec to the Maya include similarities in a shamanistic worldview and similarities in site orientation and architecture. For example, within the Mayan shamanistic cosmology was the centering of sites, homes, agricultural fields, and rulers themselves, and this ideology can be traced back to the Olmec culture and the site of La Venta (David Freidel et al. 1993: 132, 137). Moreover, the north-south orientation of sites and architecture is shared by the Olmec and Classic Maya (Grove 1999; Hansen 2005).

George Kubler (1967: 13) noted that the iconography of Teotihuacan was more similar to Olmec art than any other Late Classic expression. Like the Olmec and Maya, the iconography of Teotihuacan shares a fundamental tradition of Mesoamerica where the central World Tree can be assumed by the ruler as a representation of the tri-leveled Cosmos (Headrick 2007: 28, Schele 1995). Other scholars have established the tradition of nahualism, i.e. human animal transformations, which continues from the Olmecs all the way to the Aztecs (e.g. Headrick 2007: 78, Gutiérrez and Pye 2010).

## Middle Formative Ceremonial Complex / Paradigm of the Periphery

Due to the shared political ideologies, religious belief systems, farming practices, and technological aspects of Mesoamerican civilizations from the Formative Olmec to the Post-Classic Aztec, scholars have often described the Olmec as a "mother culture" of Mesoamerica (e.g. Caso 1942: 46, Stirling 1968: 6). Obviously, this notion follows Miguel Covarrubias' cultural continuity theory previously mentioned. In contrast, other scholars argue that the Early and Middle Formative period is not defined solely through Olmec diffusion of materials and ideas, but rather through a continuing social evolution throughout all of Mesoamerica (e.g. Grove 1993, Reilly 1995, 2005a). Archaeologically, this "social evolution" is most clearly visible in the increased social focus on elitism in which political power is maintained and ideologically expressed through access and the exchange of greenstone regalia (Grove 1993: 103; Reilly 2005a: 31, 36).

This exchange of greenstone regalia between emerging elites of Formative Mesoamerica has been termed the "Middle Formative Ceremonial Complex" (Reilly 2005a). This complex consisted of shared concepts of cosmology, political ideology, and an ideological focus on maize (Reilly 2005a). The complex featured trade networks for greenstone objects that "validated elite political authority by linking it to the supernatural power of the cosmic order" (Reilly 2005a: 31, 36). More broadly, the term, "Middle Formative Ceremonial Complex" also describes the art of the Olmec civilization, which David Freidel describes as a "burst of creative energy... that once invented ... continued to influence Mesoamerican religions and cosmologies in ways we are still learning to appreciate" (Freidel 1995). Reilly (1995: 29) furthers this definition, noting that "within the broad geographical limits of this ceremonial complex throughout both the Early and

Middle Formative periods, the Olmec heartland held the most concentrated remains of these ritual objects. He continues: "the inhabitants of the Olmec heartland were the primary source for this ceremonial complex, but other contemporary Mesoamerican ethnic groups contributed too" (Reilly 1995: 29). In this manner, the theoretical approach to study Olmec art is twofold. On the one hand, the influential nature of Olmec art, that when combined with the overall conservative nature of Mesoamerican religion and cosmology, allows for the use of upstreaming from descendent groups. At the same time, the study of other contemporary Formative period Mesoamerican ethnic groups helps illuminate the understanding of Olmec art, Olmec culture, and the Middle Formative Interaction Sphere as a whole.

The paradigm of the periphery is an interpretive trade model that focuses on how ideological traditions, like art work and sacred symbolism, diffuse from their homelands. The basic premise is that sacred traditions can expand from their initial place of conception into distant periphery regions and continue in practice in periphery regions after the core collapses or declines (Kristiansen, 1987: 74-85; Reilly, personal communication, 2016). In such occurrences, the tradition lives on in the periphery region and falls from practice in the homeland. For the Olmec, the core region can be understood as Olman, the Olmec heartland. A *very general* outline of the trade model for the Olmec would follow: (1) at the heartland, the surplus from agricultural goods leads to increased social complexity and a more hierarchical and urbanized core, (2) an ideology develops whose symbolism validates the rising elite class, (3) this ideology becomes tied to distant trade networks and interaction spheres of Mesoamerica, (4) emerging elites in periphery regions adapt the core ideology to validate their own right to rule as well as

connect themselves back to the heartland region (see Reilly 1989), (5) after the Olmec heartland declines, the ideological system continues in practice within periphery regions and later cultures (e.g. the Maya).

Ultimately, upon the decline or collapse of the core, the outlining regions maintain the ideological tradition. Therefore, when studying sacred symbolism and ideology, the outlining, periphery regions can at times hold onto some of the most authentic forms of the tradition. Although this model is purposefully brief and general, the important concept is twofold: (1) to study sacred traditions and core ideologies, one can study both the core and the periphery, and (2) one can study the ideology within later cultures (i.e. later periphery cultures). Overall, this model studies culture history: one must track how sacred traditions change across time and space. The use of upstreaming and the study of trade networks and interaction spheres are important tools to uncover greater contexts of how traditions are developed, expanded, and change across time and across cultures.

Interestingly, David Grove's 1984 classic study of the site of Chalcatzingo provides a perfect case study of the theory, as Grove defines the monumental art of Chalcatzingo as the frontier style (Grove 1984). Grove argues that on the one hand, there is no predecessor for monumental carving within the highland region of Morelos during the Formative period. Therefore, the art work of Chalcatzingo must have been completed by Gulf coast artists or local artists who were trained in the Gulf Coast style. At the same time, heartland religious and political themes are not familiar to the highland peoples of Chalcatzingo. Therefore, Grove concludes, the art work of Chalcatzingo is more simplified and more explanatory in nature (i.e. composed in the frontier style). This

identification is important, because it shows that not only can periphery regions be utilized to study heartland cultural traditions, but in some cases it can also be easier for modern viewers to understand.

In summary, the first important key concept of studying Olmec style art on the periphery is that trade can be understood as a two way street. For instance, although Formative period Olman can be understood as a key / core contributor to the development of civilization across Mesoamerica (e.g. Reilly 1995), the development is still tied to interaction between many groups and distant regions throughout Mesoamerica.

Therefore, this thesis attempts to analyze Formative period symbolism as an ideological factor that is tied to the rise of emerging elite classes and rising chiefdoms throughout Mesoamerica. Secondly, it follows the Paradigm of the Periphery model by studying periphery regions, or frontier art, in order to better understand the nature of Olmec symbolism and the interaction spheres of the Formative period.

# **Iconographic Analysis of Olmec Art**

"Iconography" is generally understood as the study or art forms, symbolic systems, and ideas within various traditions and cultures. Overall, this thesis utilizes a twofold, iconographic method. First, it utilizes a structural approach that analyzes an entire piece of art by isolating all its basic part. This method can be understood as structural analysis. Second, it uses ethnographic sources to help illuminate the cultural identities of various subjects and various iconographic patterns within the corresponding artistic corpus. Two major iconographic frameworks that utilize these theoretical components are provided by Irwin Panofsky, the father of iconography, and Peter David Joralemon, a pivotal figure in Olmec iconography.

Irwin Panofsky developed a three-step approach aimed to correctly find meanings within various methods of art. The first step within Panofsky's three-step iconographic approach is termed the primary subject matter. It is a basic description of the most minor parts that formulate the piece. It relies on the sensible perception of the artwork and is the most basic level of understanding (Panofsky 1939: 5). Panofsky's second step is termed secondary or conventional subject matter. Within this step, one identifies what subject is being depicted and in what context. The step consists of using historical information and background data to make the subject matter historically intelligible and culturally significant (Panofsky 1939: 6). The third step of Panofsky's framework is that of uncovering the meaning or content of the work of art, which he terms iconology. By meaning, he refers to the synthesis of the entire piece, finding the underlying personality of the work. In addition, the understanding of meaning for Panofsky correlates to the understanding of the development of art styles. Styles and arts evolve over time. They diffuse across groups to hold different meanings. Hence, Panofsky's third step involves understanding the meaning of the work and understanding it within its socio-historical context. For the anthropologist and archaeologist, the goal of the Panofskian method is to understand the meaning of objects within their larger cultural and historical contexts; it is identifying what the objects mean for that particular style, cultural group, and time period (see Panofsky 1939: 7).

Peter David Joralemon, in his 1971 landmark article "A Study in Olmec Iconography," outlined a method to study Olmec Iconography by isolating elemental units of Olmec representations. Overall, he proposed three major steps. First, Olmec representations could be broken down into their most basic elements to form a dictionary

of symbols. Joralemon's second step requires recognizing recurring motif combinations and character complexes within Olmec style artwork. Examples of such include deity complexes like the Feathered Serpent. Third, the Olmec symbol patterns should be compared to later Mesoamerican cultures to reconstruct the mythological history of diffusion across space and time (Joralemon 1971: 6).

Overall, Joralemon's three-step method follows that of Panofsky's. It analyzes the most minor elements to find recurring patterns. It uses upstreaming and ethnographic sources to incorporate historical data to illuminate the subject matter (i.e. the patterns) within the associated cultural / historical context. And thirdly, it studies the diffusion of various character complexes, symbols, and themes to analyze the change in traditions across time and across cultures. Hence, Joralemon follows an approach of studying culture history: his method studies art within the context of a particular time, place, and culture.

#### III. PREVIOUS RESEARCH OF THE CENTRAL MEXICAN HIGHLANDS

**Chalcatzingo and Morelos: The Formative Gateway** 

On vacation in 1932, George C. Vaillant and his wife were the first archaeologist to find Formative remains in Morelos during a salvage excavation of a disturbed brickyard (Vaillant and Vaillant 1934). Over three decades later, David Grove began his fruitful career in Morelos during his 1966 and 1967 field seasons that surveyed much of the modern state of Morelos. Interestingly, the survey found that all Formative sites with Olmec components were located along mountain passes and major trade routes (Grove 1968, 1970). This settlement pattern became central to understanding the Olmec presence in central Mexico.

The site of Chalcatzingo is located within Eastern Morelos, in one particular mountain pass that connects the modern states of Morelos to Puebla (and the Formative site of Las Bocas). Local folklore recalls a great storm of 1932 when a rain serpent appeared atop Cerro Chalcatzingo, bringing violent winds and flooding to the terraced fields below. On the very next morning, curious children discovered a washed out boulder carved with ancient images, thereby finding the now famous Monument 1, "El Rey" (Grove 1987). Like many great archaeological finds in Mexico, Chalcatzingo's discovery was intertwined by chance, mysticism, and children. And to this day, Cerro Chalcatzingo is animated with magical powers of rain and wind (Grove 1984).

By 1934, INAH archaeologist Eulalia Guzman visited the site and recorded the monumental stone sculpture and pottery (Guzman 1934). Using ceramic chronologies, archaeological excavations by Román Piña Chán in 1952 established a basic chronology of the site. During the Early Formative period, the site began as a small farming village

much like those of the Valley of Mexico. However, during the Middle Formative period, an "archaic Olmec" group coincided with the native village population and were responsible for the style of the site's carvings (Piña Chán 1952). No more archaeological work took place until the Chalcatzingo Project of 1972, a joint project between INAH and the University of Illinois. This collaboration provided absolute dating of the Olmec influence to the Middle Formative period (Grove 1987). The site's incredible bas-reliefs inspired multiple Iconographic publications that will now be summarized (e.g. Carlo Gay 1966; Cook de Leonard 1967; Grove 1984, 1987; Reilly 1994a,b).

Carlo Gay (1966) iconographically analyzed Chalcatzingo's hillside reliefs (Reliefs I through V). According to Gay, the reliefs are executed in the Olmec style and, like later Maya works, feature jaguar and reptile supernaturals that relate to fertility cults of water, the moon, and the sun. The raindrop motifs, water motifs, and moon symbolism of Mon. 1, for example, relate to rituals of the propitiation of rain like imitative magic (Gay 1966: 57). Similarly, Mon. 2 relates to either a fertility theme or to prisoner sacrifice, with a bound figure located at the far right of the relief. Gay relates Mon. 3, which depicts a large feline licking a plant, to the moon cult linked to water and rain gods (Gay 1966: 58). Gay argues that Mon. 4, which depicts two feline supernaturals dominating two humanoid figures with clefts, is a mythological themed scene involving feline cults of the sun and moon that are juxtaposed against beneath world deities. Lastly, Gay argues that Mon. 5 depicts an earth or water monster that is tied to earth, water, and moon symbolism (Gay 1966: 60).

Overall, Carmen Cook de Leonard (1967) argues that the Chalcatzingo hill side reliefs relate to solar and lunar symbolism that is best understood within the Tezcatlipoca

myth of Postclassic Mesoamerican religions. Like Carlo Gay (1966), she concludes that the jaguar supernaturals represent a tableau, which relates to mythical creatures of solar and lunar cults. Additionally, she relates Mon. 1 ("El Rey") to rain, lightning, and thunder that is produced in mountain caves, as is believed by rural communities in the region to this day (Cook de Leonard 1967: 66). The cleft hills of Chalcatzingo, Leonard concludes, mark the entrance to the supernatural 'Otherworld,' which help explain both the location of the site and the mythical nature of the hillside reliefs (Cook de Leonard 1967: 66). Thus, Cook de Leonard (1967) relates the mythical reliefs to three major themes: (1) the felines relate to the Tezcatlipoca myth, (2) Mon. 1 showcases a Formative Period belief system in mountain caves as sources of rain and fertility, and (3) the cleft hills of Chalcatzingo mark a mythical location for the reliefs.

Generally, David Grove (1984) provides two major hypotheses to Chalcatzingo's monumental art. First, Chalcatzingo's art is composed in the frontier style. As previously mentioned, this style relates to its monumental, Olmec style architecture that is more simplified and more explanatory in nature. Second, there are two major themes of Chalcatzingo art: politico-rulership and mythico-religious. Carvings at the base of the two hills convey rulership themes and are carved within a public-elite sector of the site. Supernatural / religious themes are carved onto the mountain slopes above the ancient village (Grove 1984). Thus, Chalcatzingo art is related to two features: (1) Chalcatzingo art relates to elitism and the rulership cult that is common to Olmec art and the Middle Formative Interaction Sphere, and (2) Chalcatzingo art features anthropomorphic and zoomorphic actors of mythical natures that relate to rain and plant fertility.

In his 1999 article, David Grove concludes that the layout of Chalcatzingo is tied to formative period cosmology and sacred landscape (Grove 1999: 256). In particular, Chalcatzingo combines natural landscapes with cultural, constructed landscapes. For example, Mon. 1 is carved next to a natural drainage of cerro Chalcatzino, and the relief features rain symbolism (Grove 1999: 264). Additionally, the placement of the quatrefoil shaped Mon. 9 separates the northern and southern section of the site, which separates the northern rulership monuments from religious monuments to the south. Hence, Mon. 9 is located equidistant between a sky-cave monument at the far south end of the site (Mon. 1) and the beneath world equivalent, the sunken patio, at the far northern end of the site. This pattern mirrors the north / south orientation of La Venta, which also features an elite complex, complex A, that is located at the northernmost section of the site (see Reilly 1986; 1989; 1999)

Grove (1984) provides an analysis of Chalcatzingo's hillside reliefs. First, Grove notes that the first group of reliefs, Mon. 1 ("El Rey") and the five smaller carvings next to it, relate to a rain deity producing rain within a mountain cave of Cerro Chalcatzingo. In later Postclassic religions, the rain deity Tlaloc brews rain in mountain caves before sending it out across the countryside (Grove 1984: 111). Second, Mon. 5 features a saurian, composite supernatural that is likely related to the Cipactli deity of Postclassic traditions. The nearby monuments 3 and 4 feature a mythical scene of feline deities within the Olmec theme of human subordination to felines. The humanoid carved atop Cerro Chalcatzingo, Mon. 10, reflects the reverence for ancestors and the relationship between mountain tops and rain. Thus, Grove (1984) relates Chalcatzingo monumental

art to: (1) the greater Mesoamerican association of mountain caves with rain, (2) the personification of the ruler cult, and (3) alliances commemorated in art.

In accordance with Grove (1984), Jorge Angulo V. (1987) argues that both the political and the religious monumental art of Chalcatzingo functioned as ideology to validate materialistic aspects of society. Collectively, whether political or mythological, the architectural scenes of Chalcatzingo reflect fundamental aspects of Mesoamerican belief that are maintained in later Mesoamerican civilizations. For example, Chalcatzingo art features an agricultural focus on fertility and the cycle of crops. Secondly, mountain top scenes reflect twin symbolism relating to sacrifice, resurrection, and creation of the Mesoamerican world (Angulo 1987: 155). Lastly, in accordance with Cook de Leonard (1967), the reliefs identify the cleft mountains of Chalcatzingo as the sacred mountain of rain, wind, earth fertility, and agricultural substance. This reverence is central to Mesoamerican belief from the early formative period to Christian influenced ceremonies of today (Angulo 1987: 155).

F. Kent Reilly and James Garber (2003) demonstrated that the jaguar domination theme present in Olmec art relates to warfare, prisoner sacrifice, and cosmology. For instance, the trefoil headdresses worn by the supernatural felines of Chalcatzingo identify rulers in transformation as feline, spirit companions (Reilly and Garber 2003:147). Common to Mesoamerican cultures and especially to Maya cosmology, warfare was conceived of as otherworldly battles between supernatural animal companions of opposing rulers (Reilly and Garber 2003: 147). At Chalcatzingo, multiple jaguars wear glyphs at the ear that has been identified as a Venus glyph ancestral to that of the ancient Maya (Reilly and Garber 2003; Angulo V. 1987: 121; Grove 1972:

157). For the Maya, the glyph has strong associations with warfare. For instance, Venus was a favored omen in war, and the cycle of Venus aligned with the dry season and time of war (Justeson and Kaufman 1993: 1705, fig 7c; Milbrath 1999: 193; Lounsbury 1982; Aveni and Hoteling 1994; Nahm 1994). Furthermore, the subordinate human victims of Chalcatzingo shown beneath the felines resemble sacrificial victims (*dazantes*) from the Formative period San Josè Mogote and Monte Albán (Reilly and Garber 2003:142; Marcus and Flannery 1996: 129-30, figs. 137, 151-154). Therefore, Reilly and Garber (2003) relate the Olmec iconographic theme of feline / human subordination with symbolic representations of warfare. This iconographic complex can be viewed as an ancestor to the Mayan "war jaguar" symbolic complex (Reilly and Garber 2003: 129-130; Freidel 1989).

Interestingly, Reilly and Garber (2003) also highlight the ideological function of Mesoamerican warfare. For instance, the Classic Maya relate sacrificed prisoners to creation episodes of the Maize God, as the initial death and sacrifice of First Father (Reilly and Garber 2003: 130). Similarly, the Olmec ideological function of sacrifice seems to be rainfall (Reilly and Garber 2003:147; Taube 1995: 83). For instance, Monument 31 shows a feline dominating a human figure just below a cloud symbol with rain. Hence, the sacrifice is the causative agent for rainfall (Reilly and Garber 2003: 141).

Kent Reilly (1994b) furthered the analysis of Chalcatzingo Mon. 1, illustrating that the half quatrefoil shape of Mon. 1 equated to a pars pro toto representation of the full quatrefoil shape of Mon. 9. This quatrefoil shape represents a portal to the supernatural Otherworld (Tate 1982). Reilly (1987) identified the "lazy-S" symbol on Mon. 1 as a muyall symbol of a cloud. The symbol acts as a locative. It establishes a

celestial realm, the realm of ancestors and rain, as the realm from which the action of the sculpture is occurring. Reilly (1994b) therefore argues that the figure of Mon. I can be understood as an ancestor seated within the supernatural realm of a cave. Further, the permanent carving of this ancestor could function to validate the rulership of descendants. For in the context of rain ceremonies, a ruler's blood lineage relating to this first ancestor would enable contact to the supernatural realm (Reilly 1994b).

Additionally, Reilly (Reilly 1994b; 1991) provided analysis of the five supernaturals depicted next to Mon. 1, which he terms "The Water Dancing Group." Following previous scholars (Gay 1966, Cook de Leonard 1967, Grove 1984), Reilly (1994b) argues that the tableau clearly depicts rain supernaturals dispersing winds, clouds, and rainfall from the sacred mountain of Chalcatzingo to the agricultural fields of the valley that extend beyond the site. In addition, he relates the zoomorphs to the natural behavior of crocodile water dancing in which a bellowing crocodile makes the noise of thunder and produces a fountain of water from the mouth (Reilly 1991). Therefore, the iconography of cerro Chalcatzingo relates to the widespread formative belief in mountains as sources of water (Reilly 1987), as places to contact ancestors related to rain (Reilly 1994b), and as portals for Otherworld travel (Reilly 1994b).

## **Guerrero: Mountains of Jade, Caves of Water**

Due to the incredible quantity of Olmec style green stone objects that were being unearthed from Guerrero, Miguel Covarrubias hypothesized the region to be the origin of the Olmec style (Covarrubias 1956: 11). Although archaeological data has clearly demonstrated the gulf coast lowlands as the heartland of the Olmec during the Early Formative period (e.g. Grove 1970; 1997), Miguel Covarrubias was able to first

identify Olmec presence in Guerrero through such decorated jades as those emanating from Zumpango del Rio near the center of the state (Covarrubias 1948; 86).

Scientific excavations of Guerrero began in 1964 when Charles and Ellen Brush discovered Pox pottery, which dated to 1800 B.C. (Brush 1965). In the 1970's, Yale anthropology students Louise Paradis and John Henderson excavated Early and Middle Formative sites along the Balsas river, yet no Olmec remains were uncovered (Paradis 1981, Henderson 1977). It was not until 1983 that Mexican archaeologist Guadalupe Martínez Donjuán excavated the Middle Formative regional centre of Teopantecaunitlán, which, like Chalcatzingo, featured colossal sized stone monuments carved in the Olmec style (Donjuán 1994). Olmec style painted murals, a new classification of Olmec art, came to scientific attention in the late 1960's at the sites of Juxlahuaca cave and Oxtotítlan. Gillett Griffin and Carlo Gay explored Juxtlahuaca cave in 1967, discovering magnificent Olmec style murals approximately four thousand feet within the cave (Gay 1967). David Grove identified other Olmec style painted murals in 1968 at the site of Oxtotítlan (Grove 1969, 1970). More recent discoveries in eastern Guerrero include the Cacahuaziziqui cave (i.e. Cauadzidziqui) and the Cueva de Gobernadores (Villela 1989; Gutiérrez et al 2006; Gutiérrez and Pye 2016)

#### Teopantecaunitlán

The height of occupation at the middle formative site of Teopantecaunitlan was from 1000 to 700 B.C (Donjuan 2010). Like Chalcatzingo, it existed as a regional trade center, interacting with Chalcatzingo, Zazacatla, and La Venta during the Middle Formative Period (Grove 1987, 1989; Nierderberger 1996, 2002). It was also similar to Chalcatzingo since it featured monumental stone architecture composed in the Olmec

style. In particular, the most important ceremonial construction was the sunken court, El Recinto, which was constructed between 1000 and 700 B.C. This enclosed court was walled by large, square blocks, and the walls were topped by 4 upside-down-T shaped monoliths. The monoliths were incised with the images of Were-Jaguar Gods along the east and west walls (Martinez Donjon 2010). Martinez Donjuan (2010) relates the 4 monoliths to water, vegetation, earth, sky, and ball players that astronomically record the passages of equinoxes and solstices. At the two solstices, in fact, shadows are cast from the 4 monoliths to form crossed bands at center of the court and at the center of the small range mounds / effigy ball court (Wagner et al.2013, Don Juan 2010).

Karl Taube (1996) identifies the 4 monoliths to aspects of the Olmec Maize God. For instance, Virginia Fields (1991) identified that the figures were holding bundles of Maize tied together via a double merlon shaped knot. Similarly, Linda Schele (from Wagner et al. 2013: 31) argues that the sunken court and its effigy ball court marked the place of resurrection of the Maize God. Thirdly, Kent Reilly associates the monoliths to the four mountains that support the sky at the four corners of the Mesoamerican universe to form the Quincunx (Reilly 1994b). For instance, Reilly (1994b) identified that the combination of two of the monoliths formed the double merlon motif, which is associated with mountains and portals to the supernatural realm. Further, the monolith's inverted T shape represents a mountain with a central cave (formed by the enclosed court), as can be seen in later Mesoamerican iconography like at the Zapotec site of Monte Alban J (Reilly 1994b).

Interestingly, Kent Reilly notes that the frontal faces are carved in the Olmec style, but the inverted T shape, however, is absent in monolithic sculptures of Olman

(Reilly 2010: 253). Specifically, Reilly argues that the inverted T shape represents a mountain that is associated with highland symbolism, and the frontal face of the monoliths are painted as heartland symbolism of the Olmec Maize God (Personal Communication, 2017). Overall, the four mountains form the Mesoamerican quinqunx that identify the *Axis-mundi* at the center of the court. Within this center place, between the range mounds of the ball court, a ruler could 'resurrect' in ritualistic fashion while dressed in the regalia of the Maize God (Reilly, Personal Communication, 2017). This would replicate the Cosmological events of the solstice alignments that center the court and the ruler within as the center of time and space.

#### Juxtlahuaca Cave

Olmec painted art was brought to scientific attention in 1966 when Carlo Gay and Gillett Griffin discovered Olmec style cave paintings within the Juxtlahuaca cave in Guerrero (Gay 1967). The spelunking expedition found three large paintings, three line drawings, skeletal remains embedded in a stalagmitic crust, and pottery sherds (Gay 1967). The entrance to the cave is approximately twenty feet up the slope of a mountain near the village of Colotlipa. Colotlipa is nestled within a group of interconnected alluvial valleys 2600 feet above sea level east of the Rio Blanco. The Rio Blanco is a tributary of the Rio Balsas, the longest river in Mexico and the major river highway that enabled access and allowed for exchange between the Pacific coast to the West and the central highlands of modern day Morelos to the northeast (Gay 1967).

The two focal areas of paintings are found in the "Hall of the Ritual" and the "Hall of the Serpent" (Gay 1967). Each hall features two separate figures. In the Hall of the Ritual, a larger Figure A, wearing jaguar regalia and a feathered-clefted headdress, is

engaged in a ritual with a seated Figure B who is naked besides a sash worn around the waist, a headdress, and possibly neck regalia (Painting 1, Gay 1967). The Hall of the Serpent features, in what Gay describes, a mythological encounter between an animal disguised as a jaguar and a much larger plumed serpent (Painting 3 and 2, Gay 1967). The cave paintings animate the magical power of caves in ancient rites, thereby converting the cave into a sanctum (Gay 1967).

Michael Coe (2005) visited the cave a year after Gay to take color photographs, and he assigns the Juxtlahuaca paintings to the Early Formative Period, ca. 1200 to 900 BC (Carrasco 2018). Martha Cabrera (2017: 89) depicts the cave as a subterranean, watery road of the serpent and a sanctuary to the Olmec Maize God. Julia G. Kappelman and Kent Reilly (2001) relate Painting 1 to ancestor contact within the supernatural realm of a cave. In particular, the rope that leads from the larger figure can be understood as a cosmic cord that represents an umbilicus from the petitioning descendent to ancestor (Kappelman and Reilly 2001: 42; Nierderberger 1996: 96). Reilly and Garber (2003:133-134) also identify the jaguarian costume of the larger figure as a protoype for the *wayob* costumes of Maya elite.

#### Oxtotitlán:

Dr. David Grove was the first scholar to scientifically investigate Oxtotitlán in 1968 (Grove 1969). Located approximately 30 kilometers north of Juxtlahuaca cave, the paintings are located within two grottoes that occasionally collect water during the rainy season (Grove 1969; Grove 1970). Thematically, Grove interprets the iconography of the cave paintings to relate to water, rain, and fertility (Grove 1969). Therefore, he interprets the cave site to represent a shrine that houses the rain gods (Grove 1969, 1970). This

theme, of mountain caves as sources of water and fertility, is similar to the mythical reliefs carved into Cerro Chalcatzingo in Morelos, as well as Post-Classic religions of sacred Tlaloc mountains (Grove 1969). Based on style, Grove attributes the paintings at Oxtotitlán (as well as the carvings of Chalcatzingo) to the La Venta Olmec style, which would likely date the site between 800 and 700 B.C. (Grove 1969). In agreement with Michael Coe's trade route hypothesis, this Middle Formative Olmec presence in Guerrero would correspond to trade routes for highland resources like greenstone (Coe 1965, Grove 1968, Grove 1969).

Russ, Jon, et al. 2017 provided carbon dating of Mural II as well as painting 8, showing a combined date range of the site to span from 1520 B.C. to A.D. 600- from the Early Formative to the Classic period. In particular, Mural II was dated to early parts of the Early Formative period, from 1520 - 1410 cal B.C, and Painting 8 was dated to occur at some time between the Late Formative and the Classic period, from 500 cal B.C. to A.D. 600. Grove (1970) also noted a great diversity of ceramic types, showing a complex and dynamic history of continual use through its prehistory. Russ, Jon, et al. 2017 were unable to provide a date for Mural I, so Grove's (1970) date of the Middle Formative period and the La Venta style is still possible.

Dr. David Grove analyzes the iconographic meaning of the murals in his 1970 article (Grove 1970). Grove identifies Mural 1 as a depiction of a ruler dressed in owl regalia sitting atop an altar throne. Further, the zoomorphic jaguar throne resembles La Venta altar 4 and the cave niche below the throne is similar to Chalcatzingo monument IX (Grove 1970). Mural I may have functioned as a dedicatory feature to mark the reign of a ruler in a similar fashion to La Venta altar IV. For instance, Grove notes, Post-

Classic groups share this ritual significance of ancestry through caves as a mean to charter rulership or mark sovereignty. Overall, Grove identifies multiple research questions that will be focused on within this paper including: (1) the association of the owl and rain Gods of later Mayan and Teotihuacan religions, (2) the association of the jaguar with rain, the underworld, the heart of the mountains, and the ruling elite, and (3) the black paintings of the North Grotto linking to the underworld (Grove 1970).

Interestingly, Grove argues that although the Juxtlahuaca paintings date to the same general time period and are Olmec in style, they are executed by a different hand and do not relate to themes of water and fertility like Oxtotitlán (Grove 1970). Other scholars, e.g. Kappelman and Reilly (2001), identify shared themes between the sites like cosmic chords and transformation. For instance, Oxtotitlán painting I-d mirrors Juxtlahuaca painting 1, which both depict jaguar nahuals of elite individuals traveling through Otherworld locations of caves. Further, the theme of cosmic contact and shamanic journey is also displayed on Oxtotitlán Mural I, which features a winged figure on top of an Olmec sky dragon. The image depicts a "Cosmic Flyer" seated on a metaphorical portal of a sky throne, which is commonly shown in Middle Formative iconography (Kappelmann and Reilly 2001:44; Reilly 1994a; Reilly 1995). Cosmic Flight relates to journeys in which the [supernatural] nahual of an individual traveled to an Otherworldy location in order to confer with spirit beings and ancestors (Kappelman and Reilly 2001: 43).

#### Other Middle Formative Period Sites of Guerrero

Within eastern Guerrero, two caves sites have been more recently discovered that share characteristics to the aforementioned sites. The cave paintings of Cacahuaziziqui

(Cuadzidziqui) are painted within a rock shelter high up in a mountain (Gutiérrez and Pye 2017; Villela 1989). The paintings include two anthropomorphs wearing elite headdresses that are superimposed over older, geometric designs (Villela 1989; Gutiérrez et al 2006) (Figure 9). Gutiérrez and Pye (2010: 47) relate the scene to the Juxtlahuaca paintings: the scene depicts a larger figure in jaguar attire dominating a smaller figure. In this case, the larger figure holds what resembles a bloodletting device in his right hand just like the larger figure of Juxtlahuaca painting I. Therefore, the scene relates to cave ritualism of elites- of jaguar nahualism and possibly the cult of the Divine Ruler in Middle Formative Guerrero (Gutiérrez et al 2006; Gutiérrez and Pye 2017).

La Cueva de los Gobernadores de Techan (Gutiérrez and Pye 2016) (Figure 10) features Middle Formative architecture that is similar to Teopantecuanitlan and Chalcatzingo. Carved in relief onto the north and south walls of the cave are images of guardians, or governors, that resemble anthropomorphic mountains like at Teopantecaunitlan. One monument orients to the Equinox, and the monuments, overall, include feline faces and tre-foils of supernaturals. Gutiérrez and Pye (2016) relate the cave to empowerment rituals and the cult of the divine ruler that would be ritualistically centered by the quadripartite, monolithic sculptures. Furthermore, the cave orients directly east, so the ruler would emerge from cave rituals at dawn to face the rising sun on the summer solstice (Gutiérrez 2017).

# IV. CORPUS OF OLMEC STYLE IMAGERY IN THE CENTRAL HIGHLANDS: MOUNTAIN MONUMENTS AND PAINTED CAVE SHRINES

In what follows, the Olmec iconographic corpus of Chalcatzingo, Oxtotitlán, and Juxtlahuaca will be summarized. For this chapter, the Olmec monuments and painted murals will be analyzed individually in the structural method (i.e. Panofsky's step 1). In the next chapter, the art work displayed at these sites will be compared to one another and referenced to ethnographic literature as well as the greater artistic corpus and archaeological record of the Olmecs. Since the physical layout of Mesoamerican sites relates to cosmology (Grove 1999: 256), the art work of each site will be analyzed in relation to spatial and temporal context.

## The Mountain Monuments of Chalcatzingo

As previously mentioned, Grove (1984) identified two separate areas of the site: (1) rulership monuments are located on northern village terraces, and (2) mythicoreligious monuments are carved onto mountain slopes south of the village. This thesis focuses on the mythical themed carvings of Cerro Chalcatzingo since the site is being compared to Olmec cave art. That is, the context of sacred mountains and watery cave shrines is similar within Mesoamerican cosmology, which allows for a general comparison within the greater corpus of Mesoamerican sacred landscape and Olmec art. Roman Pina Chan (1952) dated the Olmec influence and monumental carvings of Chalcatzingo to the Middle Formative period.

The mythico-religious monuments can be divided into three groups (Gay 1971, Reilly 1986). These stations are found in relation to a north south axis line that bisects the site from the summit of Cerro Chalcatzingo to the center of the village below (Grove

1988, Reilly 1986: 163) (Figure 11). Station C consists of Monument 10, a single carved boulder atop Cerro Chalcatzingo. Station A is found on the left of Grove's axis line at the eastern end of Cerro Chalcatzingo, and it consists of a series of relief carvings on massive boulders that face north. Interestingly, the Station A reliefs are found on lower talus slopes of Cerro Chalcatzingo at the base of a major cleft of the mountain (Grove and Angulo 1987: 114). In addition, they are carved in a tableau sequence that follows along a saddle crest towards a knoll located directly between the cleft shaped mountains of Cerro Delgado and Cerro Chalcatzingo (see Figure 11). Station B features "The Water Dancing Group" (Reilly 1986) whose relief carvings are found at the far western end of the site along a major drainage of Cerro Chalcatzingo. Thus, the context of the stations are as follows: Station C relates to the cerro mountain top, Station A relates to the clefted locations of the eastern side of Cerro Chalcatzingo, and Station B relates to the cerro's western mountain drainage.

#### Station C: Mountain Peaks and Rain

Mon. 10 depicts a frontal faced humanoid wearing a peaked headdress and is shown with goggle eyes, ear spools, and a raised left arm with a bracelet and outward facing palm (Figure 12). Similar to Mon. I, Grove (1984: 122) identifies the figure as most probably a chiefly ancestor and mediator of divine power that relates to the cult of the ruler- where the "control of supernatural forces was no longer carried out by village shamans, but had passed to the person of the ruler." The carving placement atop Cerro Chalcatzingo associates the ruler / ancestor with the power to bring rain since mountain peaks and rain were closely connected to ancient Mesoamericans (Grove 1984: 122, Angulo 1987: 155). Reilly (1986) relates the figure to a chiefly ancestor that animates the

clefted mountains as portals to the sky realm- the place of clouds, wind, and rain. Overall, the permanent carving personifies Cerro Chalcatzingo as a rain god mountain like is seen on the codices of the Mixtecs of Oaxaca (Williams 2009: 63) as well as the Tlaloc mountains of the Aztecs of central Mexico (Grove 1969).

#### Station A: The Eastern Cleft of the Mountain

The first monument one encounters within station A is Mon. 2, which explicitly depicts a human sacrifice ritual where three individuals are in the process of sacrificing a naked, bound, and seated figure on the right (Reilly 1986) (Figure 13). The three figures on the left are walking with the two to the right holding paddle-like objects and the farleft figure holding a vegetative staff. All three wear cape-like garments along with loincloths, bird-serpent masks, and elaborate, stylized headdresses. The headdresses of the walking figures include maize imagery worn at the forehead as well as crossed band motifs shown just behind. The regalia of the seated and bound individual (including his mask) has been stripped off and placed behind him. The elaborate regalia of the sacrificial victim could identify him as a high-status individual, possibly a highly prized enemy captured from war (Reilly and Garber 2003).

Most scholars (e.g. Michael Coe 1965b: 766; 1965a: 18; Grove and Angulo 1987; Reilly and Garber 2003; Cook de Leonard 1967: 64-66; Gay 1966: 58, 1972: 45-48) relate the scene to captive sacrifice from militarist activity. In this case the two walking figures on the right hold war clubs for the sacrifice. At the same time, the vegetative staff of the left-most figure denotes the purpose of the sacrifice- agricultural fertility. The staff resembles a stalk of corn, which is furthered by the sprouting maize headdresses worn by the other individuals. Contextually, the ritual may be understood as a sacrificial offering

of human blood to enable the successful planting and resurrection of maize- the most critical crop of Mesoamerica and the source of life.

#### Supernatural Felines of Station A:

After passing Monument 2, one encounters the supernatural feline monuments of Cerro Chalcatzingo. These monuments appear in close proximity with one another between Monument 2 and Monument 5 (Garber and Reilly 2003; Angulo 1987: 121). Therefore, they can be analyzed as a thematic tableau. Four monuments within station A can be grouped within the theme of supernatural feline domination: Mon. 3, Mon.4, Mon. 31, and Mon. 45. Monument 31 and Monument 41 depict cloud symbolism to denote the context of the supernatural feline tableau: agricultural fertility via rain bearing clouds.

Monument 3 depicts a recumbent feline that seems to be licking the branch of a skinny and tall stylized vegetative plant (Figure 14). Jorge Angulo (see Grove 1984: 116) noticed that the feline's tongue actually touches an upraised human arm of a subordinate human figure located at the bottom of the relief. Most scholars (e.g. Reilly and Garber 2003: 141) agree with this interpretation, believing the feline is devouring the subordinate human below (as is seen on Monuments 4, 31, and 45). Kent Reilly (1986: 164) associates the supernatural feline domination theme with bloodletting and transformation scenes of were-jaguars into the underworld. Like Monument 31 (which includes a rain cloud), the vegetative cactus would signify the result of the sacrifice and offering of blood: agricultural fertility and renewal.

Monument 4 (Figure 15) is another monumental relief carved into a large boulder that displays two supernatural felines, shown as a pair with stylized maize imagery, who are pouncing on and devouring two subordinate humans lying below. The upper jaguar's

ear contains a symbol identified as a formative version of the Venus star glyph (Grove 1972a: 157, Angulo 1987: 121, Reilly and Garber 2003: 142). The symbol is also displayed on the felines of Monuments 3, 31, 41, and 45. Monument 4's upper feline also includes a cartouche with crossed band motifs located above the feline's eye. The cartouche is flanked by sprouting young maize plants that combine to form the Olmec version of the Jester God headdress (see Fields 1989, 1991; Reilly 1994; Taube 1996; Reilly and Garber 2003:145). Ideologically, wearing the Jester god headdress related a Formative ruler to the same mythical figure as it did for the Classic Maya: this is "First Father" the Maize god who at the center of the sky raised the world tree to dawn creation (Freidel 1990; Freidel et al. 1993).

Reilly and Garber (2003) have demonstrated that Olmec warfare could take on mythological associations, especially relating to captive sacrifice for reciprocal blood offerings to the spirit realm. In this way, the Jester God Headdress worn by the felines signify a ruler transformed into his supernatural spirit companion that is overcoming his enemies in warfare as a ferocious jaguar. Further, the headdress likely relates the sacrifice as a causative offering to enable the resurrection of First Father, the Maize God. For instance, the Classic Maya relate the sacrifice of war captives as analogous the sacrifice and decapitation of First Father that precedes his resurrection and world renewal (Reilly and Garber 2003: 130). Therefore, the feline domination theme continues the sacrifice scene displayed in Monument 2, and the Feline's trefoil headdress mirrors the staff of maize held by the left-most figure of Monument 2.

Like the upper feline on Monument 4, the lower feline is also displayed with maize imagery that includes the royal tre-foil headdress as well as a tail that spouts three

maize seeds of jade. At the ear, a long and skinny clefted element emanates backward that either can represent maize clefts or rabbit ears. Interestingly, the feline's headdress is similar to the right most walking individual of Monument 2. One can further this interpretation, since the clefted sprouts shown on the upper feline also resemble the centralized sprout of the middle walking figure of Monument 2. Perhaps, the tableau may display a transformation sequence in which the headdresses identify both the individuals of Monument 2 with their supernatural jaguar spirit companions of Monument 4. In both cases, the monuments depict human sacrifice; however, one scene occurs in the physical realm and the other in the supernatural.

Overall, the similarity of the paired felines conveys a sculptural tableau that could relate to similar supernaturals, like twins or dualistic opposites within Mesoamerican cosmology. If the rabbit ear interpretation was accurate, the upper feline could associate with Venus and the sun, and the lower feline could associate with the rabbit Moon- the common alter ego of the moon within Maya Cosmology (Milbrath 1999: 119; Schele and Miller 1983, fig. 18d). Either way, they are shown with maize symbolism that relates the paired jaguars to the myth of the hero twins who defeat the forces of evil and resurrect First Father the Maize God (e.g. Tedlock 1996). Therefore, the scene evokes the El Azuzul twins sculptures of San Lorenzo, which displays two elite figures in front of two supernatural jaguars (Ladron de Guevara 2010: 28). This greater Mesoamerican mythology illuminates the cosmological significance of feline domination and captive sacrifice (Garber and Reilly 2003).

Discovered more recently, Monument 45 features a supernatural jaguar disemboweling a subordinate human below (Collins and Doering 2016: 10: Fig 7) (Figure

16). The jaguar wears a buccal mask that is similar to those worn by the upright humans of Monument 2. The feline has almond shaped eyes, nostrils shown in profile atop the mask, razor sharp claws, and a single visible fang. The feline can be identified as a supernatural by its flame eyebrows, the Venus glyphic element at the ear, and the tre-foil worn at the forehead. The tre-foil element consists of a triangular shaped cartouche that has three oval shaped elements sprouting from its right. In the scene, the feline is shown disemboweling a human with its claws, and all that remains of the human from the encounter is his / her upper midsection, arms, and head. This scene is most similar to Mon. 31; however, no water or cloud symbolism is visible.

Chalcatzingo Mon. 31 features another supernatural feline disemboweling a smaller, human figure below (Figure 17). The feline can be identified as a supernatural by its flame eyebrows, the Venus glyph worn behind the head, and a stylized buccal mask. It also has a downward L-shaped eye, a large snout with protruding fangs, and razor-sharp claws. The jaguar has struck the human victim from behind and has disemboweled the victim's abdomen with its claws. Above the bloody scene, a lazy-S cloud symbol is shown with three phallic shaped raindrop motifs. Reilly and Garber (2003: 141) interpret the scene as imitative magic: "the sacrifice below is the causative agent for the falling rain above."

The last jaguar monument within station A is Mon. 41, the Triad of Felines (Than 2011, Lambert 2012; Tello et al. 2015: 11) (Figure 18). The monument shows three supernatural felines that are seated within a lazy-S cloud symbol. They all wear buccal masks as well as Venus glyph symbols at the ear. Their masks are similar to those worn by the three walking figures of Monument 2, possibly relating to transformation. Above

the felines, there is a large cloud symbol that indicates the context of the scene- the clouds, wind, and rain of mountain tops and the sky realm. Like the other monuments, the scene conveys motion: it is as if they are riding through the heavens on top of clouds.

In sum, the supernatural felines of Station A relate to shamanistic transformation of elites, as the felines wear Jester God Headresses and buccal masks like the standing figures of Mon. 2. The Venus glyphs worn by the felines, and the gruesome scenes displayed, relate to captive sacrifice and bloodletting, which act as ritual offerings to brings the rains and enable the growth of Maize. In sum, the theme of fertility is depicted like billboards on the mountain with cloud symbolism, rain imagery, and vegetative imagery (e.g. cactus plants and maize).

## Eastern Supernaturals of Station A: Dragons and Maize

Mon. 5 is located at the easternmost end of station A that is approached after the supernatural felines. The monument depicts a crocodilian-like serpent or fish supernatural that is devouring a subordinate human figure (Figure 19). The monster is shown as a supernatural composite of multiple creatures; it has a curved body (of a fish or serpent), a serpentine bifurcated tongue, and a crocodilian head. It also features: a fish-like fin element behind the head, folding serpent fangs next to sheering teeth of a shark, triangular shaped motifs like scales, and crossed bands across its midsection. Below the scene are three lazy-S cloud motifs that evoke themes of rain and wind like Mon. 31 and Mon. 1. Like the crossed bands motif, they also act as locatives to establish a celestial / Other realm location for this mythical scene. Overall, the movement of the scene depicts a dragon-like creature who is either swimming through the primordial waters of the underworld or flying through the cloudy skies of the heavens.

Taube (1995: 85) interprets the creatures as a Feathered Serpent, a symbol of sky and water that is furthered by the cloud motifs and its placement on Cerro Chalcatzingo. For instance, the curved body of the creature resembles the curved clouds below. However, other scholars relate the zoomorph to a crocodile fish composite that evokes Post-Classic myths of the earth as a floating crocodile or gar fish. For instance, Angulo (1987) and Reilly (1991) relate the zoomorph to acipactli, the alligator gar or fish gator related to myths of the formation of the earth (Figure 20). Similarly, other scholars (e.g. Grove 1984: 112; Grove 1968a: 489; Angulo 1987; Williams 2009: 78) interpret the creature as a Formative version of the Cipactli creature- the mythical crocodile that dwells in the underworld waters. Angulo (1987: 156) and Williams (2009: 78) note that the figure's left foot is being eaten by the saurian monster, which evokes the Post-Classic myth of Tezcatipoca who lost his foot while dangling it into the primordial waters and having it torn off by Cipactli. This Cosmic conflict relates to later central highland creation myths where Tezcatlipoca separates the earth from sky, forms the Milky Way, and pulls the crocodile from the mythical waters to form the earth (Milbrath 2014: 171). In this way, the crocodile-fish image of Monument 5, that rests upon the three clouds, seems to represent a Formative variation of the cosmic crocodile of the earth. The monument would thereby personify Cerro Chalcatzingo as a representation of the primordial mountain and mythical earth crocodile that is being pulled out of the waters of creation by the feline diety of Tezcatlipoca (e.g. Reilly 1994a).

An alternative hypothesis of Monument 5 follows Freidel and Schele's (Freidel et al. 1993; see Andrea Stone 1985) interpretation of the crocodile supernatural, of Classic Mayan art, as a representation of the celestial Cosmic Monster. They relate the Cosmic

Monster to the East / West orientation of the Milky Way. The appearance of the zoomorph in the night sky precedes creation when First Father raises the World Tree. In the night sky, the episode occurs as the Milky Way rotates from an East / West orientation to the "raised up sky" North / South orientation of the World Tree. Interestingly, the Maya associate the Milky Way with clouds (Milbrath 1999: 279), and the Cosmic Monster appears with a body formed by clouds on the Late Classic Structure 22 at Copan (Milbrath 1999: 279) (Figure 21). Monument 5 includes cloud motifs, and it also orients to Schele and Freidel's star chart of the Milky Way Cosmic Monster. That is, the cross bands appear at the middle of the dragon supernatural of Mon. 5 (where the Ecliptic crosses the Milky Way), and the three clouds mirror the turtle / 3 stone hearth constellation of Orien (see Freidel et al 1993: 86, Fig. 2:22) (Figure 22). There are also examples in Mayan art of the Maize God, as well as other deities like God K'awil, which emerge from the maws of celestial dragon creatures and vision serpents (e.g. Freidel et al. 1993: 93, 196, Fig. 2:27, Fig. 4:11) (Figure 23). Within this interpretation, the subordinate figure of Mon. 5 would relate to First Father the Maize God in similar fashion as the victims of the supernatural felines. For instance, Mon. 13, to be discussed, would show the later creation episode of the raising of the World Tree, i.e. the rotation of the Milky Way and Cosmic Monster to a vertical position.

Hence, this hypothetical interpretation narrates an interesting tableau sequence for station A, which includes: (1) captive sacrifice rituals via elites and supernatural feline nahuales, (2) reciprocal rains to aid in the resurrection of First Father (Mon. 31), (3) feline cloud riders (Mon. 41) that evoke the Mayan Canoe Episode, (4) Monument 5 as the East / West Cosmic Monster and Milky Way, and (5) Monument 13 (to be discussed)

as an image of First Father holding the horizontal staff of the World Tree that he will rotate to a North / South position atop Cerro Chalcatzingo.

Monument 13, "El Governor" (Figure 24), is another monumental relief carved into a square slab that is located just downhill from Monuments 3 and 4. Contextually, the monument is located near the knoll that is between the cleft hills of Chalcatzingo. The monument depicts a cleft headed and baby-faced humanoid seated within a quatrefoil shaped mouth of an earth monster (Grove and Angulo 1987: 122). Vegetation sprouts from the corner of the monster's mouth. These bromeliads plants act as a locative identifying the supernatural earth monster- the primordial mother of all plants, animals, and fertility itself. Like Mon. 9 and Mon. 1, the vegetative sprouts are located at the inter cardinals of the monster's mouth to center the quatrefoil shaped portal. Only a small portion of the monster's eye is visible, but it seems to depict an elongated eye with elaborate flame brows. The figure wears a garment or cape over the body, a pectoral at the chest, and a belt that might hold either a loin cloth or ball playing regalia. The figure has an elaborate back rack that forms a second cleft that sprouts from behind. The figure can be identified as a supernatural by its baby face, clefted head, and clefted back rack.

Overall, the monument evokes themes of heartland throne monuments that show rulers seated within cave niches who hold in their laps either ropes or supernatural were-jaguar babies (Williams 2009: 77, Grove and Angulo 1987: 122). Grove and Angulo (1987: 122): note that the figure's hands appear to hold a ceremonial bar in a similar hand posture to that of the figure within San Martín Pajapan Mon. 1 (see Figure 02). This posture has been referred to as the "lacrosse - style" posture, and Monument 1 from Pajapan has been interpreted (Freidel et al. 1993: 132) as a mythical ancestor, i.e. First

Father, in the act of raising the World Tree at the center of creation. In similar fashion, the cleft elements of Monument 13 identify the figure as First Father the Maize God. For the Classic Maya, First Father raises the world tree to its vertical position to thereby separate sky and earth at the beginning of time and within the center of space (Freidel et al. 1993). Monument 13 depicts this clefted supernatural within the earth monster like a planted maize seed ready to sprout with the coming rains. In other words, this is the fully dressed Maize God inside the mountain of Cerro Chalcatzingo who, with the aid of the cloud bearing felines, is ready to emerge from the earth monster and raise the world tree that he grasps at the knees. Further, the cleft hills of Chalcatzingo mirror the cleft mountain top of San Martín Pajapan, which in both cases provide the sacred place of emergence for First Father to raise the sky from the earth.

## Station B: Water and Wind of Cerro Chalcatzingo

Station B consists of Monument 1, "El Rey," as well as five smaller relief carvings that extend one after another eastward from Mon. 1. Mon. 1 (Figure 25) features an elaborately dressed human figure who is seated within the mouth of a personified cave. The figure is seated on a bench and holds a ceremonial bar that each display the lazy-S cloud motif. Phallic shaped raindrop motifs appear on the figure's head dress and skirt. Vegetation sprouts from the figure's forehead, which evokes previously mentioned concepts of the Jester God headdress worn by elites as the royal charter. His headdress is animated by three zoomorphic eye motifs with half circle eyebrows as well as two realistic quetzal birds. These symbols combine to form a pars-pro-toto variant of an avian zoomorphic supernatural like the feathered serpent or Olmec sky dragon. A second bromeliad plant also sprouts from the headdress. In sum, his headdress includes elements

of the entire scene: avian attributes of the celestial realm and vegetative attributes of the earth dragon. Overall, fertility themes of water and vegetation are displayed as billboards all across the figure.

Cosmologically, the monument displays the tri-leveled Cosmos within its carved space (Williams 2009). First, the cave space that surrounds the figure can be understood as the watery, underworld register of the scene. Similarly, the terrestrial space of the scene if formed through the personified cave monster itself, whose half quatrefoil shape link it to the mountain shaped monoliths of Teopanticuanitlan. In addition, bifurcated scrolls representing water, wind, or smoke emanate from the zoomorphic cave. J. Angulo V. (1987: 138; Thompson 1960:73) relates the scrolls to the Mayan belief in Ik, the god of wind that represents breath and life. Hence, the scrolls fortify the fertility themes of the mountain cave. In contrast to Mon. 13 and Mon. 9, the zoomorph on Mon. 1 contains celestial elements including crossed bands within both eyes, three double merlon cleft motifs, and flame eyebrows of a harpy eagle (Angulo V. 1987: 135). These elements identify a sky dragon and a celestial mountain cave. I interpret the combination of terrestrial and celestial attributes of the zoomorph as symbols that identify it as the Axis mundi in the form of a sacred mountain- an earthly feature whose cave connects to the watery beneath realm and whose peak rises to the heavens.

The celestial realm is furthered at the upper register of the Monument, which features three undulating cloud motifs. Below the clouds, rain drops fall in the form of slashed lines, phallic shaped rain, and concentric circles (Grove 1984: 110). In addition, three bromeliad plants fall from the clouds to evoke a mythical scene of seeds given from the heavens alongside precious rain. The three sets of clouds at the top mirror the three

displayed at the base of Mon. 5, although the clouds of Mon. 1 are stacked to show 9 in total. Overall, the scene showcases a common Mesoamerican association between mountain tops, caves, and rain. Grove (1984) identifies the person as a type of rain or wind god that brews rain in mountains and distributes it across the countryside. Hence, the monument clearly carves into stone either a ruler, a deity, or a revered ancestor whose rituals of supernatural contact in the mountain cave brings wind, rain, and the seedlings of agricultural rebirth. The monument is a paired opposite of the clefted cave deity of Mon. 13; one supernatural cave births maize and another births wind and rain.

Jorge Angulo (Grove 1984) first interpreted the five smaller sized relief carvings east of Monument 1 as a visual tableau sequence that can be read like a stop action film. Thematically, the tableau continues the wind, cloud, and rain symbolism depicted on Mon. 1. Like Monuments 31 and 41 of Station A, the group features zoomorphic supernaturals riding atop stylized clouds. In the case of station B, they are shown with upturned heads that produce bifurcated scrolls that seem to birth the raindrops that fall from the clouds above. I read the sequence eastwardly from Mon. 1, as that is the way the zoomorphs face and the directions the clouds travel at the end of the sequence.

The first relief east of Mon. 1, Mon. 6, depicts a realistic squash plant with rounded bulbs of young fruits (Figure 26). Mon. 7 appears directly above Monument 6, and it depicts a zoomorphic creature riding atop a Lazy-S cloud motif with an upward turned head (Figure 27). The creature is smaller than others in the group and is not shown with a bifurcated scroll (or the scroll has eroded away). J. Angulo (Grove 1987: 135) identifies the creatures as an iguana. It is shown with flame eyebrows and a stylized mouth or snout that identifies it as a supernatural. Its' close proximity to Monument 6

denotes the result of the cloud bearing, celestial supernatural: life giving rain. In the same fashion, Monument 15 appears next in the sequence, and it furthers this zoomorph-cloud-rain-squash duality. The monument is badly eroded, but it contains another realistic squash depiction at its lower end, and it shows another zoomorphic creature who is emanating a bifurcated scroll into a cloud above (Figure 28). As a result, the cloud releases one visible rain drop motif, which falls onto the squash plant below.

Monument 14 appears next, and it shows another zoomorph crouched atop a stylized cloud with an upturned head that produces a bifurcated scroll (Figure 29). The scroll emanates into an undulating cloud above, and rain falls as a result. The zoomorph is a quadruped with a long and curved tail resembling a jaguar or other feline. In addition, its flame brows and crocodile-like mouth identify it as a supernatural. Monument 8 continues the theme with a larger zoomorph who is also shown with an upturned head that births a bifurcated scroll into a cloud above (Figure 30). Raindrops are shown falling once again as a result. The zoomorph can be identified as a supernatural by its mask, flame brow, and elaborate tail. J. Angulo (Grove 1987: 134) and Reilly (Reilly 1995: 38; Reilly 1986: 162) relate the creature to a crocodile whose tail evokes the vegetative image of the Caiman World Tree that carries a trefoil. More specifically, Reilly (1993: 6) relates the image to the natural behavior of crocodile water dancing in which a bellowing crocodile makes the noise of thunder and produces a fountain of water from the mouth. At the far east, Monument 11 completes the sequence (Figure 31). It depicts another fourlegged zoomorph atop a stylized cloud motif. Like Monument 14, the creature resembles a feline and also wears an elaborate crest above the eye that identifies a supernatural. No bifurcated scroll emanates from the creature; however, there is a serpentine-like cloud to

the left that is diagonally oriented and shows rain drops falling perpendicularly. This off center orientation of the cloud and rain imply wind blown clouds and sideways falling rain.

When "read" as a tableau, the Water Dancing Group continues the work displayed in "El Rey" (Figures 32). In both cases bifurcated scrolls emanate like breaths of life from the mouths of supernaturals towards clouds that birth rain. Like the bromeliads of Monument 1, the fruiting squash plants show the result. If you follow the interpretation of scrolls as wind and breaths of life (e.g. Grove 1987: 138; Thompson 1960:73), the scene shows the supernatural animal companions of El Rey "blowing" the life bearing clouds across the landscape. As previously mentioned, perhaps Monument 1 displays a deity brewing rain within the sacred mountain cave, and the Water Dancing Group depicts his supernatural nahaules dispersing his successful creation. The last monument of the sequence, Mon. 14, shows the success of the scene: the cloud is blowing on its own eastwardly across the countryside to bring rain to the gardens below.

Interestingly, a recorded Mixe myth of Oaxaca describe 'Ene, the God of Thunder and Wind, who produces lightning and wind that cause rain and enable the growth of maize. He is described as the King of the Mountains (where he resides) and as the Owner of Wild Animals. When wearing his cape, he rides atop clouds as thunder bringing rain. Wind is described as his soldier that appears in four differing forms relating to different directions and colors (Lipp 2010: 28-30). Perhaps Monument 1 can be understood as a Formative version of this caped thunder and wind god, and the iguana, jaguar, crocodile, and other zoomorphs can be understood as his quadripartite wild animals and soldiers of wind.

#### The Cave Paintings of Oxtotitlán

As previously mentioned, Oxtotitlán is located approximately 20 miles north of Juxtlahuaca cave in the mountainous region of Guerrero. The murals span from 1520 BC to AD 600 (Russ, Jon, et al. 2017). Contextually, the Olmec style murals occupy liminal space and subterranean space: they occur both at the mouth of a cave and within caverns that are underneath two large mountain grottos (Figure 33). Like Chalcatzingo, this space occurs atop the mountain hill, and the village site is found at the base of the mountain. Overall, the paintings animate a mountain-cave shrine linked to mythico-religious themes of water, rain, maize, and fertility. I feel that there are three groups of paintings within the site. Group A paintings are located at the entrance to the cave grottos and thereby occupy liminal space- the portal space before the supernatural. These painting feature elites who mediate the cave space. Group B paintings are painted in red and are located within the south grotto to occupy subterranean space. These paintings feature celestial deities related to water and wind. Group C paintings are painted mostly in black and are located within the north grotto cave space. Group C paintings feature underworld deities and maize imagery.

#### Group A: Murals Mark the Entrance to the Cave

Group A includes the two large, polychrome murals as well as paintings 7-9, which all appear at boundary areas before the north and south grottos. In particular, the two larger sized, polychrome murals appear first as if to oversee the greater entrance to the caverns. Mural I appears above the entrance to the south grotto, whereas Mural II appears just before the smaller paintings 7-9 that mark the entrance to the north grotto (see Figure 33). Thematically, these paintings feature anthropomorphic figures with

elaborate regalia that convey rulership themes or identify lineage founders. Their placement at the cave entrances mark them as mediators to the supernatural cave space and the earth deities that dwell in caves.

Painted directly above the entrance to the south grotto is mural I, a polychrome masterpiece composed in rich, quadripartite colors of blue-green, red, yellow, and black (Figure 34). The mural depicts an elaborately dressed human figure wearing a winged owl costume who is seated atop a zoomorphic throne with a maw that frames the cave entrance below. The owl mask is cut away in shamanic x-ray style to show the human face of a figure wearing regalia. Reilly (1995: 40) attributes the piece to ritualistic, shamanic flight with a figure highlighted by avian attributes. These attributes include: an owl headdress, a winged cape in the form of a feathered back rack, winged arms, a cross banded pectoral at the chest, and two hand-paw-wing motifs. Furthermore, the cross bands shown on the eyes of the throne monster identify it as an Olmec sky dragon and the throne as a sky throne (Reilly 1995: 40). Since the mouth of the tricephalic throne frames a cave beneath, the painting shows "the precise moment before he will lift off and fly through... the cosmic portal into another reality (Reilly 1995: 41). Kent Reilly (personal communication 2017) notes that at sunset rays of sunshine fall onto the owl's eye that probably once held a polished jade or obsidian mirror. This would have ritualistically brought the winged figure to life (as rays reflected from the owl's eye) at the precise moment before night fall- the time when owls take flight.

The first iconographic theme of Mural I is water symbolism, which is highlighted naturally by water that collects below the mural during the rainy season (Grove 1970). Grove (1970) notes that owls within Maya cosmology, especially the

horned moan bird, relate to rain (see Thompson 1960: 49, 114, 275, 292). Additionally at Teotihuacan, owls are associated with rain gods and water (Armillas 1945, Miller 1967, Noguera 1925). Other water attributes of the mural include: (1) the red motif located above the figure's forehead has been identified as a water symbol (Grove 1970), and (2) the blue-green plumes that drape down from behind the head dress are associations of sky, rain, and wind- typically personified by the avian serpent deity of wind and rain. These blue-green plumes evoke the image of the quetzal birds on the headdress of El Rey, a figure surrounded by rain and wind symbolism at Chalcatzingo. Lastly, the hand-paw-wing motifs and scrolls that are shown on the figure's thighs are widespread Mesoamerican symbols of water (Rands 1955: 285-298; Thompson 1960: 114) and may relate to the sectioned conch motif of Quetzalcoatl within post-classic traditions (Grove 1970: 10).

The throne that mediates the avian ruler and the cave space below showcase the second major theme of mural I: rulership and shamanic flight. The throne itself has been identified by Grove (2000) as a tricephalic sky serpent since its fangs are curved. This would further the mural's rain and fertility themes via the Olmec sky serpent (see Taube 1995). However, it has also been interpreted as an image of frontal jaguar face that holds bicephalic serpents that hang below (Grove 1970). Either way, the tricephalic maw creates the quatrefoil portal to the Other world. The winged ruler who sits above showcases his ability to travel through this portal into the cave realm of the Otherworld and contact ancestors and rain deities that dwell within the mountain

The second large, polychrome mural that marks the greater entrance to the cave paintings is Mural II, located below and north of Mural I (Figure 35). It orients to face

directly east, and it is located along a cliff face that is directly between the north and south grottos (see Figure 33). It is also located in close proximity to paintings 7-9, which all collectively seem to mark the entrance to the north grotto. Although badly eroded by natural elements, the mural depicts a jaguar, which includes: tri-lobed flower spots depicted in red and black, an enlarged feline tail, a human-like face or mask, and a headdress topped by black and yellow feathers that emanate from the forehead region of the face. The jaguar is not naturalistic in style. Instead, the flower-petal spots, enlarged tail ending, and feathered crest indicate a supernatural. At the same time, Grove (1970) identified a human face at its upper left portion that includes a bracketed eye and possibly a down turned fang. Based on its close proximity to Mural I, which features a shamanic ruler in transformation, I would interpret the facial portion to indicate the mask of ruler in supernatural regalia. Hence, the shamanic ruler is transforming just before the cave entrance. This interpretation is strengthened by the flower-like spots, which are also found on painting I-d that includes a humanoid figure and jaguar. Furthermore, the feathered headdress evokes the image of Juxtlahuaca Painting I, which features an elite figure dressed as a jaguar with a feathered headdress. Overall, the mural displays an Early Formative tradition of jaguar nahualism tied to supernatural contact within sacred mountains and fertility themes like rainfall (see Kappelman and Reilly 2001; Gutierrez and Pye 2010; Russ, Jon, et al. 2017).

The other, smaller sized paintings that occupy the liminal space of group A occur just north of Murall II at the immediate entrance to the north Grotto. It is possible they thematically connect more with the north grotto paintings; however, I included them within group A since they are found at the boundary area before the interior, grotto space

(see Figure 33b). Painting 9 occurs first and features broad, scroll-like elements (Figure 36). Painting 8, which dates from the Late Formative to the Classic Period, is composed in black and red, and it features a feathered circular band that is divided by a series of rectangles (Russ, Jon, et al. 2017) (Figure 36). The painting faces east towards the rising sun and has been interpreted by Grove (1970) as a solar disk and shield like Post-classic renditions of central Mexico (see Noriega 1959: 265). Russ, Jon, et al (2017) located a human head depicted in profile above the shield, which identifies an elite figure who holds the shield. Furthering Grove's interpretation, they interpret the image to predate Post-classic symbolism where Aztec rulers are depicted holding shields within sacred outcrops (Russ, Jon, et al. 2017). For instance, Monteuczoma II is depicted holding a shield and facing east at the Chapultepec Hill Sanctuary that includes a spring, cave, and sacred mountain (Russ, Jon, et al. 2017; Nicholson 1959). Within this interpretation, the grouping at the north entrance may feature elites who are ritualistically connected to east and the rising sun. This would contrast the western oriented mural I that animates at sunset.

Like painting 8, painting 7 orients to the east and features a human face shown in profile. However, it is more Olmec in style, as it is shown with a baby were-jaguar face who wears a helmet and a buccal mask with three fangs (Figure 36). The figure's mouth is toothless like a were-jaguar supernatural. Emanating from the mask is a scroll element in the form of an early speech glyph. At Teotihuacan, speech glyphs occur in scenes relating to water (Grove 1970:21; Kubler 1967) (e.g. see Figure 3).

Overall, the elite figures wearing regalia relating to transformation scenes within group A animate the grotto entrances as portals to the supernatural space of the

subterranean caves. It is interesting that the paintings of group A are oriented dualistically. Paintings 7-9 and Mural II orient east towards the rising sun, and they mark the entrance to the north grotto cave. Mural I, on the other hand, orients to the setting sun (when rays of sun hit the owl), and the mural marks the entrance to the south grotto cave. Perhaps, the paintings animate in ritualistic fashion the rotation of the heavens via paired opposites- the underworld realm of the flowery jaguar of Dawn and the celestial realm of the winged owl who takes flight at sunset.

South Grotto Paintings (Group B): In the Belly of the Olmec Dragon

The South Grotto is found directly below Mural I; in other words, these paintings appear beneath the winged ruler and within the maw of the Olmec-sky-dragon throne. Overall, the paintings further Mural I's theme of rain symbolism, and they seem to relate to the celestial realm. Within the cave space are painted a Rain-god face, a naturalistic deer, and an Olmec sky dragon in scroll-like form. The first painting encountered is A-1, "El Diablo," which features a glyphic like rendition of an Olmec Sky Dragon producing a bifurcated scroll (Figure 37). At the top of the painting is a hand element with seven fingers that most likely relates to the hand-paw-wing motif, a common locative of the Olmec dragon and a common symbol of water (see Reilly 1995; Rands 1955: 285-298; Thompson 1960: 114). At its lower end, a circular eye is painted with the celestial symbol of crossed bands, which identifies the Olmec sky dragon. The eye is flanked by four flower-like petals at the inter cardinals as well as abstract versions of flame brows shown above. Lastly, a bifurcated scroll emanates from the eye at the base of the painting. Although the shape of the scroll is reminiscent of Mixtec mountain glyphs, I feel it more likely relates to the bifurcated wind scrolls that project from the zoomorphic

cave maw of Chalcatzingo Mon. 1, El Rey (see Figure 38). As such, I relate both celestial dragon creatures to Avian Serpent deities of wind and rain (e.g. Taube 1995). For instance, Figure 38 has cut and pasted the south grotto paintings to show a possible shared iconographic theme with Chalcatzingo's Water Dancing Group (i.e. the water / wind context of the mountain cave).

After El Diablo is painting A-3, which features a Classic / Post-Classic Period style Tlaloc face (Figure 39). Although it likely postdates the Olmec horizon of the cave shrine, the rain god image furthers the rain symbolism of painting A-1. In addition, it establishes supernatural rain deities to dwell within the mountain cave. The only other noticeable cave paintings of the south grotto include a kneeling humanoid (A-2) as well as a naturalistic image of a leaping deer (B-2) (Figure 40). The human figure is shown with a vegetative element protruding from the forehead that would relate to fertility themes. Likewise, the image of the deer could relate to animal spirits, animal sacrifice, or the fertility of the mountain as a watery source of life for humans, plants, and animals. For the Mixteca of Oaxaca, for instance, Carlos Mautner (2005: 131) has identified a depiction of a rain god sacrificing a deer within the classic period cave site of the Colossal Natural Bridge cavern.

For the South Grotto murals as a whole, the aforementioned Mixe myth of a Poh 'Ene comes to mind. Poh 'Ene is the mountain dwelling deity of wind, rain, and the owner of wild animals. The winged ruler of Mural I, interestingly, is painted directly above an Olmec sky dragon (i.e. wind), a Tlaloc face (i.e. rain), and a leaping deer (i.e. wild animals). It is as if in flight the ruler mediates these supernatural elements of the south Grotto cavern that dwell in the heart of the mountain.

North Grotto Paintings (Group C): Animating the Otherworld of Jaguar

The north grotto paintings are primarily composed in black, the color of the

Mesoamerican underworld (Grove 1970), and they extend northward from the entrance
paintings (Murall II, paintings 7-9) into the subterranean space. The first group of
paintings encountered are paintings 4, 5, and 6 that are just east of the entrance. Only one
painting, painting 5, is naturalistic, which displays an Olmec style baby face in profile
(Figure 41). The figure has toothless gums and is near identical to the face of painting 7
nearby. The other two paintings (4 and 6) are more abstract and glyphic like. Although
obscure, painting 4 most closely resembles a bound sacred bundle (Figure 41). Painting 6
is also obscure and similar in shape and design at its base (Figure 41). However, its upper
portion contains some anthropomorphic characteristics, including a stylized face with two
rectangular eyes that evoke Classic period Venus glyphs (Grove 1970: 21). Interestingly,
there are examples of Mixtec bundles often found in caves that include masks at the
upper end (Headrick 2007). Hence, the grouping may relate to ancestor contact.

Painting 3 appears next just north of paintings 4, 5, and 6, and it depicts a supernatural dragon creature (Figure 42). Grove (1970) identifies the creature as a Formative version of Cipactli- the crocodile personification of the earth floating in the primordial sea. Overall, the creature is a composite, supernatural dragon that features a mammalian tongue, a pointed bird-like snout, tripartite flame brows, and bifurcated scroll elements that emanate behind its head. At the end of the scrolls, a Venus-like glyph is shown at the zoomorph's ear that is similar to the supernatural jaguars of Chalcatzingo. Three circular elements appear both below and above the head. Overall, the creature evokes the Cipactli-like creature of Chalcatzingo Mon. 5.

To the north of painting 3 is a quadripartite group of paintings located at the far north end of the subterranean grotto space (Figure 43). In (approximate) orientation, the jaguar-human Painting 1-d is south (below), the flowering human painting 1-a is east (at right), the horned owl painting 1-e is north (above), the Cipactli-like dragon painting 1-c is west (at left), and the feathered serpent painting I-b is centered (see Grove 1970: 7; Fig. 3). Figure 43 shows this quadripartite grouping where I have rotated the paintings based on their direction (i.e. north is up and south is down). Painting 1-d (Figure 44) depicts a nude, standing male figure shown behind a supernatural jaguar. The figure's arms are positioned opposite to that of Mural I, possibly also linking the figure to rulership and shamanic transformation. He wears a headdress of an elite in the form of a headband that has a frontal protruding element. Of equal size and importance in the painting is a supernatural jaguar that emanates from the male's genitals and features bifurcated scroll elements, circular spots, flower-like spots, a Venus-like glyphic element at the ear, a hand composed of stylized tre-foil and dot motifs, and two large fangs. Clearly, the bifurcated scrolls and flower elements relate the jaguar-ruler to themes of fertility. Like Murals I and II, the scene depicts an elite ruler who is transforming into his nahual in this supernatural cave space. Kappelman and Reilly (2001) compare it to Juxtlahauca painting 1, arguing that the two images relate to jaguar transformation and ancestor contact. In particular, the fertility themes of both Mural II and painting I-d relate such jaguar transformation to supernatural contact and a ruler's ability to access supernatural powers like water and maize (Kappelman and Reilly 2001: 45-46; Gutiérrez and Pye 2010).

Directly north of painting I-d are painted two supernatural dragon creatures.

Painting I-b is badly eroded, but the reconstruction by Grove (1970: 16; Fig. 11) depicts a

stylized zoomorphic supernatural with a crocodilian snout, a curved serpentine fang, and an oval eye with crossed bands and exaggerated flame brows (Figure 45). Unlike painting I-c and Painting 3, which include multiple teeth, the singular fang seems to identify the creature as a serpent. Further, its long and thin shape is serpentine as well. The creature includes celestial symbols of cross bands and exaggerated flame brows. Possibly it represents a feathered serpent- a rain and wind deity.

Directly next to this this abstract, avian serpent image (I-b) is painting I-c, a mystical painting of an Olmec dragon that is very similar to Chalcatzingo Mon. 5 (Figure 46). The supernatural creature is serpent like in shape, but it also features: a crocodilian snout, a bifurcated tongue, multiple curved and triangular shaped teeth of shark, flame brows, forked fin-like elements resembling fish fins, and jaguar-like spots. Although some scholars view the zoomorph as a feathered serpent (e.g. Coe 1968: 92, 114; Taube 1995), others (e.g. Reilly 1991, Grove 1970) relate it to *Cipactli*, the alligator / gar fish supernatural of the underworld waters. For instance, Figure 47 shows its similarity to other Olmec supernatural renditions of gar fish. Interestingly, Gar fish have a pronounced bulb at the upper snout at the nostril like this creature of Oxtotitlán. They also have curved serpent-like bodies, a crocodilian-like snout, and the spotted gar species feature a spotted body. Therefore, I would relate this creature (as well as Chalcatzingo Mon. 5) to a Cipactli-like supernatural creature who dwells in the underworld waters and is related to the mythical earth that floats in the primordial sea.

At the upper register of the group is painting I-e, which depicts a realistic owl with horns (Figure 48). Like Mural I, its horns would identify it as either a great horned owl or a Moan bird, and the later would relate to rain (Grove 1970). It may represent the

complete transformation of the ruler of Mural I that is now flying through the caves. For instance, this northern grouping mirrors the paired murals of the cave's entrance with a shamanic owl appearing above an anthropomorphic jaguar in transformation (i.e. Paining I-d). In both cases, the owl appears at the upper, celestial register, and the jaguar appears below as if in the underworld.

Painting I-a is located directly below the realistic owl (I-e), and it depicts a quadripartite flower with four stylized jaguar paws and a human face that emerges at center (Figure 49). The jaguar-paw motifs are identical to the feline paws of painting I-d. Further, the jaguar of painting 1-d includes flower spots that seem to pair the images. The feline paws of I-a orient to the cardinal directions, and the four flower petals orient to the intercardinals, which center the emerging human head shown in profile. The flower itself evokes the image of the Mayan *kin* glyph that relates to the sun. Therefore, perhaps the image relates to a jaguar solar deity like Tezcatlipoca of Post-Classic mythologies. Interestingly, the painting is located directly right of painting I-c, the dragon creature. Hence, the Oxtotitlán tableau mirrors Chalcatzingo Mon. 5, as it features a flowering solar diety that emerges directly to the right of the Cipactli-like creature (Figure 50).

On the other hand, the flowering human head evokes images of the Maize God like Chalcatzingo Mon. 13. For instance, Kappelman and Reilly (2001) relate the image of La Venta Altar IV, which includes a jaguar throne monument with a flower petaled cave, to the world tree that the Maya commonly animated with sparking jades or white flowers. The jaguar paw motifs of painting I-a include tre-foils for fingers that evoke associations with the Maize god. In particular, the image brings to mind the Popol Vuh myth where the decapitated head of the First Father becomes the seed of Mesoamerican

life when it is resurrected from the ball court of the underworld. Perhaps, the intercardinal flower petals combine with the cardinal oriented jaguar-paw-wings to identify the flowering of the Lord of Center- the Maize god who will emerge from the underworld at the center of the Cosmos to raise the world tree at creation. Figure 51 shows Olmec examples of flower motifs that are shown with images of clefted supernaturals, which may relate to this creation episode.

# The Paintings of Juxtlahuaca Cave

The Olmec style cave murals of Juxtlahuaca are depicted deep within a mountain cave that is located near a village site of Colotlipa. The cave is found along the Rio Blanco river valley, and the entrance is approximately 20 feet up slope of the mountain. Gay (1967) interpreted the murals to the Early or Middle Formative Period and Olmec in style. Coe (2005) attributes the murals to the Early Formative Period. Thematically, the murals animate the magical power of caves in ancient rites. Included within the cave are images of elites dressed in elaborate regalia, images of bloodletting and shamanistic contact, and images of supernaturals. There are five main features of the subterranean space to be discussed (Figure 52): (1) the Chamber of the Drum, (2) the Hall of the Dead, (3) the Hall of the Ritual, (4) the Hall of the Serpent, and (5) the Subterranean Lake.

Approximately two thousand feet from the cave mouth is the Chamber of the Drum, a small room that includes hanging, hollow stalactites (Figure 53). When the stalactites are tapped, a drum-like resonance emanates (Gay 1967: 31). In Western Belize, the ancient Maya were at least cognizant that speleotherms were formed from water drops turning into stone, which the Yucatec called *xix ha tunich*, or water drip stone (Brady 2005: 287; see Barrera Vasquez 1980: 946). Hence, perhaps the room can

be conceived of as a shrine to primordial water stones of the underworld. Within the same cavern, there was also painted three red spots that may relate to prehistoric cave use and these three stones of creation (see Gay 1976: 31).

The next hall encountered is the Hall of the Dead, where Gay (1967) discovered the skeletal remains of three children and eight adults (Figure 54). All of the remains were embedded in stalagmitic crust caused by seasonal floods (Gay 1967: 31). Overall, the hall may have served as a repository for the dead, or it may relate to ancestor worship. For instance, there are images in Mixtec codices of elites contacting and interacting with mummy bundles within caves of Oaxaca (Headrick 2007: 51-52).

Located in a cavern room approximately 3400 feet from the entrance, you encounter the Hall of the Ritual, which features two human figures engaged in a bloodletting ritual (Painting 1; Gay 1967) (Figure 55). The larger figure B commands the scene. He wears the costume of a jaguar as well as a feathered headdress, a helmet, and large ear spools. In his left hand, he holds a snake-like rope that leads towards the genitals of the seated figure on the left (figure A). In his right hand, he holds a trident-shaped implement with three razor-sharp points aimed towards the seated figure. His headdress features a clefted frontal element worn at the forehead that is painted in red, and it sprouts jade colored feathers whose length and color resemble the tail feathers of the Splendid Quetzal. The clefted element at the forehead evokes the Jester God Headdress that is worn as the royal charter and personifies First Father the Maize God. In addition, the quetzal plumes that emanate backward mirror the quetzal birds displayed on the headdress of Chalcatzingo Mon. I. The smaller figure A is seated cross legged with arms extending to the knees. He wears elite regalia, including a circular ear ornament, a

headdress, and a black mask. His chest is bare and his legs are painted in red. Across the figure's waist is painted in black some sort of regalia that resembles a ceremonial bar. The mask work by the figure may relate to shamanistic themes of supernatural contact within caves. Interestingly, both the serpent rope and trident aim at the seated figures genitals. Perhaps, the ritual consists of penal bloodletting as a ritual offering in the cave. For instance, Kappelman and Reilly (2001: 42) relate the rope to a cosmic cord that relates to ancestor worship where the smaller figure represents a petitioning descendent entering the cave to evoke supernatural contact via bloodletting.

Gay (1972: 48; Lambert 2012) also discovered two other elite figures (C and D) to the right of Painting 1 that are painted with headdresses and elite regalia (Figure 56). Overall, Gay (1972: 48) relates the four figures of Juxtlahuaca Painting 1 to mirror the figures of Chalcatzingo Monument 2. In both cases, the theme relates to bloodletting and features three commanding figures facing a seated and subordinate figure. Further, the clefted headdress of Figure B mirrors the maize imagery displayed on Chalcatzingo Monument 2. Therefore, perhaps both tableau scenes relate to offerings of blood that relate to the resurrection of Maize. On the other hand, Kappelman and Reilly (2001) call forth to ethnographic evidence of the Mixe of Oaxaca (Lipp 1991: 78) who included myths of powerful nahuals who dwell in mountains and take the form of jaguars to communicate with the dead. Gutierezz and Pye (2010) demonstrated that the jaguar nahual ability to contact the supernatural realm, the realm of ancestors and rain deities, allowed them to contact forces of rain and wind. Furthermore, this nahual belief system become linked to elites as a royal charter during the Formative period. Therefore, the

purpose of the Juxtlahuaca cave ritual relates to fertility themes, perhaps of both maize and rain, which would validate elites in rituals performed in the cave.

At 3,900 feet from the cave entrance, one encounters the Gallery of the Drawings (Figure 57). Drawing 2 depicts a feline head in front of a serpent head that are both shown in profile. The two creatures mirror those of the Hall of the Serpent, to be discussed. Directly to the left is drawing 3, which depicts a male figure shown in frontal view who wears a loin cloth and holds unidentifiable objects. Overall, these drawing are more sketch like than the other murals. They do, however, showcase the same tableau as the Hall of the Ritual and the Hall of the Serpent: elite humanoids holding ritual paraphernalia shown before a jaguar and serpent.

At 4000 feet from the cave mouth, one encounters the Hall of the Serpent, a spacious room that according to Andres Ortega, the local guide (see Gay 1967: 33), marked the deepest reached room in ancient times. The scene is fitting for this deep interior mountain cave space and heart of the mountain. In mythical and mystical fashion, two large scale murals depict a jaguar leaping towards a feathered serpent (Figure 58). The left most jaguar, measuring approximately 3 feet by 4 feet, is painted in red and black. The jaguar's lower midsection is painted in red, and its upper back is covered by black spots. The painter focused most on the feline's head that includes overly large ears, which evoke Venus-like glyph motifs shown on the jaguars of Chalcatzingo. The feline's eye is visible as well as the mouth from which emanates an overly long tongue. Interestingly, the spotted pelt of the feline is only shown along the animal's back, which could signify a jaguar in transformation, i.e. a supernatural nahual.

Directly right of the jaguar is painted a seven foot tall plumed serpent that covers a slab projecting out of the cavern wall (Figure 58). The serpent is vertical with a red body and a black head. The serpent's shape and vertical position is near identical to La Venta Monument 19 (Figure 59). The Juxtlahuaca serpent is shown with a tail and an elongated tongue that each feature sprouting maize motifs. The supernatural zoomorph has avian plumes that protrude from flame brows and a circular eye with crossed bands. Directly right of the eye is a S- shaped motifs with two dots on each side (Figure 60). This motif represents a stylized version of the lazy-S symbol, or a muyall, which represents a cloud and relates to water and fertility themes (see Reilly 1993). These muyall symbols are also shown on the maize bundles (often called torches) carried by the Maize god monoliths of Teopanticuanitlan (e.g. see Gutierrez and Pye 2010: fig 2.4). In similar fashion, the image of the Juxtlahuaca plumed serpent carries both the muyall and trefoils of Maize.

Overall, the mythical scene evokes Aztec creation episodes of the Post Classic that was completed by the heroic brothers of Tezcatlipoca the jaguar and Quetzalcoatl the Feathered Serpent (Mendieta 1993: 82 [1870]; Gutiérrez and Pye 2010: 34; Adams 1977: 228-229). For the Formative Period, Taube (1995) illuminated two major gods in Olmec iconography: one an avian serpent and the other a rain deity who is usually jaguar-like in form (Gutierrez and Pye 2010: 50). For Juxtlahuaca, the setting is mythical. The hall is in the watery underworld of a cave, which evokes a ball game-like encounter between two dualistic deities. Hence, the cave is animated as a shrine by "the avian serpent god and the rain god [who] were responsible for weather phenomena, with the avian-serpent providing transportation for rain, and the [jaguar] rain god providing precipitation itself"

(Taube 1995: fig. 19a, Gutierrez and Pye 2010: 50). As if to mystically capture the essence of the mountain cave and these two dualistic deities, the Subterranean Lake lies just beyond the murals (Figure 61). The lake identifies the overall theme of the paintings and the mystical source of its sacred landscape. The mountain cave, and its paintings, represent a cave shrine of the watery underworld.

# V. DISCUSSION: ILLUMINATING THE ICONOGRAPHIC PATTERNS OF THE CENTRAL MEXICAN TABLEAU

In the previous chapter, individual monuments or paintings were analyzed in the structural method. This chapter will utilize the last chapter's interpretations to summarize the iconographic tableau of each site's sacred imagery. Second, it will illuminate patterns within the iconographic corpus, and it will reference these patterns to the greater ethnographic and archaeological record of Mesoamerica. This is equivalent to step two in the Panofskian method of iconology (see chapter two).

# Illuminating the Tableau

Chalcatzingo: Dualistic Caves, Clefted Cerros

Two major mythico-religious themes are carved onto Cerro Chalcatzingo at the east and west personified caves: sacred water and precious maize. To the west, an anthropomorphic rain and wind deity is carved within a quatrefoil, sky cave that is next to a major drainage of the cerro (Mon. 1). The quatrefoil shaped mountain cave is formed by the maw of a zoomorphic sky dragon that may represent a celestial crocodile or serpent (Grove 2000). To the east, the fully dressed Maize God (Mon. 13) is carved within a quatrefoil cave that is formed by a more terrestrial, zoomorphic maw (i.e. an Earth Dragon). This eastern tableau is found close to the knoll (a small natural mound) that is within the saddle directly between the clefted cerros. Interestingly, the western "Water Dancing Group" (see Reilly 1991) is carved higher up on the mountain and therefore closer to the Tlaloc-like ancestor / diety of Mon. 10. So that, the collective rain and wind deities are carved atop the cerro to relate to the sky realm. In contrast, the eastern group (that lie at the base of the talus slopes) relate to sacrifice and bloodletting in

the underworld / *Other* realm. Such sacrifices precede the resurrection of the Maize God (i.e. Mon. 13), who emerges from the eastern mountain cave and raises the World Tree at the base of the clefted cerros. Therefore, the mountain monuments as a whole depict rituals of reciprocity in a dualistic Cosmos: sacrificial blood offerings by elites in the underworld (e.g. Mon. 2, Mon. 4) give forth life giving rains (e.g. Mon. 31, Mon. 1) and prepare the resurrection of First Father (Mon. 13). In all, the two quatrefoil shaped caves, the wombs of the mountain, birth the clouds, the wind, and the rain (that emanate from the west), and they Dawn maize that resurrects between the clefted mountains to the East. Figure 62 shows the dualistic tableau sequences of the clefted cerros.

In particular, the western sky cave depicts a wind and rain deity blowing his supernatural nahuales that ride clouds and disperse rain. Possibly, his headdress- which includes zoomorphic eyes and realistic quetzal birds- identify this anthropomorphic deity as a pars-pro-toto representation of the Avian-Serpent deity of wind, i.e. Quetzalcoatl of later traditions. A similar image occurs on La Venta Mon. 19, which depicts an elite humanoid who also wears a cape and holds an incense bag that is seated within a cave niche formed by a Feathered Serpent (see Figure 59). As previously mentioned, the bifurcated scrolls emitted by El Rey (and his zoormorphic nahaules) evoke the Mayan belief in *Ik*, the life force that relates to breath and wind, which in this case is birthing and blowing the rain filled clouds and Zoomorphic cloud riders (see Grove and Angulo 1987: 137). Therefore, the western group displays an anthropomorphic rain deity that brews rain in a mountain cave (e.g. Grove 1984: 110-111) and whose nahual *soldiers of wind* disperse his creation (see Lipp 2010: 28). Further, the "Water Dancing Group" combines

with Mon. 10 to identify the cerro as the primordial source of water, i.e. a Rain God Mountain.

In contrast, the tableau of the eastern group depicts episodes relating to the resurrection of First Father, the Maize God. The overall procession of the monuments seem to ritually prepare for his resurrection from the quatrefoil crack of the mountain. For example, Mon. 2 clearly showcases ritual sacrifice and the scene includes maize regalia, like tre-foil headdresses and a vegetative staff. In addition, the sacrifices performed by the supernatural felines, who wear Venus Glyphs and Jester God Headresses, symbolically relate to captive sacrifice for the resurrection of First Father (Reilly and Garber 2003). Hence, the collective images of sacrifice and bloodletting relate the Eastern tableau to underworld / Other Realm contexts like the mythical ball game that is later recorded in the Mayan Popol Vuh myth. Put another way, the sacrifices relate to the initial beheading of First Father prior to his resurrection (as was believed by the Classic Maya) (see Reilly and Garber 2003: 130). Therefore, in the most general sense, the eastern tableau culminates through Mon. 13 where the fully dressed Maize God is seated in the quatrefoil crack of the mountain (see Figure 62). He will be aided by the cloud bearing felines and rain supernaturals (e.g. Mon 41 and Mon. 31), and he is shown holding the horizontal staff of the world tree that he will rotate to its vertical position at creation.

In like fashion, Monuments 41 and 5 seem to relate to creation episodes of the Maize God and the mythical clefted mountain of creation. The three feline cloud riders of Mon. 41 evoke themes of Cosmic travel, like transporting the mythical seed of First Father to the heart of the Mountain and Place of Creation (e.g. see Freidel et al. 1993:

255, fig. 5:6) (Figure 63). For instance, the shape of the cloud that the felines sit in resembles a canoe, which evokes the Classic Mayan canoe episode. If this interpretation were correct, then the manifestation of the Cosmic travel would culminate in Mon. 13 where the fully dressed Maize God sits within the eastern quatrefoil cave and heart of the mountain. Mon. 5 features a crocodile-fish supernatural that evokes the mythical Cipactli of later highland traditions- the floating crocodile manifestation of the terrestrial earth and mother of plants. Further, the Tezcatlipoca-like diety who is losing his left leg evokes the highland myth of the solar feline diety pulling the crocodile out from the underworld waters to form the terrestrial earth- i.e. the rising of the primordial clefted volcano (Williams 2009: 78; Millbrath 2014: 171; Cartwright 2013; Phillips and Jones 2006). In such mythical fashion, Mon. 5 may depict the rising of the twin cerros of Chalcatzingo (whose clefted shape resemble the eyes of a crocodile, see Reilly 1994a). Mon. 13, as such, would depict the raising of the World Tree from on top of this mythical crocodile-clefted-mountain.

Interestingly, Mon. 5 also evokes the Mayan Cosmic Monster, which Freidel et al. (2003: 87) relate to the east – west orientation of the Milky Way that is visible within key dates of creation and that rotates into a vertical position as the manifestation of the World Tree. Examples of similar images by the Classic Maya are shown on Figure 64. Perhaps, the supernatural felines and crocodile monster, which are shown with symbols like Venus glyphs, crossed bands, and clouds, relate the eastern tableau to astronomical features like the cycle of Venus, the birth of the eastern sun, the cycles of the rainy season, and the rotation of the Milky Way (especially from a horizontal to a vertical position). Whatever the case, the eastern quatrefoil cave (Mon. 13) features the fully dressed Maize God ready

to emerge from the earth monster cave. Like San Martín Pajapan Mon. 1, Mon. 13 orients to the saddle between the clefted peaks, and the carved ancestor holds the staff of the Word Tree to raise the sky.

In summary, the western tableau features a rain and wind diety with animal spirit companions that are collectively blowing rainy clouds from the mountain to the gardens below. The eastern tableau features: (1) ritual sacrifice by elite humanoids (Mon. 2), (2) ritual sacrifice by supernatural felines (e.g. Mon. 4), (3) Cosmic / Otherworld travel by supernatural felines (Mon. 41), (4) the Cosmic Alligator creation episode relating to the mythical clefted mountain (Mon. 5), and (5) the Maize God fully dressed within the mountain cave and heart of the mountain (Mon. 13) (see Figure 62). As a collective whole, the mountain monuments of Chalcatzingo depict ritualistic sacrifices by elites and their supernatural spirit companions, and these sacrifices act as ritual offerings relating to mythical episodes of World Renewal. Such creation episodes include the rising of the mythical Earth volcano (e.g. Mon. 5), the birthing of the rainy season (e.g. Mon. 1), and the Resurrection of Maize (e.g. Mon. 13). Further, the formative monuments evoke the dualistic creator twins of the Post-Classic. For instance, the supernatural, Venus felines evoke Tezcatlipoca, the descending solar feline relating to warfare and the dry season. In contrast, Mon. 1, the anthropomorph surrounded by rain and wind imagery (who also wears a quetzal headdress), evokes Quetzalcoatl, the Feathered Serpent deity of rain / wind. In this way, the clefted mountain is venerated, architecturally, as a dualistic, primordial mountain of sustenance- the source of sacred water and precious maize. Such supernatural forces are personified by opposing mythical ancestors at the western and eastern quatrefoil caves. And, lastly, the procession depicted on the mountain top reliefs

could be replicated by Formative rulers, which would have included rituals of captive sacrifice and myths relating to World Renewal, cycles of rain, and the mythical mountain of maize.

For instance, it is interesting to note that the two quatrefoil-caves of the mountain seem to mirror the two northern 'caves' of the public / elite sector of the site. The zoomorphic throne of Mon. 22 (Figure 65) is found at the far northern end of the site that is opposite of the sky-cave equivalent of El Rey (Grove 2000). Grove (2000: 287) compares Mon. 22 to Oxtotilán Mural I since it features a zoomorphic, serpent throne whose maw forms a watery cave that is formed by a sunken patio. Perhaps, this patio could have been ritually flooded with water and would mirror the water context of Mon. 1 (that is next to a drainage). In addition, the zoomorphic cave monster of Mon. 9 (Figure 65) includes bromeliad plants and a tre-foil element that once consisted of three phallic shape motifs at the forehead. The motifs have been damaged during its reconstruction as now only two motifs remain (Reilly Personal Communication 2017). In this way, this quatrefoil mountain-cave monster (with vegetative elements) seems to mirror the quatrefoil earth monster of Mon. 13, which frames the dressed Maize God. Hence, rulers dressed as the Maize God could have passed through the maw of Mon. 9 in public ceremonies of resurrection that would be mirrored by the sky mountain equivalent of Mon. 13. In like fashion, rulers may have performed rituals of rain within the watery throne of Mon. 22, which would replicate the supernatural forces of the supernatural rain deity of Mon. 1.

Hence, the rulership themed monuments of the northern site sector (e.g. Mon. 9 and Mon. 22) mirror their supernatural equivalents that are located on the mountain

slopes. The northern monuments could have been used in elite rituals that would have related to a ruler's ability to mediate the supernatural deities that dwell above in the sky / Other realm of the mountain. Through such rituals, that likely would have included bloodletting, sacrificial offerings, and shamanistic contact, formative rulers could replicate the forces of the two personified mountain caves in public rituals within the northern sector of the site. This would be equivalent to public plaza spaces before pyramids as is seen, for example, at the Formative site of La Venta. As such, ritual offerings could be offered to the opposing caves of the sacred mountain, and this would conceivably enable the birth of rain and the resurrection of the World Tree of Maize. Naturally, the result of the sacrifices would occur when winds and clouds began to stir around the mountain to mark the rainy season, and when the rain bearing clouds would enable the sprouting of young maize plants.

## The Dualistic Caves of Oxtotitlán:

The cave paintings of Oxtotitlán can most generally be defined as dualistic grotto spaces that are marked at the entrance by murals of shamanic rulers / ancestors. A winged owl-anthopomorph (Mural I) commands the south grotto paintings that are composed in red, and the mural orients to the west (i.e. sunset) and relates to water and wind symbolism of the celestial realm. A jaguar-anthropomorph (Mural II) commands the entrance to the north grotto paintings, which are composed in black, orient towards the east (of the rising sun), and relate to underworld themes like feline transformation as well as solar and plant fertility themes (i.e. maize). Hence, the two large, entrance murals depict shamanistic rulers dressed as supernatural nahaules, of a winged owl above and a jaguar below, and these figures mediate the opposing supernatural forces of the north and

south grottos. Like the east and west quatrefoil mountain caves of Chalcatzingo, the supernatural forces of the opposing grottos relate to wind / water as well as maize- the twin sources of life that stem from the heart of the mountain. That is, the celestial Mural I, and its ruler in flight, mediates the rain and wind context of the south grotto, and the human-jaguar figure of Mural II mediates plant fertility themes, like the flowering / Dawning of maize that are featured in the north grotto. Figure 66 illustrates the dualistic tableau sequences of the opposing cave grottos.

As previously mentioned, Mural I animates at sunset when descending rays fall on the owl figure, bringing the mural to life before each night (Reilly Personal Communication 2017). Grove (1970) associates the owl with a winged Moan bird, which evokes later Mayan associations of rain that is furthered, naturally, by the pools of water that collect below the mural during the rainy season. An Olmec Sky Dragon, in the form of a tricephalic serpent, frames the watery cave entrance. Hence, the avian owl "crests" the sky serpent cave maw, and the two combine to form a bird-serpent-throne above a watery cave. Possibly, this iconographic combination furthers the water and wind symbolism of the south grotto by evoking the deity complex of the Feathered Serpent (see Figure 74). Within the cave maw of the dragon throne are painted supernatural forces of wind and rain via a scroll-like sky dragon (Painting A-1) and a Tlaloc God painting (Painting A-3). Therefore, I associate the western oriented south grotto with supernatural forces of water and rain that are mediated by the winged ruler. Hence, the winged ruler and watery cave mirror the western oriented, quatrefoil sky cave of Chalcatzingo Mon. 1 (see Figure 69).

The entrance to the northern cave grotto of Oxtotitlán is marked by Murall II, the jaguar-human mural whose placement below Mural I seems to relate it to underworld themes that contrasts the celestial Mural I above. It also contrasts Mural I since it faces east towards the rising sun (see previous chapter). Further, the north grotto paintings relate to plant fertility themes and possibly the resurrection of maize (e.g. Painting I-a). The overall tableau features: (1) human-feline transformation imagery of elites who wear Jester-God like headdresses (Mural II, Painting I-d), (2) a horizontal oriented fish-gator supernatural that evokes later deities like the highland Cipactli crocodile or the Mayan Cosmic Monster (Painting 1-c), and (3) a flowering human profile head of a solar and / or maize diety (Painting 1-a) (see Figure 66).

Marking the beginning of the northern grotto tableau are human-feline transformation images (e.g. Mural II, Painting I-d). These images relate to jaguar nahualism of elites whose supernatural contact in highland caves relates to ancestor contact (Kappelman and Reilly 2001) and fertility themes like the control of weather phenomena (Guiterrez and Pye 2010) and the growth of maize. For instance, the headdresses worn by each evoke the Formative charter of rulership as mediators of the Maize God (e.g. Fields 1989; Reilly 1991). Although no sacrifice image is shown (like at Chalcatzingo), it should be noted that Jaguar nahualism appears commonly in Olmec art within underworld themes of bloodletting and feline-human domination (e.g. the paintings of Cuadzidziqui, Juxtlahuaca Painting 1, and Chalcatzingo Mon. 4). At the center of the northern sequence, past the images of the anthropomorphic jaguars, is painted the Cipactli-like Olmec dragon (Painting 1-c), which resembles the fish-gator monster of Chalcatzingo Mon. 5 (see Figure 47). Like Chalcatzingo Mon. 5, the

supernatural evokes the highland mythical crocodile of Cipactli- the dragon manifestation of the floating, primordial earth. Directly right of the maw of this dragon creature is Painting 1-a, a flowering human head that resembles the Mayan Kin' glyph of the sun. Karl Taube (2019; 2004) relates flower images of later Classic Period and Post-Classic Nahua traditions to the sun, as well as supernatural realms of emergence (like caves). Of interest, he relates such 'Flower Mountain' images to cave portals, the path of ancestors (for the Maya), and the color yellow (the color of Maize) (Taube 2019).

On the one hand, the image of a flowering solar diety (i.e. the blooming anthropomorphic head with jaguar paws of Painting 1-a) may relate to Tezcatlipoca of later highland traditions. In other words, the image would relate to a descending, solar feline deity of the underworld (e.g. Gay 1966; Cook de Leonard 1967). Contextually, Painting 1-a is shown emerging beside the maw of the Cipactli-like dragon of Painting 1-c. Hence, these combined images create a Tezcatlipoca / Cipactli like creation episode that resembles the mythical struggle displayed in Chalcatzingo Mon. 5 (Figure 67) (e.g. Williams 2009; Milbrath 2014: 171; Cartwright 2013; Phillips and Jones 2006).

At the same time, the painting includes a decapitated head, as well as four jaguar paws that feature tre-foils (shown at the cardinal directions). Therefore, I also relate the image to the Pan-Mesoamerican myth of the Maize God and Lord of Center who resurrects from the underworld ball court that is centered by four mountains of Maize at the corners of the Mesoamerican Cosmos (See Reilly 1994b). In other words, here is the seed of Mesoamerican life with the head of First Father that is blooming in resurrection within an eastern oriented, flowery mountain cave. Therefore, the flowering human head can be understood as a *pars-pro-toto* representation of the Dawning of the World Tree

from a centralized mountain cave (to thereby resemble Chalcatzingo Mon. 13) (Figure 67). The flower context of the painting could relate to solar birthing contexts like sunrise (Taube 2019; 2004), which would oppose the sunset orientation of Mural I (and seemingly depict Cosmic horizon portals). In addition, it can be noted that Classic Mayan iconography commonly show the World Tree dressed with sparkling jades, white flowers, as well as the Kin' Glyph of the sun (Figure 68) (e.g. Kappelman and Reilly 2001). Thus as a whole, the northern grotto sequence is similar to the eastern tableau of Cerro Chalcatzingo since it features: (1) jaguar transformation of elites that wear Jester God headresses, (2) a Cipactli creation episode / a Cosmic crocodile Monster, and (3) an eastern oriented image of the Maize God that is emerging from a cave (here with the image of the mythical seed in the form of a decapitated head that is blooming in rebirth and centered by 8 partitions) (Figure 69).

In conclusion, the dualistic paintings of Oxtotitlán juxtapose the water and wind contexts of the celestial, southern grotto with the solar-feline and plant fertility contexts of the northern grotto. Like at Chalcatzingo (see Figure 69), opposing mountain caves frame the dualistic deities of creation through two opposing grotto spaces that orient to sun rise and sun set (as well as through juxtaposed portal symbols with a bird-serpent-cave-throne and a flowery-jaguar-mountain-cave-portal). Shamanic elites are painted on centralized murals to command the two cave entrances and thereby mediate the supernatural forces with a winged owl humanoid above and a feline anthropomorph below. Conceivably, through shamanic rituals that would enable Cosmic flight to the heavens and feline transformation to the underworld, descendent rulers could travel through these caves grottos, to the heart of the mountain, and contact the supernatural

forces of water, wind, the sun, and maize. Of interesting note, the Mixe of Oaxaca (Lipp 1991: 48) describe two roads within caves, "one leading to the underworld and the other to the abode of Poh 'Ene ['wind thunder']."

Juxtlahuaca Cave: The Underworld Court of Avian Serpent and Jaguar

Overall, the iconographic symbolism of Juxtlahuaca cave paints a shrine to the watery underworld where the source of creation lies at the heart of the mountain and is depicted through a mythical encounter of Jaguar and Feathered Serpent. The encounter evokes the Aztec ball game creation episode of the Post-Classic played between the twin brothers of Tezcatlipoca the Jaguar and Quetzalcoatl the feathered serpent (Cartwright 2013; Phillips and Jones 2006; Peterson 1959: 130) Hence, the shrine features dualistic creator deities near a pool (i.e. the Subteranean Lake) at the heart of the mountain where, in Mayan myth, humans are made from Maize dough (Freidel et al. 1993: 139; Vogt and Stuart 2005: 175-176). Preceding this creation episode, the Hall of the Ritual shows elite humanoids who are engaged in a bloodletting ritual (Painting 1). The scene showcases shamanic rulers whose rituals and cave offerings mediate the dualistic, supernatural forces that are personified though Zoomorphic supernaturals and that lie beyond at the deepest point within the mountain womb.

The Juxtlahuaca Cave tableau can be most generally summarized by three main features: a room of water stones, an ideological hall of a bloodletting ritual, and a mythical jaguar-serpent hall depicting the underworld source of creation (Figure 70). In the Hall of the Drums, water stone drums combine with three painted circles to evoke the mythical setting of creation stones placed in the waters at the center of the Mesoamerican Cosmos. Continuing through the cave, the Hall of the Ritual displays the highland cult of

jaguar nahualism (Gutierrez and Pye 2010) with Figure B, who is dressed as a jaguar and dominates the ritual scene. His dominating posture and his razor-sharp trident relate the scene to bloodletting and possibly sacrifice, which are commonly shown in Olmec art through Feline Domination. For instance, Carlo Gay (Lambert 2010) relates the four standing figures that all face the subordinate Figure A to the sacrifice scene of Chalcatzingo Monument 2. The Cosmological, or ideological, context of the bloodletting ritual can be explained through the Jester-God like headdress worn by Figure B, which relates to the myth of First Father and acts as the Formative Period charter of rulership (Fields 1989; Reilly 1991; Reilly and Garber 2003). Hence, the headdress and jaguar attire identify a shamanic ruler who mediates Otherworldy forces within caves that would include fertility themes like maize and weather phenomena like the brining of rain (Gutierrez and Pye 2010).

In this deepest cavern of the mountain, near a subterranean lake, a ball game-like encounter is painted between an opposing Jaguar and Feathered Serpent. The supernatural feline wears a transforming pelt, a Venus-like glyph at the ear, and an enlarged tongue. The larger Avian Serpent supernatural carries maize trefoils (at the tongue and tail) as well as the Muyall cloud symbol of water near the crested eye (see Figure 60). Overall, I relate the supernatural feline to the transformed nahual of the ruler of Painting 1 (Figure B). This transformation sequence would mirror the sequence of Oxtotitlán, which included feline-anthropomorph rulership imagery followed by feline transformation (e.g. Mural II and Painting I-d) (Figure 71). For instance, the Jester-God like headdress worn by Figure B mirrors the feathered headdress worn by the anthropomorphic jaguar figure of Mural II. Further, the headdress identifies Figure B as a

mediator of maize, which the supernatural serpent of Juxtlahuaca carries at the tongue and tail. In this way, the transforming, supernatural jaguar of the Hall of the Serpent mirrors the transforming jaguar nahual of Oxtotitlán painting I-d. Both images, of humanfeline transformation, occur in supernatural contexts (of caves within the heart of the mountain). Therefore, figure B of Painting 1 can be understood as a shamanic ruler whose ability to transforms into a supernatural jaguar enables travel to the heart of the mountain and contact with the supernatural dragon zoomorph of the Avian Serpent. The ideological context of the supernatural ability of the feline ruler could relate to creation myths like, for instance, Tezcatlipoca, Quetzalcoatl, the origin of Maize, and the control of weather phenomena (e.g. Gutierrez and Pye 2016). For instance, the Feathered Serpent diety can be understood as the mythical source of water and maize, as the zoomorph carries trefoils of maize and a muyall cloud symbol.

In summary, the cave sanctum of Juxtlahuaca venerates the watery, underworld that represents the sacred source of creation. This mythical place of origin resides at the heart of the mountain, deep within the mountain cave. It represents the primordial source of sacred water and precious maize, which are mythically characterized by zoomorphic supernaturals of dualistic natures in the Hall of the Serpent. Here, in the holiest of holies, the primary Diety seems to be the Feathered Serpent who carries both maize trefoils and the muyall cloud symbol of water. The scene evokes the later Post-Classic (Aztec) myths of creation completed by the twin brothers of Quetzalcoatl and Tezcatlipoca (who together dismember the Crocodile diety known as Cipactli to form the earth and sky (Cartwright 2013; Phillips and Jones 2006). Further, it evokes the subsequent myth of

Quetzalcoatl traveling to the underworld to obtain maize from which humans are created from (Peterson 1959: 129; Townsend 2009: 12).

The supernatural jaguar in the Serpent Hall seems to relate to shamanic rulership themes, i.e. jaguar nahualism and feline transformation, since it 'mediates' the mythical serpent and it mirrors the jaguar dressed ruler of Painting 1. In this way, the human mediator of the cave's supernatural forces is characterized by Figure B of the Hall of the Ritual. He is depicted as a ruler-ancestor, as: (1) he is dressed as a supernatural nahual of a jaguar, (2) he wears a Jester-God like headdress that includes a clefted cartouche with emanating quetzal plumes, and (3) he holds a supernatural lineage rope (Kappelman and Reilly 2001). Therefore, Painting 1 depicts a shamanistic ruler or ancestor performing sacred rites of the cave in the form of a bloodletting ritual (via the trident shaped object). His clefted headdress identifies the ruler as a descendent of First Father and illuminates the context of the sacrifice: fertility and renewal. Therefore, his offering can be understood as a sacrifice to the primordial mountain cave and the avian serpent zoomorph of maize, water (i.e. rain), and fertility. Further, it can be seen as part of a ritualistic tableau and transformation sequence: the blood offering relates to feline transformation and supernatural contact of the underworld- the mythical place where Avian Serpent dwells in the Heart of the Mountain.

# **Iconographic Patterns of the Central Highland Sites**

The Primordial Mountain of Water and Maize

The most general iconographic pattern shared by all three sites is that their symbolism relates the site's natural features, the sacred mountain or mountain cave, to the primordial source of precious maize and sacred water. These dualistic sources of

creation relate to the pan-Mesoamerican reverence of the Axis-Mundi as the primordial volcano-tree-cave complex- the central World Mountain that rises from the mythical waters and sprouts the twin sources of life via a celestial maize tree and a virginal cave / spring (Figure 72) (Headrick 2007: 30). For instance, at Chalcatzingo the opposing east and west quatrefoil caves feature an anthropomorphic wind / rain deity as well as the fully dressed Maize God (Mon. 1 and Mon. 13). At Oxtotitlán, the supernaturals of the south cave, e.g. the anthropomorphic owl, the Tlaloc face, and the Sky Serpent Dragon, relate to water and wind. In contrast, the supernaturals of the north cave, that include Cipactli the crocodile-earth-dragon and the anthropomorphic flowery-jaguar (with trefoils), evoke themes of plant fertility and the myth of the Maize God. Lastly, at the heart of Juxtlahuaca cave, the jaguar dressed ruler of Painting 1 wears the Jester-god headdress of the Maize God. In addition, the Feathered Serpent carries symbols of both water and maize (i.e. trefoils and a lazy-S cloud symbol). Therefore, the symbolism of all three sites venerate the Mountain-Tree-Cave axis as the central mountain of sustenance, the primordial womb of maize and water, or what the Maya call "The First True Mountain" (Freidel et al. 1993: 138-139).

#### The Dualistic Deities of Creation

At the three highland sites, the source of creation is depicted within sacred mountain tops and mountain caves, and it is dualistically oriented. These opposing, *Otherworld* forces take the form of supernatural Dragons that are mediated by elite humanoids. At Chalcatzingo's western mountain cave, for example, rain and wind deities originate from a caped anthropomorph who wears a quetzal headdress and sits within a celestial serpent cave (Mon. 1). In opposition, deities of plant fertility and maize

orient to an eastern clefted humanoid who sits within a more terrestrial, zoomorphic cave (Mon. 13). This eastern tableau relates to feline supernaturals (e.g. Mon. 4) as well as the mythical earth crocodile of Cipactli (i.e. the Olmec Earth dragon) (Mon. 5). Likewise, at Oxtotitlán, the sky-serpent throne and its avian owl ruler orient to sunset and relate to water symbolism of the celestial realm and the south grotto (Mural I). In opposition, the anthropomorphic jaguar and the cipactli-like crocodile zoomorph (Paintings I-d and I-c) are depicted within the eastern oriented northern grotto, and they relate to earthly, fertility themes (like the flower sun and Dawning of Maize). Lastly, at Juxtlahuaca cave, the deepest painted room depicts the source of creation via a mythical encounter between a supernatural Jaguar and Feathered Serpent. This last example most strikingly evokes dualistic creator twins, as it evokes the Post Classic creation myth of the Aztec that features an *Otherworldy* ball game played by Tezcatlipoca (the jaguar) and Quetzalcoatl the Feathered Serpent (Cartwright 2013; Phillips and Jones 2006; Peterson: 1959:130). Figure 73 illustrates these dualistic creator deities at the sites.

It is interesting to note that this opposition, between Jaguar and Feathered Serpent, is displayed at all three sites. For instance, at Chalcatzingo the eastern tableau features supernatural felines as well as the Cipactli-like crocodile of Monument 5. A similar sequence appears in the northern grotto of Oxtotitlán, which features the jaguar-anthropomorph painting (I-d) as well as the Cipactli-like crocodile supernatural (I-c). The two supernaturals seem to display Formative Period examples of Tezcatlipoca and Cipactli, whose supernatural nahuales are the jaguar (e.g. Gay 1966; Cook de Leonard 1967; Peterson 1959: 130) and the mythical crocodile manifestation of earth (e.g. Angulo 1987; Reilly 1991; Grove 1984: 112; Williams 2009: 78). Likewise, Chalcatzingo Mon. 5

may exemplify a similar mythical scene with what appears to be an image of Tezcatlipoca losing his leg within the maw of Cipactli (Angulo 1987: 156; Williams 2009: 78). In contrast to these feline / crocodile supernaturals, the western sky cave of Chalcatzingo and the celestial oriented Mural I of Oxtotitlán evoke rain and wind associations of the Feathered Serpent diety complex (Figure 74). For instance, the headdress of El Rey includes zoomorphic eyes and realistic quetzal birds, and he sits within a sky serpent cave maw and distributes rain and wind from the cave. In like fashion, the winged owl anthropomorph of Mural I sits above a celestial serpent throne whose maw frames a watery cave below. Within the cave are painted images of rain and wind supernaturals via a Tlaloc painting (A-3) and an Olmec Sky Dragon (A-1). Collectively, this dualistic juxtaposition mirrors the mythical encounter of Juxtlahuaca's Hall of the Serpent, which features twin-like deities of Tezcatlipoca and Quetzalcoatl playing their eternal ball game prior to creation (see Figure 73).

Furthermore, the dualistic opposition of the sites seem to relate to Cosmic Horizon Portals as well as underworld / above realm oppositions. At Oxtotitlán, for example, a descending, solar feline deity (that associates with the east and a Kin' glyph) contrasts the celestial owl deity of rain who takes flight after sunset (i.e. to the west). Likewise, at Chalcatzingo, the western sky cave dualistically opposes the eastern cave of Mon. 13 that lies at the base of the clefted slopes. As such, the opposing east and west quatrefoil caves of Chalcatzingo seem to mirror such opposing dualities of sunrise, sunset, sky realms, earth realms, maize, and water. So that, the dualistic monuments and cave paintings seem to feature an eastern oriented solar deity that comes to life at sunrise and relates to underworld themes as well as plant fertility. In opposition, the sites feature

a western oriented deity of rain and wind, which takes flight after sunset (e.g. the owl of Oxtotitlán) and relates to the Sky Realm. The nahuales of each appear to be related to the underworld jaguar and the avian serpent, which may represent early examples of the highland deities of Tezcatlipoca and Quetzalcoatl.

Rulership Themed Monuments / Paintings Mediate the Supernatural

A third pattern within the three highland sites is that rulership themed monuments or paintings mediate supernatural forces, and the latter are located on mountain tops or within mountain caves. Hence, the iconographic symbolism personifies these sacred places as ideological sources of power and creative forces for Shamanic rulers. For instance, images of shamanic elites appear in boundary spaces at the three sites, which center the dualistic, *Otherwordly* forces- of Avian Serpent, of the Jaguar of the Underworld, and of precious maize and sacred water.

At Chalcatzingo, for example, the supernatural space is carved onto clefted peaks and is personified by opposing quatrefoil caves. Rulership themed monuments are found within the northern site sector (Grove 1984), where public rituals would have demonstrated a ruler's access to the ancestral deities atop the mountain. As previously mentioned, Mon. 22 and Mon. 9 seem to mirror their supernatural equivalents- of Mon. 1 and Mon. 13. At Oxtotitlán, the two larger murals appear at the grotto entrances as if to mediate the supernatural forces of the dualistic cave grottos. Hence, the murals mirror the rulership monuments of Chalcatzingo's northern sector since they mediate the *Otherworldy* spaces of opposing cave grottos (i.e. the north and south grottos mirror the east and west quatrefoil caves of Cerro Chalcatzingo). In like fashion, Juxtlahuaca Painting 1 includes a shamanic ruler dressed as a jaguar who is engaged in a bloodletting

ritual that mediates, or opens the portal to, the supernatural deities located at the heart of the mountain (of Jaguar and Feathered Serpent). As previously mentioned, the transforming jaguar in the Hall of the Serpent could also represent the fully transformed ruler, who is now traveling through the subterranean realm of the cave as his supernatural nahual to contact Feathered Serpent.

The collective pattern of the highland sites, of rulership themed monuments / murals mediating supernatural realms and *Otherworldy* forces, relates to the Formative Period Cult of the Ruler (Grove 1984; Gutierrez and Pye 2010 / Reilly 1991). That is, shamanic access and responsibility had passed from village shamans to emerging Mesoamerican elites who were empowered and validated through their supernatural ability, i.e. feline transformation and Cosmic flight, to contact the *Other Realm*. Cosmic places, or portals, for such contact included subterranean caves and mountain-top-sky-realms. In this way, the highland tableau evokes heartland monuments that depict rulers emerging from caves (e.g. La Venta Mon. 4 and Mon. 5) as well as ritualistic monuments placed around mountain peaks (e.g. San Martin Pajapan Mon. 1). In other words, during the Formative Period, the ancient shamanic myths that related to sacred landscape, of mythical realms atop mountains and within caves, became incorporated into the ideology of Central Mexican elites and the Middle Formative Ceremonial Complex. This greater iconographic pattern exemplifies the widespread nature of the art style of the Olmecs.

Iconographic Variation at the Sites: The Solar Feline, Maize God, and Avian Serpent

At noted earlier, the iconography of Chalcatzingo and Oxtotitlán feature supernatural feline transformation with jaguar-elites wearing versions of Maize headdresses and tableau scenes that relate to the ideology of First Father the Maize God

(e.g. Chalcatzingo Mon. 4 / Mon. 13 and Oxtotitlán Murall II, Painting I-d, and Painting I-a). In contrast, at Juxtlahuaca, the Feathered Serpent Deity carries trefoils in the Serpent Hall rather than the supernatural Jaguar. However, the Jaguar dressed human in the Hall of the Ritual wears a variant of the Jester God Headdress (that includes a clefted Maize cartouche at the forehead). Within the context of Olmec iconography, this would identify the jaguar dressed anthropomorph as a ruler and descendent of First Father who validates his rulership by mediating the resurrection of Maize (e.g. Fields 1989; Reilly 1991). As mentioned, it may also relate the figure to the fully transformed, supernatural jaguar in the Hall of the Serpent (who faces the maize bearing serpent). Hence, even at Juxtlahuaca, jaguar nahualism of elites is associated with the mythical resurrection of Maize, which corresponds to the widespread Formative Charter of rulership relating to First Father. Thus, the iconography is shared at all three sites: shamanic elites are either dressed as jaguars or are shown fully transformed into supernatural felines, and they all wear the Jester God headdress of the Maize God. Such images include: Juxtlahuaca Painting 1 Figure B, Oxtotitlán Murall II and Painting 1-d, and Chalcatzingo Mon. 4 (Figures 75, 76). Although the supernatural image of the mythical seed and source of maize is varied at the three sites (i.e. the clefted anthropomorph of Mon. 13, the flowering head of Painting 1-a, and the Avian Serpent of Juxtlahuaca Cave), the human mediator of the supernatural remains constant. That is, elite feline-anthropomorphs mediate supernatural origins of maize in underworld contexts of caves that feature rites relating to feline domination (bloodletting / sacrifice) and feline transformation.

Of further note, as mentioned earlier, the collective feline deities of the three sites evoke the highland deity of Tezcatlipoca of later traditions. This is most evident

with the flowery jaguar of the north grotto of Oxtotitlán (Painting 1-a), which evokes later Nahua associations of the sun birthed from cave portals, as well as the Mayan Kin' glyph of the sun. These solar, feline-deities of the underworld contrast the Avian Serpent deities of rain and wind. In this way, the three sites seem to collectively associate the feline, solar-deity of the underworld with the ideology of the Maize god since the feline zoomorphs / anthropomorphs wear Jester-God-like headresses. Therefore, Formative Period rulership at the highland sites seems to be linked to Maize symbolism, feline transformation / nahualism, and a solar ideology related to Venus and the Sun.

Interestingly, the early Formative date of Murall II from Oxtotitlán (Russ, Jon, et al. 2017) would place this hypothetical association to the San Lorenzo phase in the central Mexican highlands. Astonishingly, more than a 1000 years later, God K (the Mayan equivalent to Tezcatlipoca [Milbrath 1999: 229]) held strong associations with Maya rulership (Milbrath 1999: 248).

However, in addition to the pattern above, the Juxtlahuaca tableau may also relate to a more local cult of the highlands. Contrasting the Maize God ideology that dominates the Olmec heartland (e.g. Reilly 2010: 253), this possible variation corresponds to jaguar nahuals, of highland elites, who control weather phenomena through ritual offerings within cave shrines and mountain tops sanctuaries (e.g. Gutierrez and Pye 2010). For example, at Juxtlahuaca, the Feathered Serpent evokes the Mixe myth from Oaxaca of a rain and wind deity, Poh *Ene* ('wind thunder'), who is described as the collective god of lightning, rain, winds, and the Lord of Maize (Lipp 1991: 28-29). Hence, the jaguar dressed elite (Juxtlahuaca Painting 1, Figure B) may relate to jaguar nahualism of central highland elites that mediated such supernatural forces of rain, wind, and plant fertility

within mountain cave shrines (see Gutierrez and Pye 2010). In this way, perhaps the collective theme of jaguar nahualism / feline domination may not solely relate to the ideology of Maize (and solar / Venus themes). Rather, the theme may relate to broad aspects of highland rulership ideology with jaguar nahuals who, within caves and mountain top shrines, mediate of the supernatural deities of Maize *and* Rain.

When the Juxtlahuaca variation is combined with the aforementioned Maize God symbolism of the feline anthropomorphs, this would collectively relate to rulers transforming into jaguar nahauales to mediate the twin sources of life from the sacred mountain. That is, the supernatural jaguars are shown in *Other-realm* contexts of highland peaks and caves, and the felines wear headdresses of rulers who are validated by mediating the mythical seed of maize as well as rain and wind deities of water. As an example, the supernatural feline tableau at Chalcatzingo includes both maize imagery as well as rain imagery (e.g. the Maize headdresses of Mon. 4 and the cloud / rain symbolism of Mon. 31). Likewise, at Juxtlahuaca, the feline-anthropomorph of Painting 1 wears the Jester God Headdress, and through the bloodletting ritual the elite seems to transform into the supernatural feline to mediate the Avian Serpent deity of rain and wind (in the Hall of the Serpent). Thus as a collective whole, the highland tableau of feline transformation and domination (sacrifice) seems to correspond to rulership themes, which are shown with: (1) astronomical cults like cycles of the Sun, Venus, and the Moon (e.g. Cook de Leonard 1967; Gay 1966), (2) bloodletting / sacrifice rituals to bring rain with the aid of Avian Serpent (e.g. Gutierrez and Pye 2010), and (3) ritual offerings to aid in the Resurrection of First Father the deity of Maize (e.g. Reilly and Garber 2003).

### VI. CONCLUSION

This last chapter has four topics of mention: (1) it will revisit hypotheses outlined in the Abstract section, (2) it will summarize significant findings of the Central Highland corpus and compare them to the archeological record of the Olmecs, (3) it will attempt to formulate an iconographic synthesis of the highland mountain imagery, and (4) it will provide topics for future research. Topics two (2) and three (3) correlate to step three of the Panofskian method of iconology (see chapter two).

# **Testing Original Hypotheses**

Three hypotheses were outlined in the *Abstract* section. First, that the central Mexican region incorporates heartland, rulership symbolism to validate emerging elites in the periphery zone of the highlands. Second, that the symbolism at the three sites can be linked thematically- and thereby relate to a distinct and particular sociopolitical region of the central highlands of the Formative Period. Third, that a unique religious cult of the highland can be unveiled that relates to mountain top shrines and mountain caves utilized by shamanic elites in rituals of fertility like bringing rain (Gutierrez and Pye 2010).

First, Olmec heartland symbolism that is shared with the highland iconography includes: (1) rulership iconography relating to maize, (2) cave symbolism relating to empowerment rituals and supernatural contact, and (3) iconography that depicts rulers who mediate the supernatural realm. First, at all three highland sites, elite rulers are shown with feline imagery and with maize regalia, and the latter relates to the widespread Formative charter of rulership as mediators of First Father the Maize God. This is most obvious with Chalcatzingo Mon. 13, which clearly resembles San Martin Pajapan Mon.

1. Although in addition, the same theme is displayed at all three sites (e.g. Oxtotitlán

Painting 1-a, Juxtlahuaca Painting 1, Figure B) (Figure 76). Second, the two themes of heartland throne monuments, of rulers emerging from caves holding either ropes and / or the infant Maize God (Taube 1995), is also visible within the highland corpus. For instance, the three highland sites include mythical images of rulers aiding in the resurrection of Maize, and these tableaus are shown within actual mountain caves. In addition, Juxtlahuaca Painting 1, Figure B holds a serpent-like rope that has been identified as a supernatural sky rope, i.e. a Cosmic Umbilicae, which mirrors the sky ropes held by rulers on heartland throne monuments (Kappelman and Reilly 2001) (Figure 77). Further, Oxtotitlan Mural I includes sky band motifs that mirrors La Venta altar IV- an altar that features a ruler holding sky ropes (Figure 78). Hence, highland cave imagery includes empowerment themes and also mirrors heartland contexts of maize and sky ropes. Lastly, as mentioned in the previous chapter, the three sites also place rulership themed monuments or murals at the center of supernatural forces of creation. This pattern is also founded in the heartland, as rulership themed monuments are centered within supernatural contexts like mountain tops (e.g. San Martin Pajapan Monument 1) or within subterranean / Other realms (e.g. La Venta Complex A, see Reilly 1999).

The second hypothesis, of a shared highland symbolism, was discussed in the previous chapter by illuminating iconographic patterns of the three sites. These patterns included: (1) iconographic reverence of the sacred mountain of precious maize and sacred water, (2) dualistic creator deities that evoke highland divinities of Tezcatlipoca and Quetzalcoatl, (3) rulership themed monuments / murals that mediate supernatural contexts, and (4) jaguar nahualism relating to shamanic rulership themes- of mediating maize and rain within mountain cave shrines. Such shared iconographic themes,

especially within themes of rulership, display an Early and Middle Formative cultural fluorescence of the region. Further, some of the shared iconographic patterns seem distinct to the highland region rather than being diffused from Olman. These will now be discussed.

The first highland pattern, of the central mountain of sustenance, is pan-Mesoamerican, and it is present in Olman with examples like the sites of El Manatí, San Martin Pajapan Mon. 1, and the La Venta earthen pyramid (see chapter 1). Likewise, the third iconographic theme, of shamanic rulership, is exemplified by heartland rulership iconography and Olmec symbolism in general (Reilly 1995). However, the highland dualism of creator deities, of Avian Serpent and the solar, flowery jaguar, seem to evoke later central Mexican deities rather than lowland ones of Olman or of the Maya. For instance, the central deity of Olman seems to be the Maize God, which acts as the main charter of Rulership (Fields 1989; Reilly 1991). The central, earthen pyramid at La Venta, as an example, is surrounded by four monumental stelae that depict the Maize God (Reilly 1999; Tate 2012: Fig 8.20) (Figure 79). Likewise at San Martin Pajapan, the sacred mountain is revered by Mon.1 as the place for First Father to raise the World Tree staff of Maize (Freidel et al. 1993: 132) (Figure 80). In contrast, the highland mountain of creation is venerated at the three sites by supernatural images of both maize as well as rain / wind (Figure 81). The dualistic deities of creation within the highland corpus consists of a jaguar solar god with maize associations as well as a rain / wind god that takes the form of an Avian Serpent. Included at the three sites are images of the Avian Serpent as a primary deity of the mountain, and at Juxtlahuaca the serpent also carries the mythical source of maize. This increased iconographic focus on Avian Serpent in the

highland sites seems to place an increased emphasis on rain and wind deities within sacred mountain and mountain cave contexts. For example, even jaguar nahualism is depicted at the three sites within themes of maize *as well* as bringing rain. Naturally, this ritualism towards deities of rainfall may relate to the more dualistic seasonality of the highland region that is more vulnerable to droughts and flooding. The Mixe of Oaxaca, for example, note that if 'Ene, the deity of lightning, rain, and wind, becomes offended, he sends out his cowboy to destroy maize fields of those that have not given offerings (Lipp 1991: 28).

The third hypothesis relates to a highland cult that consisted of mountain top shrines and cave sanctuaries which were used for sacrifices and offerings to bring rain. This hypothesis follows the work of Gutierrez and Pye (2010), who illuminated jaguar nahualism as charters of Formative Period rulership in the central Mexican highlands that relates to supernatural access to rain and weather phenomena. As previously mentioned, the Avian Serpent deity or rain / wind is depicted at all three sites to venerate the mountains as Rain God Mountains (see Figure 74). Jaguar nahualism is also displayed at the three sites, which seems to mediate the supernatural deity of rain and wind. For example, Chalcatzingo Mon. 31 shows feline sacrifice as a causative agent for rainfall. In addition, the supernatural feline in the Hall of the Serpent at Juxtlahuaca mediates the Avian Serpent deity of rain and wind. At all three sites, the symbolism of jaguar nahualism relates to themes of underworld contexts like feline transformation and / or feline domination (i.e. sacrifice and bloodletting) (see Figure 75). In each case, feline transformation and sacrifice / bloodletting seem to act either as a causative agent for

rainfall (e.g. Chalcatzingo Mon. 31), or they seem to enable Cosmic Contact of deities of fertility and rain (e.g. the jaguar transformation sequences of Oxtotitlán and Juxtlahuaca)

Interestingly, this more unique highland pattern allows for a possible hypothesis on exchange and variation between heartland and highland iconography. That is, perhaps the Maize God imagery that relates to rulership, e.g the supernatural feline tableau that culminates in Mon. 13 at Chalcatzingo, represents a (Middle) Formative period projection from Olman. So that, the Jester God-like headdresses worn by the feline anthropomorphs / supernatural felines at all three sites represents influences of Maize God rulership themes that are being influenced by Olman. Whereas, the rain symbolism and solar symbolism of the felines may be more typical of this highland zone. Such highland ritualism would relate to elites whose ability of transformation enabled Cosmic travel through caves to mediate the highland creator deities of Tezcatlipoca and Quetzalcoatl. In other words, they would relate to the bringing of rain, sacrifice and warfare, and the rebirth of the sun (after its travel through the underworld).

Hence, a contrasting hypothesis for the three highland sites is that the Early

Formative Period sites of Oxtotitlán and Juxtlahuaca (Russ, Jon, et al. 2017; Coe 2005)

showcase the dualistic forces of creation via early representations of Quetzalcoatl, the
deity of thunder and wind, as well as Tezcatlipoca, the descending feline solar deity.

Within this hypothesis, the flowery jaguar and profile human head of Oxtotitlán (I-a)
could be understood as representing Tezcatlipoca and the birthing image of the eastern
sun. At the Middle Formative site of Chalcatzingo, the same dualism is carved onto its
clefted mountain with supernatural felines (e.g. Mon. 4) opposing the celestial serpent
cave of Mon. 1. However in addition, the Maize God ideology of Mon. 13 is also placed

within the eastern tableau to combine maize imagery with the supernatural Venus felines (Mon. 31; Mon. 4) and the Tezcatlipoca / Cipactli myth (Mon. 5). This could mean that Mon. 13 represents a Middle Formative projection / influence from Olman that is placed alongside the Venus felines of war and sacrifice.

As another example of iconographic exchange, Mon. 13 features a clefted deity that evokes heartland monuments like San Martin Pajapan Mon. 1. At the same time, the deity is carved within a quatrefoil shaped cave whose shape is distinctive to the highlands and the site of Chalcatzingo (Tate 1982; Reilly 1994b). A similar example of exchange occurs at Teopanticuanitlan, where mountain monuments are carved in the highland shape of an Inverted T, yet they are incised with heartland symbolism in the form of the face of the Olmec Maize God (Reilly 1994b: 253). In other words, there is possible evidence of ideological exchange via iconographic symbolism that would relate to political and religious ideology. A hypothetical distinction would relate the ritualism of elite feline nahuals in cave rites (that corresponds to rain and the sun) to a highland cult. Whereas, the association between felines, rulership, and the Maize God may derive from influence from the heartland. Such variation within the three sites, and the exchange of iconographic symbolism with Olman, needs more research and is a topic for future academic endeavors.

Personally, I follow the dualistic pattern of the three sites and relate the jaguar nahualism of the feline anthropomorphs, collectively, to solar cults that are being combined with the mythology of the Maize God (see Figures 72, 73, 74). This context would juxtapose the rain and wind symbolism of the mountain cave imagery. It would, instead, relate the felines to Formative period charters of highland rulership ideologies of

Jaguar Nahualism and the Maize God. For instance, Gutierrez and Pye (2016) discovered a cave in Guerrero that included monumental sculpture that combined feline imagery and maize symbolism. At La Cueva de los Gobernadores, the cave orients directly east towards the dawning sun of the summer solstice. This would mirror the eastern context of Chalcatzingo's supernatural felines as well as the eastern oriented northern grotto of Oxtotitlán (and its flowery jaguars). Interestingly, the four monolithic sculptures of the cave feature anthropomorphic guardians who have feline faces with tre-foils of supernaturals (Gutierrez and Pye 2016) (Figure 10). Hence, this cave of governors seems to continue the mythical combination of supernatural felines in caves that relate to both maize (i.e. trefoil headbands) and solar symbolism (i.e. the summer solstitial cave). Furthermore, the rock shelter paintings of Cuadaziqiui also included symbolism relating to feline domination and rulership themes. The painting depicts a larger figure in jaguar attire dominating a smaller figure, and the larger figure wears an elite headdress as well as a bloodletting device (Gutiérrez and Pye 2010: 47) (Figure 9).

#### **Significant Findings Within the Formative Period Ceremonial Complex**

Four significant findings have been laid out as a result of this analysis of the three highland sites of Central Mexico. First, the iconography of the three sites venerate the primordial mountain of sustenance, of maize and water, and this reverence is Pan-Mesoamerican whose shamanic origins likely stem in the deep ancestral past. Second, within the mountains dwell dualistic deities of creation that take the form of a Solar / Venus / Flowery Feline that relates to Maize as well as an Avian Serpent deity that relates to wind and rain. These deities seem more particular to the highland region (as they evoke Tezcatlipoca and Quetzalcoatl of later traditions), and they show a unique cult of

sacred mountain symbolism. That is, these central highland mountains birth the flowery, eastern sun (whose nahaul is the jaguar), and they are revered as sources of water and rain (i.e. the cavern house of Avian Serpent). As mentioned, this contrasts heartland sacred mountain images that seem to relate primarily to the myth of First Father and Maize (e.g. the La Venta Pyramid and San Martin Pajapan Mon. 1).

Thirdly, the iconography of the three sites place shamanic rulers at the center of the Cosmos whose ability to transform and whose sacrifices in the Spirit Realm mediate the supernatural mountain-cave sources of both maize as well as rain and wind. Images of elites are shown dressed as jaguars, they are shown in full transformation, and they are shown in dominating postures relating to sacrifice and bloodletting ceremonies. The collective themes connect to underworld ceremonies whose offerings help renew the Cosmos and restore the continuous cycles or rain, wind, and the resurrection of both the sun and maize. Lastly, a hypothesis relating to variation between heartland and highland symbolism was unveiled. This hypothesis related rulership iconography of the Maize God (e.g. trefoil headdresses) to the heartland. Whereas, the theme of jaguar nahualism, that relates to solar feline cults and rain making ceremonies in caves, may represent highland cults. As an intertwined whole, the highland sites display the theme of jaguar nahualism within combined contexts of the resurrection of the Maize God, a solar diety like Tezcatlipoca, and the mediating of rain supernaturals like Avian Serpent. Bringing these supernatural forces together are themes of rulership, as all the feline anthropomorphs wear elite regalia including headdresses. As such, the collective highland tableau shows rulers whose ability to transform into felines, perform sacrifices in the spirit realm, and

travel into the underworld context of mountain caves allows for supernatural contact- of First Father, Of Avian Serpent, and of the cyclical deities like Venus, the Sun, and Moon.

### **Synthesis of the Sites**

Cosmologically, the symbolism of the three sites revere the Sacred Mountain of Creation as the source of life (of precious maize and sacred water), and mountain caves represent primordial wombs that birth highland creator deities like the solar feline and an Avian Serpent. More interestingly, the symbolism reveres the mountain caves with a shared theme of dualism that evokes dualistic pyramid mountains of later traditions. For instance, the Post-Classic feline deity of Tezcalipoca is described as the Jaguar of Mountain Caves, as the sun, and, interestingly, as the Fire God (Lipp 1991: 115; Seler 1901: 60; Sahagún 1969: 19). For the Formative corpus, early representations of the solar feline deity (and a possible fire context) juxtaposes the water and wind deities that evoke Quetzalcoatl, the Avian Serpent. In this way, the dualistic deities of the centralized mountains and mountain caves would evoke later Classic Period and Post-Classic pyramids of Teotihuacan and Tenochtitlan that have dualistic natures (e.g. the Pyramid of the Sun and Moon at Teotihuacan and the Aztec twin temples of the Templo Mayor) (Figure 82).

For instance, the Pyramid of the Moon at Teotihuacan is framed by Cerro Gordo, which is the sacred mountain source of water via an underground aquifer. In other words, the pyramid relates to sacred water. Whereas, the Pyramid of the Sun orients east toward the equinoctial path of the sun (Townsend 2009: 33). Interestingly, at the base of Pyramid of the Sun, there were sculptures of jaguars eating hearts (likely of sacrificial victims from warfare) (Freidel, Personal Communication 2020, Robb 2017). Such solar jaguars

of warfare and sacrifice would mirror the Feline domination theme that is visible at highland sites (e.g. Chalcatzingo Mon. 4 and Juxtlahuaca Painting 1). Likewise, the water and wind context of the Pyramid of the Moon would mirror the rain and wind deities depicted at the highland sites (e.g. Chalcatzingo Mon. 1, Oxtotitlan Mural I, and Juxtlahuaca's Feathered Serpent). For the Aztecs, the dualistic Templo Mayor pyramid included a temple to Huitzilopochtli, the god of the sun, of war, and of rulers, as well as a temple to Tlaloc, the god of rain. Moreover, the war-temple oriented south to the winter solstice and time of the dry season, and the rain-temple oriented north to the summer solstice and time of the rains (Cartwright 2016; Townsend 2009: 66; Coe 2013). These two temples created a clefted mountain at the center of the Aztec world (Garber, Personal Communication, 2020). In like manner, the clefted mountains of Chalcatzingo, with dualistic deities and opposing quatrefoil caves, would seem to showcase a Formative Period example of this same dualistic and clefted mountain of Creation.

For instance, the Formative Period corpus includes a juxtaposition at the three highland sites that relates to a solar god of war and rulership as well as a rain god of wind and the season of storms. Feline anthropomorphic imagery contrasts rain and wind deities at the Formative sites, and the felines are shown with rulership imagery (e.g. headdresses), sacrifice imagery (e.g. feline domination and bloodletting devices), and solar imagery (e.g. the Oxtotitlan flowery jaguar). In contrast, the three sites include depictions of rain and wind deities like El Rey, Oxtotitlan Mural I, and the Avian Serpent of Juxtlahuaca. In this way, the cosmology of the Formative Period highland sites, of a dualistic central mountain of life, showcases highland religious concepts that would continue for over two thousand years- through the Classic and Post Classic Periods

(Figures 81, 82). Examples of such cultural continuance in later traditions would include: (1) dualistic and clefted pyramid-mountains of creation (e.g. pyramids of the Sun and Moon, of water and fire, and of sacrifice and renewal), (2) rain god mountain temples, (3) mountain cave places of emergence, and (4) mountain top sacrifices performed by elites in shrines of rain and fertility.

In conclusion, the Formative Period corpus and highland cosmology symbolically venerate the central mountain of creation and mountain of sustenance – of sacred water and precious maize. The mountain is venerated by a solar deity and a rain deity to mythically represent a plant: it is the symbol of earth that bears life giving maize with the aid of the cycles of the sun and the seasonal rains. Like a plant, the Mesoamerican symbol of life requires a mound of earth and the aid of sunlight and water. This mythical mountain of maize is most awesomely exemplified by the clefted mountains of Chalcatzingo- whose shape resembles the eyes of Cipactli- the crocodile Earth Dragon and mother of plants (Reilly 1991; 1994b). Supernatural forces, of dualistic natures, reside within mountain caves and mountain peaks and are mediated by shamanic elites (either in feline transformation or in avian flight). Underworld contexts relate to feline domination and sacrifice, and celestial contexts relate to rain dieties that include the owl, the quetzal, and the Avian Serpent. Possibly, this juxtaposition between the Avian Serpent of Rain and the Solar Feline of maize would relate to the twin cycles of the seasons: the dry season of war and sacrifice and the wet season of storms and wind. Themes of rulership that relate to First Father occur at the three sites, which include Juxtlahuaca Painting 1 Figure B, Chalcatzingo Mon. 13, and Oxtotitlán Painting I-a. Collectively, these seem to evoke the myth of First Father raising the heavens through the vertical rotation of the World Tree, which cosmologically occurs within caves at the cleft of the sacred mountain.

Thus, the iconography of the three sites identify a sacred, central mountain with sacred wombs (caves) of emergence for creation events. This central mountain axis can be understood as a primordial place of creation as well as the center of time and space. For instance, the aforementioned dualism between a solar feline and Avian Serpent seems to relate to cyclical cycles of the season- of the dry season of war and sacrifice and the wet season of rain. This cyclical duality would have rotated around the centralized mountains in Cosmic dances and cycles of time. In addition, the celestial tree axis of the central mountain would relate to the Dawning, World Tree of maize that is raised from the mountain cleft by First Father to raise the sky (and thereby create vertical space). For the Classic Maya, as a later example, "the standing up of the *axis mundi* not only lifted the sky from its lying-down position on the earth but it imparted motion to the star fields (Freidel et al 1993: 75).

Hence, if the Olmec manifestation of the World Tree related to the north / south 'rising sky' aspect of Milky Way, as it did for the Classic Maya (Freidel et al 1993: 86-87), the resurrection of Maize could have coincided with the Milky Way stretching across the peaks of the highland sacred mountains. This would visually showcase the celestial tree rising above the clefted volcano axis of the world in its north / south orientation. At Chalcatzingo, for example, rulers could be ritually dressed following sacrifice rituals and be 'resurrected' as the Milky Way would rotate above the clefted cerros. Such rituals may have also occurred at the site of La Venta, which is also centered by a mythical pyramid mountain (Reilly 1999) and is oriented along a north / south axis. As such, the ritualistic

monuments of Chalcatzingo and the painted cave shrines may have functioned as ritual theatre: they would animate and come to life during Cosmological events of the dualistic seasons, the cycles of the sun and moon, and the dance of the constellations and Milky Way. To modern observers, we would call these *astronomical events* and *weather phenomena*. However to the ancients, they were *Other-worldly*, Supernatural, and presumably made possible by the rituals of elites. Therefore in conclusion, the carvings of Chalcatzingo and the painted cave shrines seem to identify a sacred center place of the First True Mountain whose clefted peaks and primordial caves lie at the heart of the east – west cycle of the winds, clouds, and rains as well as the north - south rising of the Milky Way and World Tree of Maize (Figure 83).

#### **Topics for Future Research**

During research I noticed a possible correlation between highland patterns of mountain cave imagery and monuments from Olman. As mentioned, the highland corpus includes a shared pattern where mountain caves birth two mythical sources of life: sacred water and precious maize. The dualistic caves of Chalcatzingo (Mon. 1 and Mon. 13), for example, feature an anthropomorphic rain and wind deity as well as the Maize God. Throne monuments from Olman share two themes: rulers emerge from caves holding infant Maize Gods (Taube 1995), and / or rulers hold sky ropes that represent Cosmic Umbilicae (Kappelman and Reilly 2001). Kent Reilly (1995) has established that the thrones represent billboards of shamanic rulership: the thrones include multiple realms to represent an *axis-mundi* with rulers who mediate Cosmic Realms. As a representation of the *axis-mundi*, the thrones represent miniature mountains at the center of creation and include a cave of the underworld at their base.

A hypothesis for future research is whether the highland themes, of water / wind caves that juxtapose caves of maize, may also relate to the two heartland themes of Olmec thrones- of emergence caves with rulers holding infant deities of Maize and supernatural sky ropes. This thesis has shown that the three highland sites include rulership imagery of mythical origins of maize within mountain caves, which would correlate to the heartland throne monument theme of rulers bearing infant Maize babies (e.g. La Venta Mon. 5) (Figure 84). Overall, the maize symbolism within caves would relate to the widespread myth of First Father's resurrection from the underworld to raise the World Tree at creation. Supernatural sky ropes, on the other hand, are shown in Olmec art interchangeably with serpent imagery (see Figure 85). Such rope themes seem to relate to the Elliptic that is often shown in Mesoamerican iconography as a Bicephalic Serpent that crosses the World Tree at the Center of the Sky (e.g. Freidel et al 1993: 86; fig 2:22). Perhaps, the sky rope / bicephalic serpent imagery of heartland monuments and jade celts may correlate to the celestial serpent imagery of the highland caves. For example, Figure 86 showcases the similarity between Oxtotitlan Mural I and La Venta Altar IV. As such, the sky rope theme would correlate to the celestial serpent imagery of the highland caves and the Avian Serpent dieties like El Rey, Oxtotitlan Mural I, and the Juxtlahuaca Serpent (Figure 87). In this case, the supernatural rope / serpent theme would contrast maize symbolism and relate to water and wind contexts of the primordial mountain at the center of the Cosmos.

To further this notion, Figure 86 shows an artistic representation by Tara D. Smith (Stanley and Smith 2015) of La Venta Altar 4 with a ruler's ascension into the sky holding Ecliptic-like Ropes that connect to ancestors on the sides of the monument.

Figure 85 shows a celt from Rio Pesquero with a ruler dressed as the World Tree holding the Ecliptic in the form of a serpent bar. In this way, the rope / serpent imagery showcases the ruler as the Axis Mundi: he wears the Maize God headdress of the World Tree, and he holds the serpentine Eclipic at the center of the sky. Therefore, the collective themes of the thrones, of Maize and Ecliptic Ropes, would iconographically identify rulers who raise the World Tree of Maize and hold the Ecliptic ropes at the center of creation (e.g. Freidel et al 1993: 104-105; fig 2:34). Perhaps this would identify the ruler as the center of time and space- they raise the Tree of Maize to create space (by lifting the sky), and they rotate the Eccliptic to create time (through the rotation of the heavens and the laying out of the constellations) (see Freidel et al 1993: 75, 105).

As mentioned, Figure 87 shows the possible shared themes of celestial ropes with sky serpents and rain symbolism. Within this possible shared iconographic pattern, Maize symbolism in caves (of the heartland thrones and the highland corpus) would relate to raising of the World Tree by First Father. In contrast, the celestial serpent / rope imagery would relate to the rotation of the heavens and the east / west path of the Eccliptic. Such Eccliptic Sky Ropes would relate to ancestral time via the cyclical rotation of the heavens and the path of constellations. This cyclical time would correlate to the dualistic rotation of the seasons and the East / West path of the winds, clouds, and storms of the rainy season. Figure 88 showcases this possible pattern.

# APPENDIX SECTION

## **FIGURES**

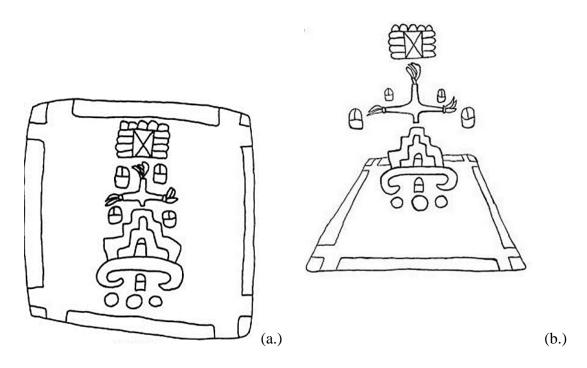


Figure 01: The Dallas Plaque (Freidel and Reilly 2009: Fig 14; Smith 2017: 129; Fig 47): (a.) The Dallas Tablet (drawing by F. Kent Reilly III), (b) The Dallas Tablet rendered in three dimensions (Drawing by F. Kent Reilly III)

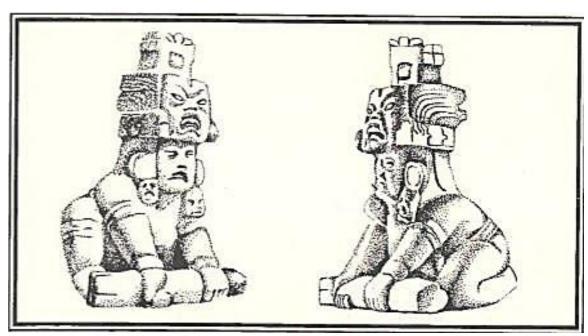


Figure 02: San Martin Pajapan Mon. 1 (Freidel et al 1993: 133)

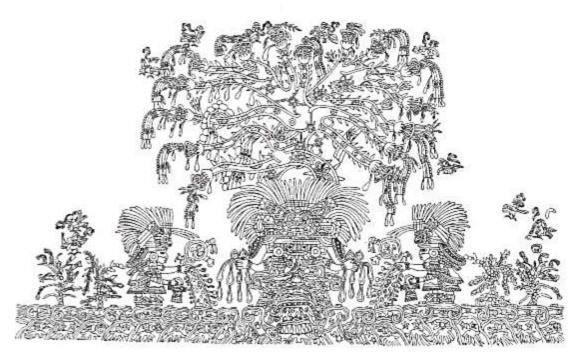


Figure 03: Portico 2, Tepantitla, Teotihuacan (Headrick 2007: 30)

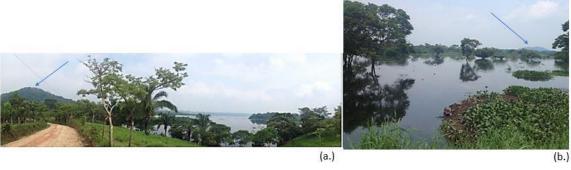


Figure 04: Cerro El Manati: (a.) Cerro el Manati is at left behind road (photograph by author); (b.) Cerro el Manati from afar (the hill is at back right of photo) (photograph by author)

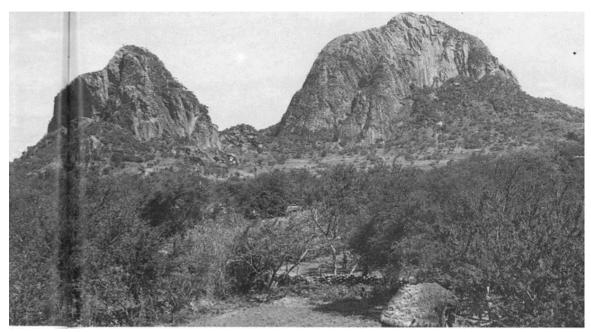


Figure 05: Chalcatzingo's Clefted Cerros (Grove 1984: 90 -91)

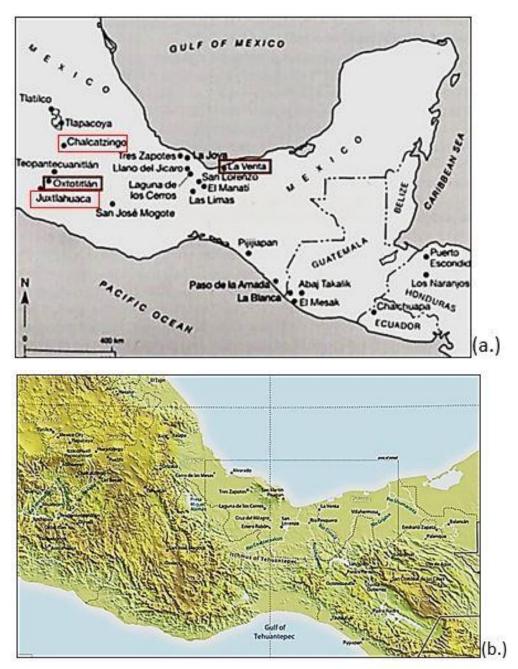


Figure 06: The Olmec World: (a.) Diehl 2004 (with Olmec Sites of Focus); (b.) Berrin and Fields 2010: 16-17

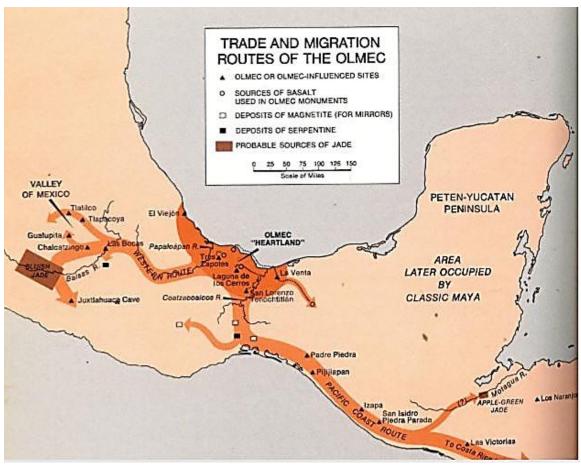


Figure 07: Trade and Migration Routes of the Olmec (Coe 1968: 102-103)

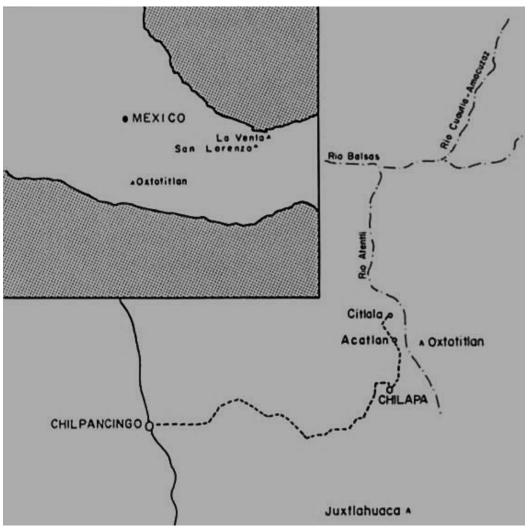


Figure 08: Location of Oxtotitlan and Juxtlahuaca (Grove 1970: 5; Fig 1)



Figure 09: Cacahuaziziqui (Cuadzidziqui) Rock Shelter Painting (Villela 1989: 40; Fig 1)

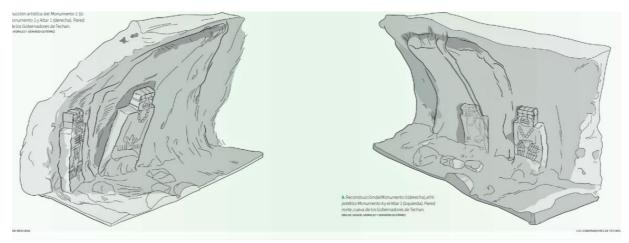


Figure 10: Cueva de los Gobernadores Monuments 1-4 (Gutierrez and Pye 2016: 80-81; Figs. 4 and 5)

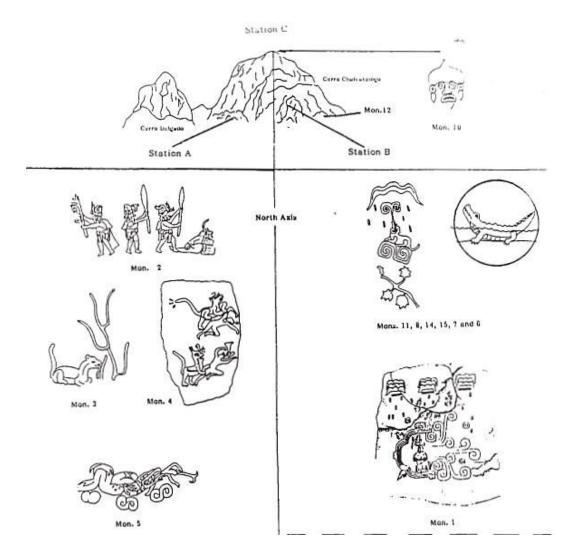


Figure 11: Three Iconographic Groups of Chalcatzingo (Reilly 1986: 164; Fig 17)

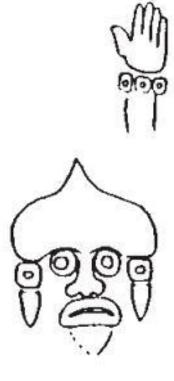


Figure 12: Chalcatzingo Monument 10 (Reilly 1986: 165; Fig 18 [redrawn by Kent Reilly after Gay 1972: fig. 34])

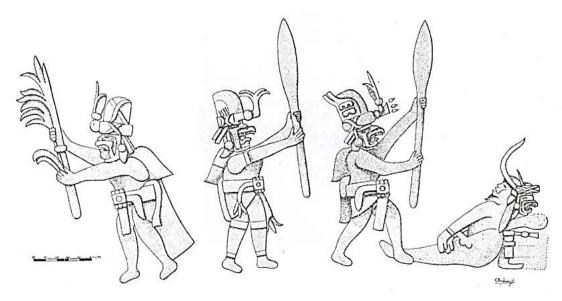


Figure 13: Chalcatzingo Monument 2 (Tello et al. 2015: 25; Fig 24 [from Pina Chan 1955])

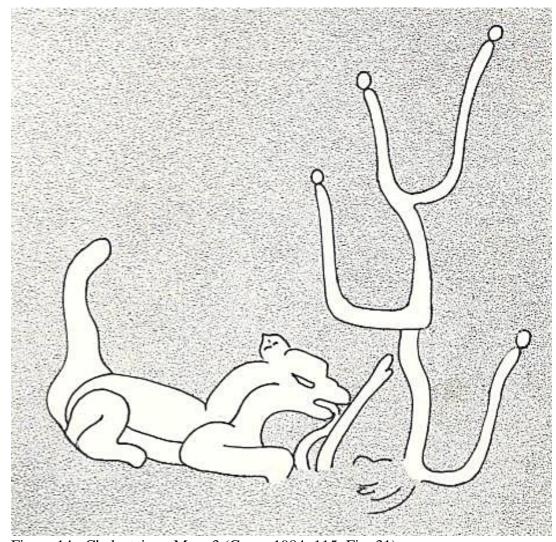


Figure 14: Chalcatzingo Mon. 3 (Grove 1984: 115; Fig. 31)

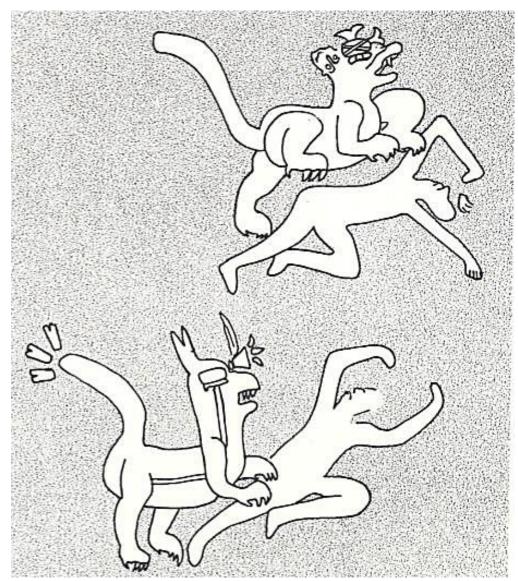


Figure 15: Chalcatzingo Mon. 4 (Grove 1984: 113; Fig. 30)



Figure 16: Chalcatzingo Monument 45 (3D Renders): (University of South Florida Libraries Digital Heritage and Humanities Collection: Accessed at: https://dhhc.lib.usf.edu/project/preserving-imperiled-monuments-and-rock-carvings-at-chalcatzingo

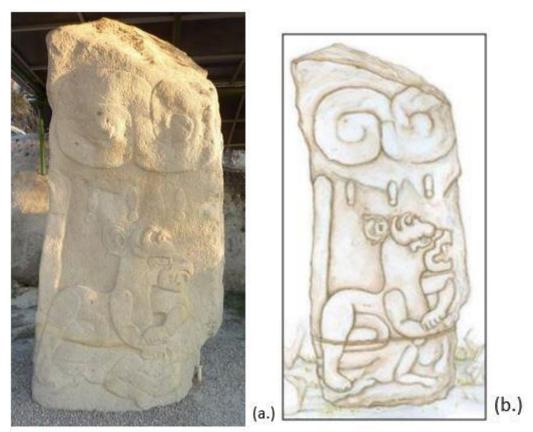
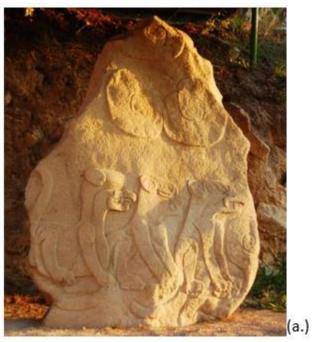


Figure 17: Chalcatzingo Mon. 31: (a.) Tello et al 2015: 28; Fig 31; (b.) Tello et al 2015: 9; Fig 5 (From Proyecto Chalcatzingo 2007).



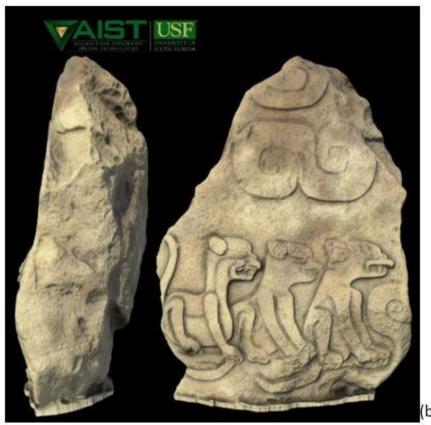


Figure 18: Chalcatzingo Mon. 41: (a.) Tello et al 2015: 11; Fig. 7; (b.) Tello et al. 2015: 29; Fig 33

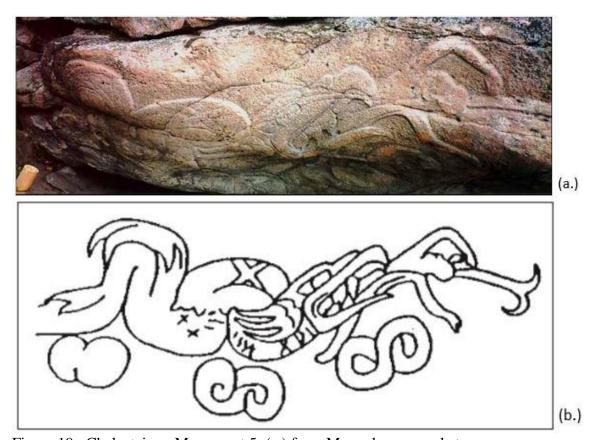


Figure 19: Chalcatzingo Monument 5: (a.) from Mesweb, accessed at: <a href="http://www.mesoweb.com/mpa/chalcatzingo/monument5.html">http://www.mesoweb.com/mpa/chalcatzingo/monument5.html</a>; (b.) Grove 1984: 112; Fig 29.

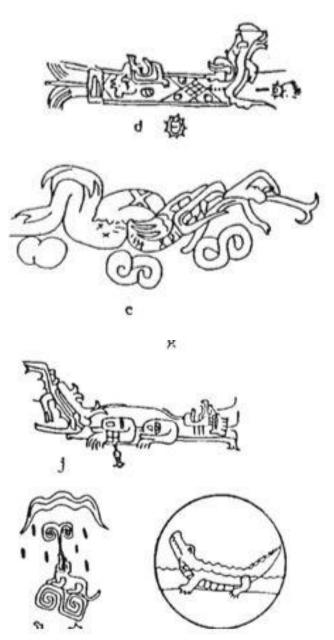


Figure 20: A Formative Period version of *Acipactli*, the mythical alligator gar or fish gator: from Reilly's (1991) iconographic grouping of mythical Alligator / Gar Fish (Reilly 1991: 165; Fig 18 d,e,j,I; (d.) ["Slim" the piscine zoomorph] (drawing by Gillett G. Griffin, 1985); (e.) Chalcatzigo Mon. 5, Grove 1968); (j) "Slim", the crocodilian zoomorph (Drawing by Gillett G. Griffin, 1985); (i): Chalcatzingo Monument 14 compared to the crocodilian water dancing posture (drawing by Kent Reilly, 1988) (at bottom)

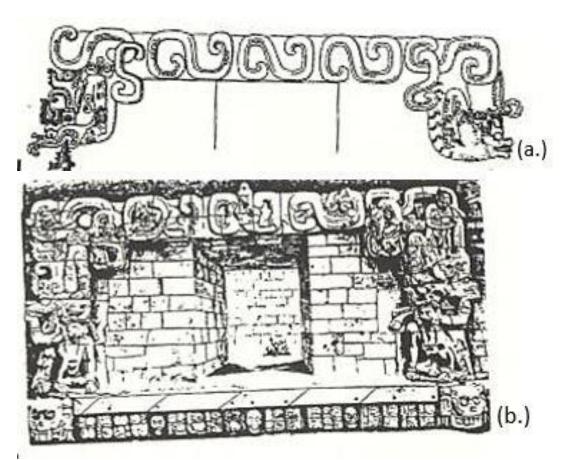


Figure 21 : Late Classic Structure 22 at Copán: Cosmic Monsters and the Milky Way (From Milbrath 1999: 278; Fig 7.5 d [after Maudslay 1889-1902, 1, pl. 114])

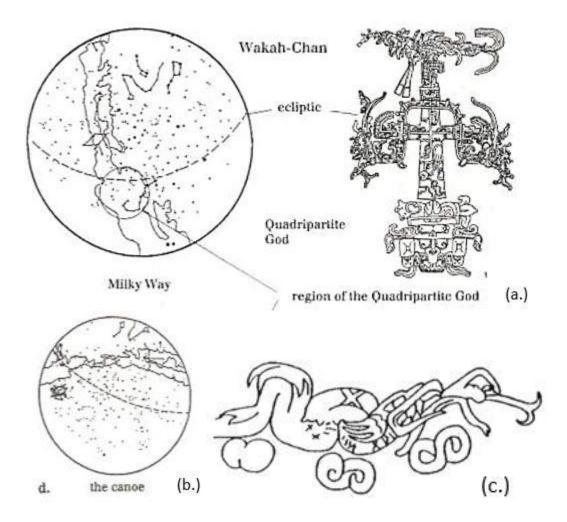


Figure 22: The Cosmic Monster and the Milky Way: (a.) The Milky Way World Tree (Freidel et al. 1993: 86; fig 2:22); (b.) The Cosmic Monster Milky Way (Freidel et al. 1993: 90; fig 2:25d); (c.) Chalcatzingo Mon. 5 (Grove 1984: 112; Fig 29).

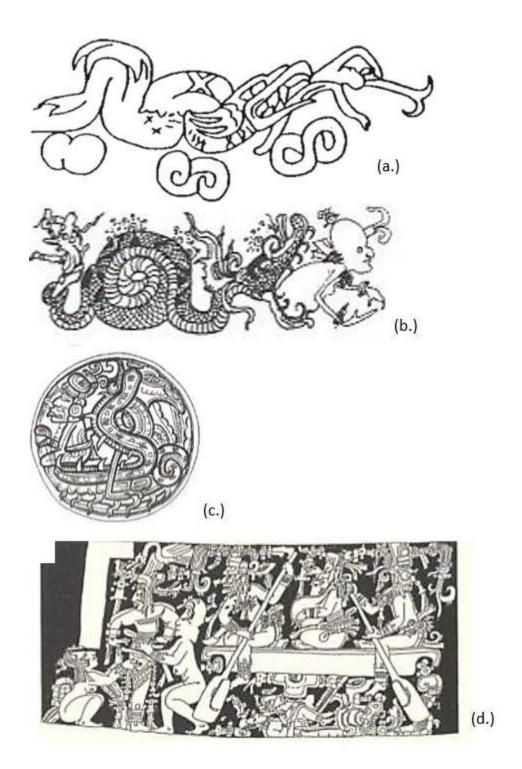


Figure 23: Gods emerging from maws of celestial dragon creatures: (a.) Chalcazingo Mon. 5 (Grove 1984: 112; Fig 29); (b.) K'awil emerges from a Vision Serpent (Freidel et al. 1993: 196; Fig 4:11); (c.) The Maize God Emerges from Serpent (Freidel et al. 1993: 216; Fig 4:28); (d.) The Maize God is reborn in the sea from the mouth of the snake (at bottom right of scene) (Freidel et al. 1993: 93; fig 2:27a)

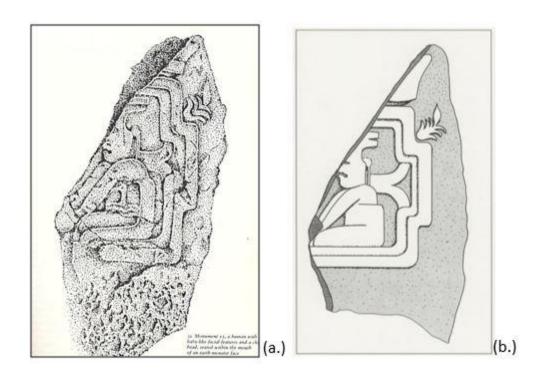


Figure 24: Mon. 13, "El Governor": (a.) Grove 1984: 117: Fig 32; (b.) Grove 2000: 285; fig 13

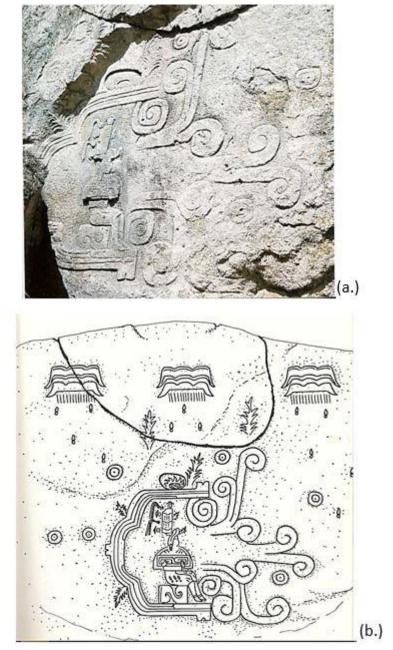


Figure 25: Chalcatzingo Mon. 1, "El Rey": (a.) Grove 1984: 34; Pl. IV; (b.) Grove 1984: 27; Fig 5.

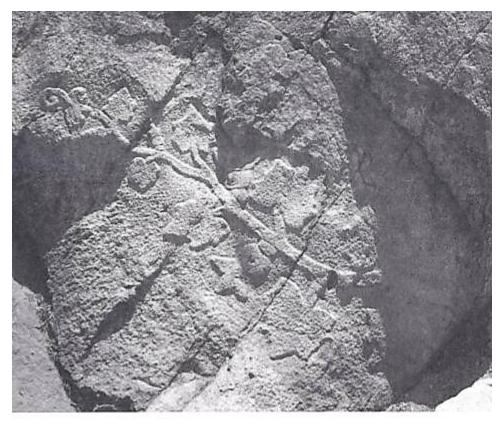


Figure 26: Chalcatzingo Monument 6 (Grove 1984: 94; fig. 12)

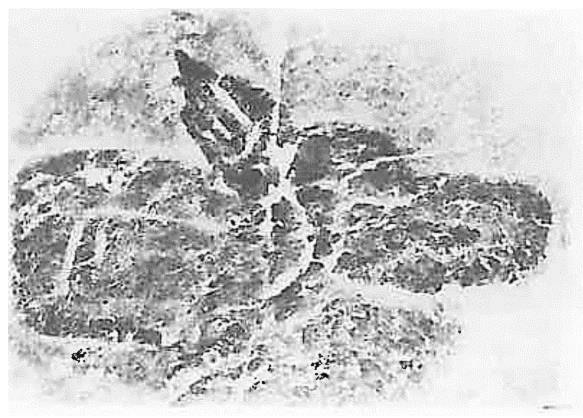


Figure 27 : Chalcatzingo Mon. 7 (Grove 1987: 134; Fig 10.5)

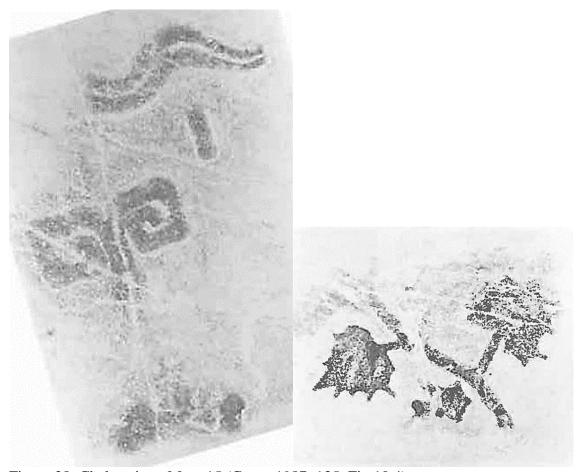


Figure 28: Chalcatzingo Mon. 15 (Grove 1987: 135; Fig 10.4)



Figure 29: Chalcatzingo Mon. 14 (Grove 1987: 134; fig 10.3)



Figure 30: Chalcatzingo Mon. 8 (Grove 1987: 133; fig 10.2)

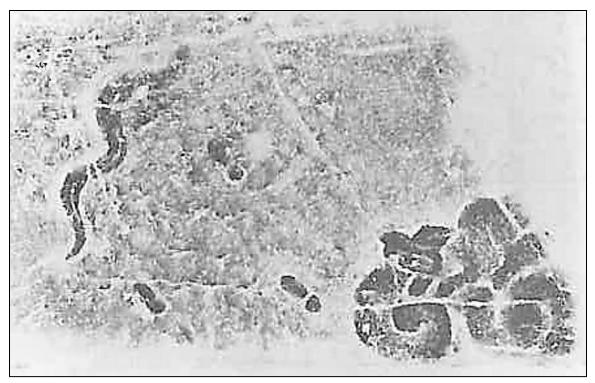


Figure 31 : Chalcatzingo Mon. 11 (Grove 1987: 133; fig. 10.1)

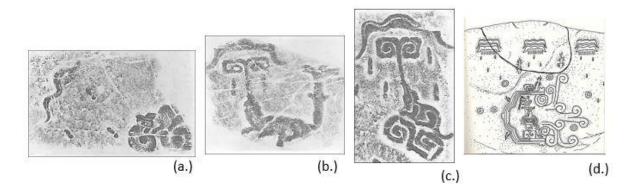


Figure 32: Chalcatzingo's Water Dancing Group: (a.) Grove 1987: 133; fig. 10.1; (b.) Grove 1987: 133; fig 10.2; (c.) Grove 1987: 134; fig 10.3; (d.) Grove 1984: 27; Fig 5

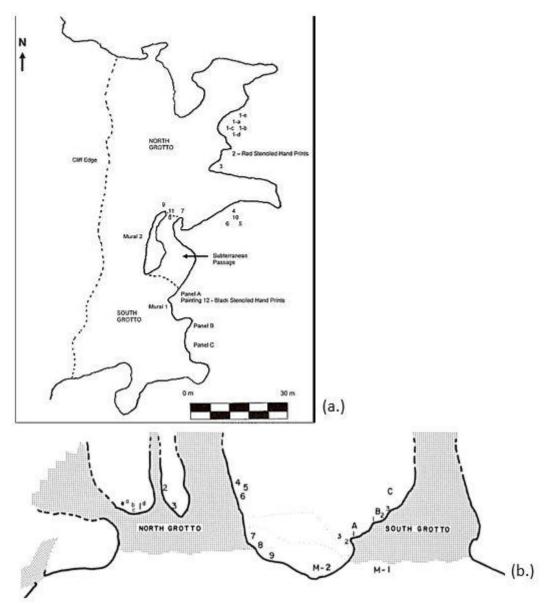


Figure 33: Map of Oxtotitlan Paintings: (a.) Lambert 2013: 17-18; Fig. 2; (b). Grove 1970: 7; Fig 3.

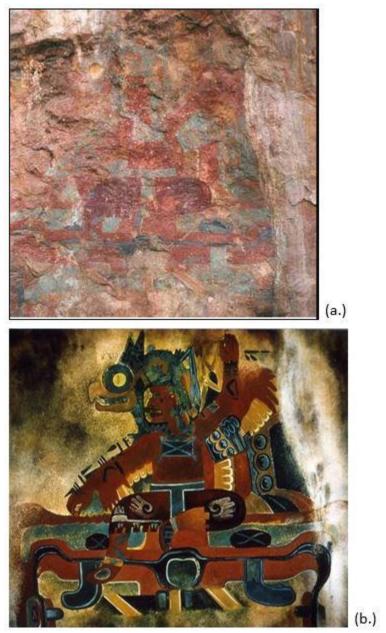


Figure 34: Oxtotitlan Mural I: (a.) Grove 2013: Fig. 3c; (b) Grove 1970: 2; Frontispiece (Rendering by Felipe Davalos)

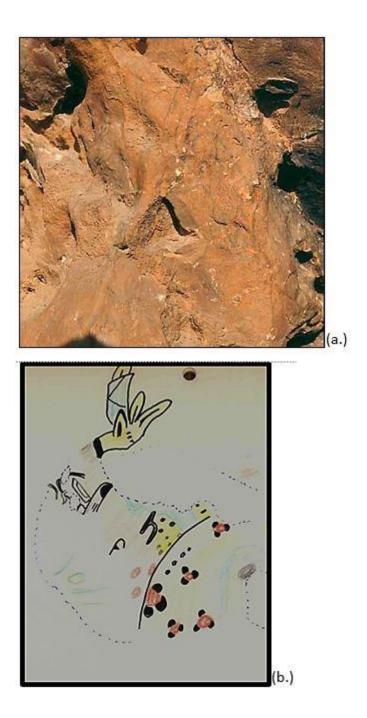


Figure 35: Oxtotitlan Murall II: (a.) Grove 2013: Fig. 3g; (b.) Courtesy of Kent Reilly, Based on Grove 1970: pp 11; Fig 5.

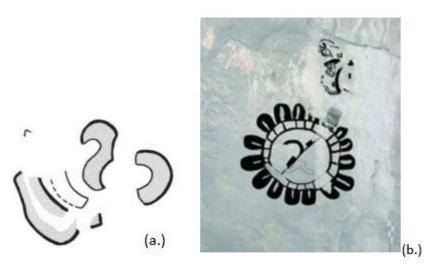
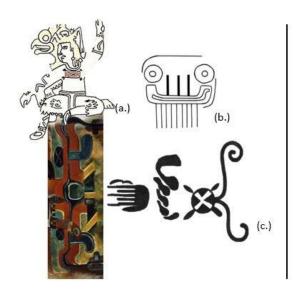




Figure 36: Oxtotitlan North Grotto Entrance Grouping (Paintings 7, 8, and 9): (a.) Painting 9 (Grove 1970: 23; Fig. 22); (b.) Painting 8 (Rendition) by Russ et al. 2017: Fig. 4; (c.) Painting 7 (Grove 1970: 22: Fig. 19) (Rendering by Felipe Davalos)



Figure 37: Oxtotitlan Painting A-1, "El Diablo" (Grove 1970: 25; Fig 25 [Rendering by Felipe Davalos])



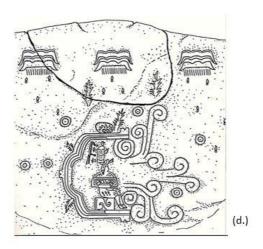


Figure 38: Olmec Sky Dragons: Oxtotitlan South Grotto Paintings and Chalcatzingo El Rey: (a.) Oxtotitlan Mural II (Above: Courtesy of Kent Reilly (from Reilly 1995); Below: Taken from (Grove 1970: 2; Frontispiece); (b.) Oxtotitlan A-3 (Grove 1970: 26; Fig. 27); (c.) Oxtotitlan A-1 (Grove 1970: 25; Fig 25); (d.) Chalcatzingo Mon. 1 (Grove 1984: 27; Fig 5)

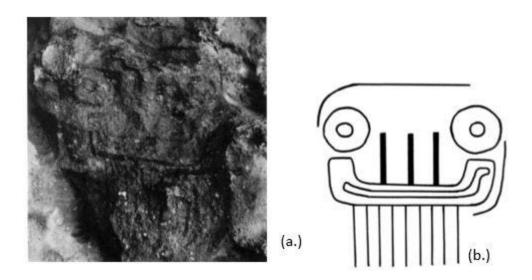


Figure 39: Oxtotitlan Painting A-3, a Tlaloc Face: (a.) Grove 1970: 26; Fig. 28; (b.) Grove 1970: 26; Fig. 27

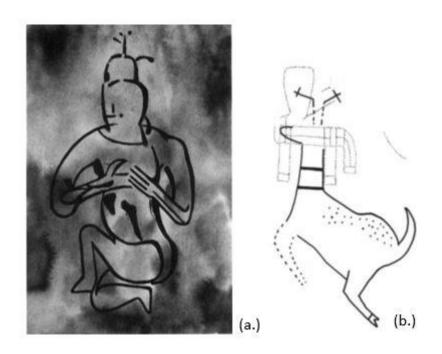


Figure 40: Oxtotitlan Paintings A-2 and B-2: (a.) A-2 (Grove 1970: 26; Fig. 26) (Rendering by Felipe Davalos); (b.) B-2 (Grove 1970: 27; Fig. 29)

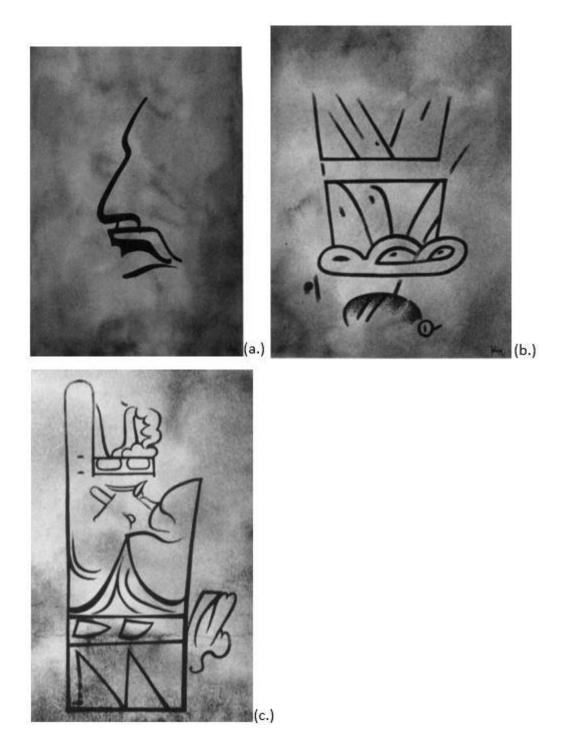


Figure 41: Oxtotitlan Paintings 4, 5, and 6, an Olmec Face and Bundles: (a.) Painting 5 (Grove 1970: 20; Fig. 17 [rendering by Felipe Davalos]); (b.) Painting 4 (Grove 1970: 20; Fig. 16) (by Felipe Davalos); (c.) Painting 6 (Grove 1970: 21; Fig. 18) (by Felipe Davalos)



Figure 42: Oxtotitlan Painting 3 (Grove 1970: 19; Fig. 14 [Rendering by Felipe Davalos])

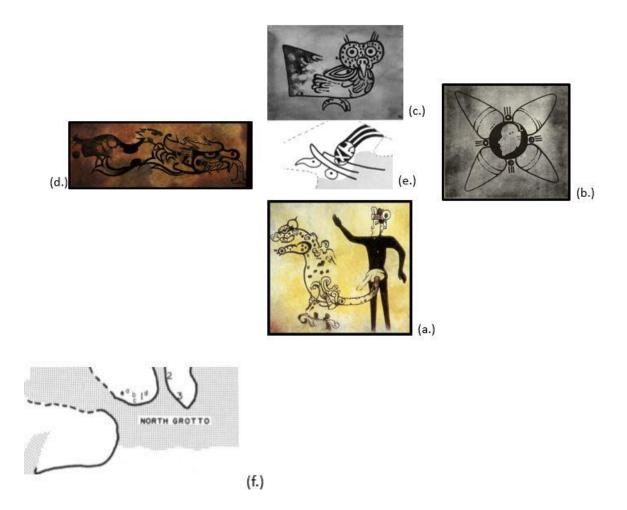


Figure 43: Quadripartite grouping at northern end of the north grotto: (a.) Painting 1-d (south / below), Courtesy of Kent Reilly (from Grove 1970: 17; Fig 13); (b.) Flowering Humanoid I-a (east), Courtesy of Kent Reilly (from Grove 1970: 13; Fig. 7): (c.) Owl Painting I-e (north, above), from Grove 1970: 15; Fig 9; (d.) Cipactli Dragon Painting I-c (west), courtesy of Kent Reilly (from Grove 1970: 16; Fig. 12); (e.) Feathered Serpent Painting I-b (central), Grove 1970: 16; Fig 11; (f.) Map of North Grotto (North orients left of image), Grove (1970: 7; fig 3)

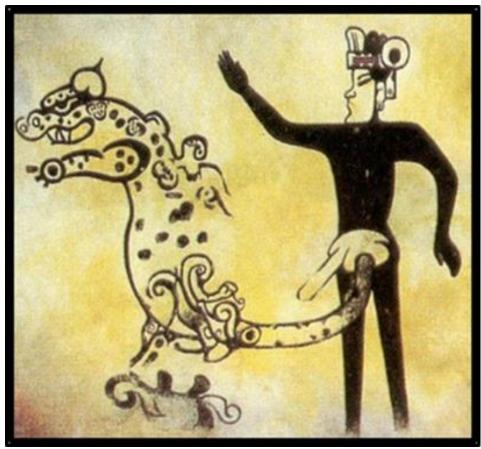


Figure 44 Oxtotitlan Painting 1-d. (Courtesy of Kent Reilly (from Grove 1970: 17; Fig 13; Rendering by Felipe Davalos)

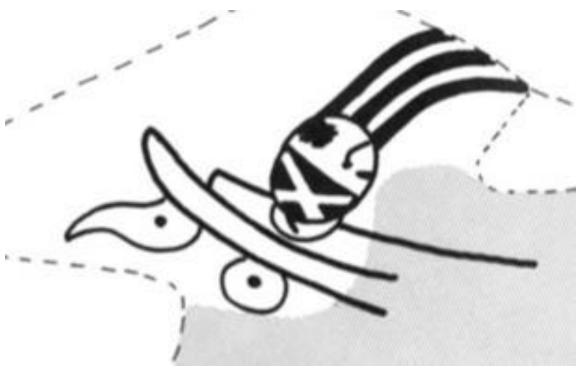


Figure 45: Feathered Serpent Painting I-b (Grove 1970: 16; Fig 11)



Figure 46: Oxtotitlan Painting I-c, a Cipactli Dragon (Courtesy of Kent Reilly) (from Grove 1970: 16; Fig. 12)

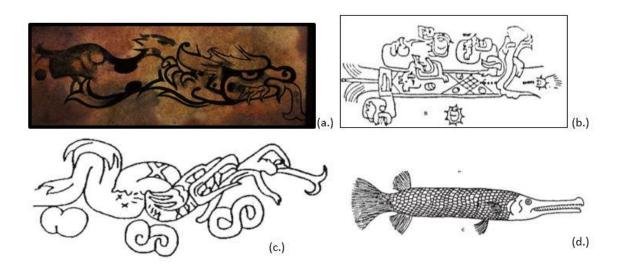


Figure 47: Olmec supernatural gar fish: (a.) Oxtotitlan Painting I-c (Grove 1970: 16; Fig. 12); (b.) Supernatural Gar Fish on "Slim's" right thigh, "Slim" is a green stone statue from the Pacific Coast of Guatemala (Reilly 1987), image from Reilly 1986: 160; Fig. 12; (c.) Chalcatzingo Mon. 5 (Grove 1984: 112; Fig 29); (d.) the tropical alligator gar (Reilly 1986: 160; Fig. 12 (c), drawing by Kent Reilly

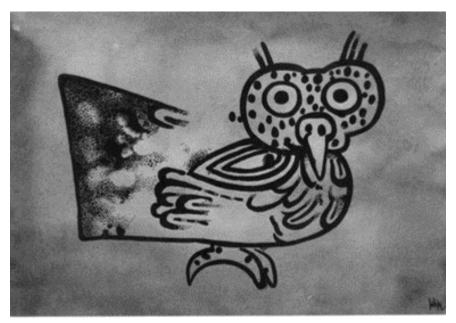


Figure 48: Oxtotitlan Painting I-e, an owl (Grove 1970: 15; Fig 9)

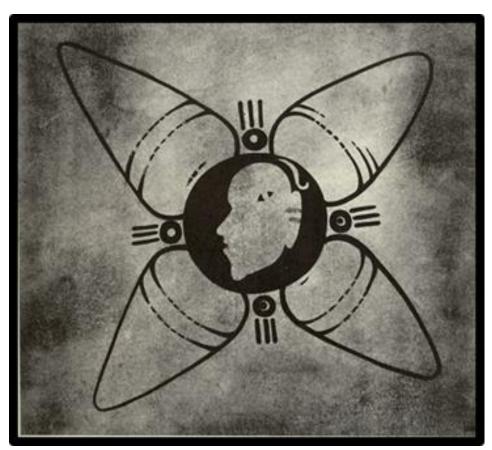


Figure 49: Oxtotitlan Painting I-a, a flowering humanoid (from Grove 1970: 13; Fig. 7; Rendering by Felipe Davalos)

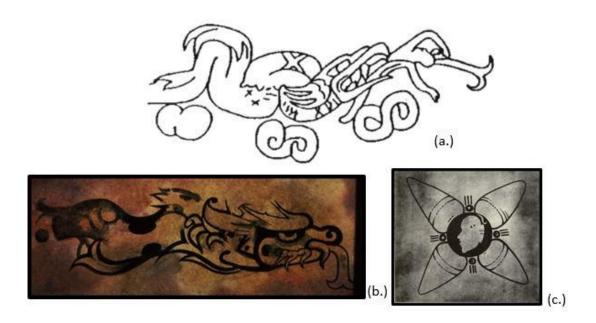


Figure 50: Chalcatzingo Mon. 5 and Oxtotitlan Paintings I-c and I-a: (a.) Mon. 5 (Grove 1984: 112; Fig 29); (b.) Painting I-c (from Grove 1970: 16; Fig. 12); (c.) Painting I-a (from Grove 1970: 13; Fig. 7)

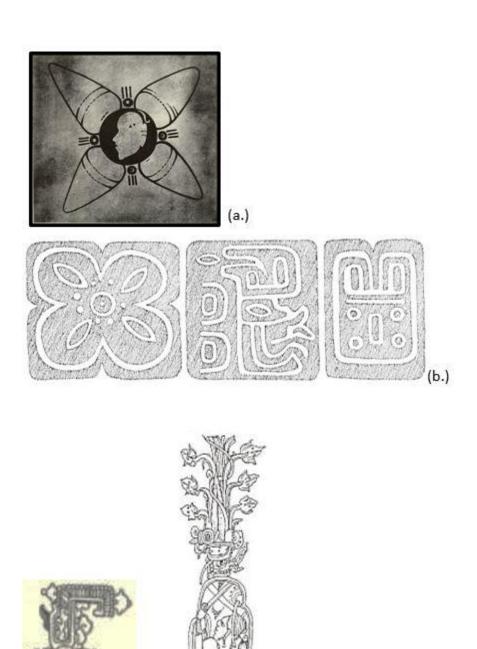


Figure 51: Flower Motifs and the Mesoamerican World Tree: (a.) Oxtotitlan Painting 1-a (Flower Motif with Trefoils) (Grove 1970: 13; Fig. 7); (b.) Three-Sign Composition from a Tlatilco roller Stamp in the Olmec Style (Gay 1973: 279; From Collection of Frederick V. Field); (c.) Classic Period Maya Flower from the Wakah-Chan (Freidel et al. 1993: 183; Fig 4:2g); (d.) Classic Maya Wakah-Chan with Flowers emerging from quatrefoil shaped offering plate (Freidel et al. 1993: 218; Fig 4:29b)

(d.)

1(c.)

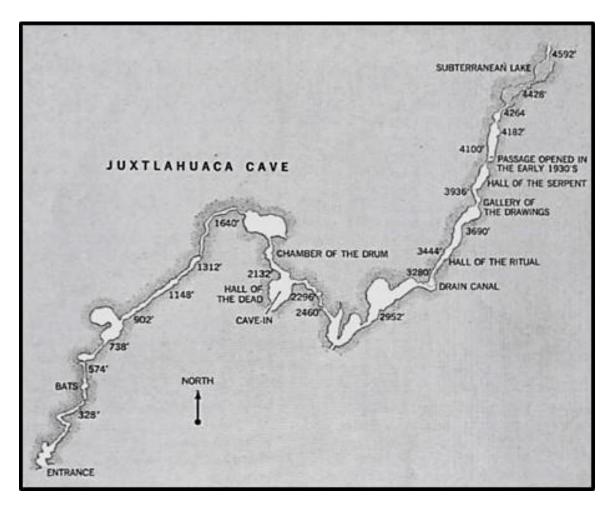


Figure 52: Map of Juxtlahuaca (Gay 1967: 33)

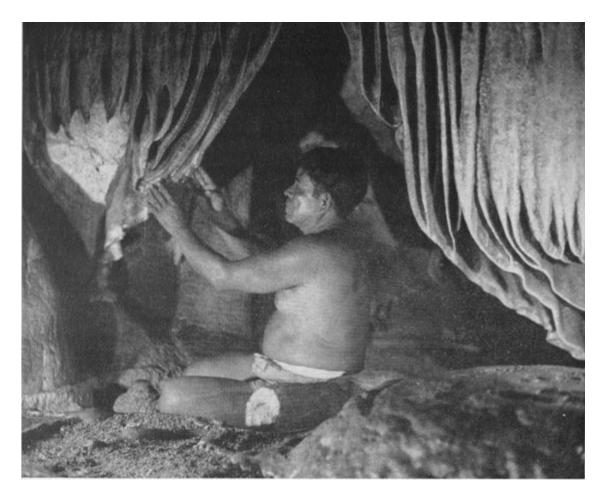


Figure 53: Juxtlahuaca Chamber of the Drum: ("when guide Andres Ortega taps these stalactites, the resulting sound is amplified by the natural wall cavity behind them") (Gay 1967: 32)



Figure 54: Juxtlahuaca Hall of the Dead (Source: The Mesoweb – PARI Photo Archive. Photo by Jorge Perez de Lara. http://www.mesoweb.com/photo/Juxtlahuaca/01.html (1/30/2020))

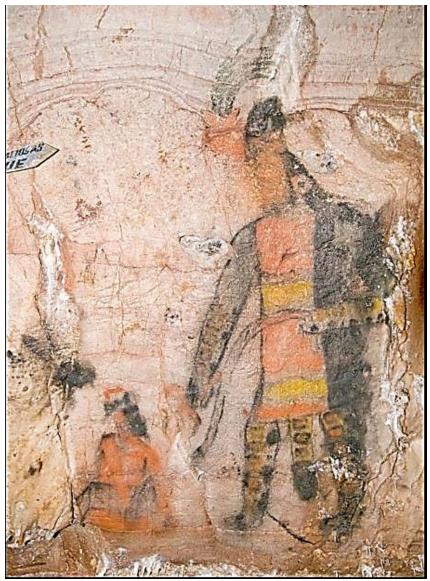


Figure 55: Juxtlahuaca Hall of the Ritual (www.mesoweb.com/photo/Juxtlahuaca/06.html Source: The Mesoweb – PARI Photo Archive. Photo by Jorge Perez de Lara)

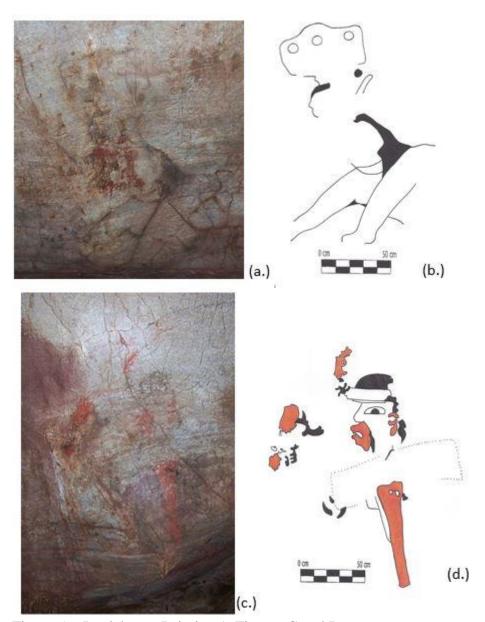


Figure 56: Juxtlahuaca Painting 1, Figures C and D: (a.) Photograph of Figure C (Lambert 2010: Fig. 3); (b.) Drawing of Figure C (Lambert 2010: Fig 4); (c.) Photograph of Figure D (Lambert 2010: Fig 5); (d.) Drawing of Figure D (Lambert 2010: Fig 6)

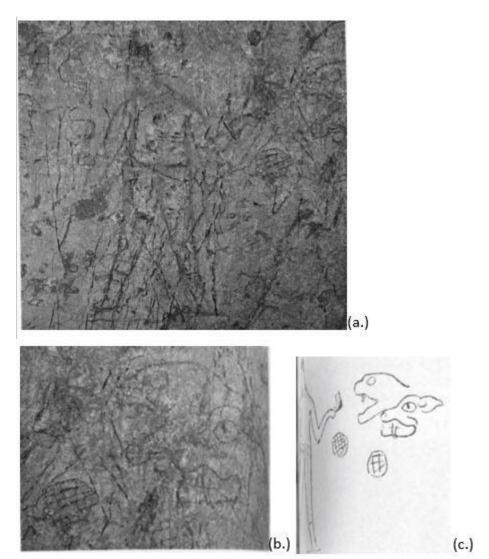


Figure 57: Juxtlahuaca Gallery of the Drawings:
(a.) Elite humanoid photo (Gay 1967: 30 Drawing 3); (b.) Serpent and Jaguar Photo (Gay 1967: 30; Drawing 2; (c.) Line Drawing of anthopomorph and Zoomorphs (Gay 1967: 31)



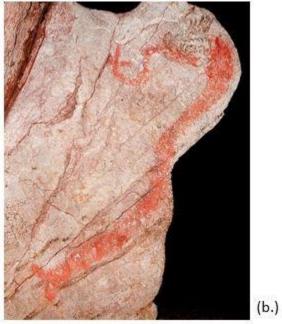


Figure 58: Juxtlahuaca Hall of the Serpent:
(a.) Jaguar (The Mesoweb – PARI Photo Archive. Photo by Jorge Perez de Lara http://www.mesoweb.com/photo/Juxtlahuaca/02.html (02/02/2020);
(b.) Avian Serpent (The Mesoweb – PARI Photo Archive. Photo by Jorge Perez de Lara http://www.mesoweb.com/photo/Juxtlahuaca/03.html) (02/02/2020)

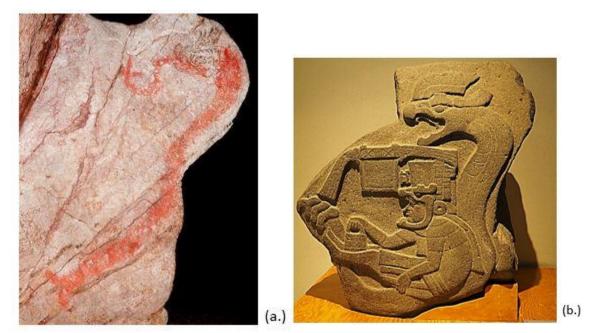


Figure 59: Juxtlahuaca Feathered Serpent and La Venta Mon. 19: (a.) Juxtlahuaca Serpent (The Mesoweb – PARI Photo Archive. Photo by Jorge Perez de Lara http://www.mesoweb.com/photo/Juxtlahuaca/03.html) (02/02/2020)); (b.) Photo by Author (from museo nacional de antropologia, Mexico, D.F.)

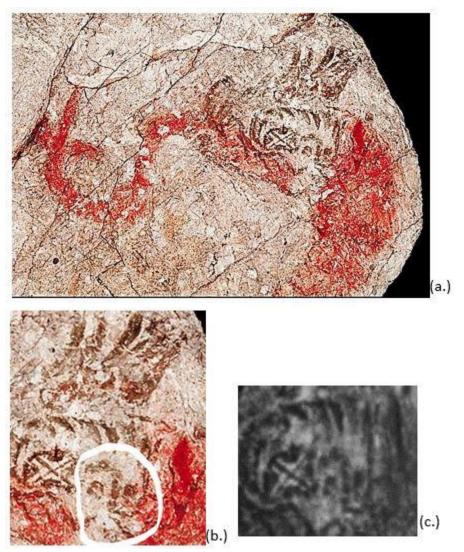


Figure 60: Close up of the Juxtlahuaca Serpent: (a. and b.) from The Mesoweb – PARI Photo Archive. Photo by Jorge Perez de Lara http://www.mesoweb.com/photo/Juxtlahuaca/04.html); (b.) see muyall symbol right of the eye; (c.) Gay 1967: 30



Figure 61: Juxtlahuaca Subterranean Lake (Courtesy of Kent Reilly)

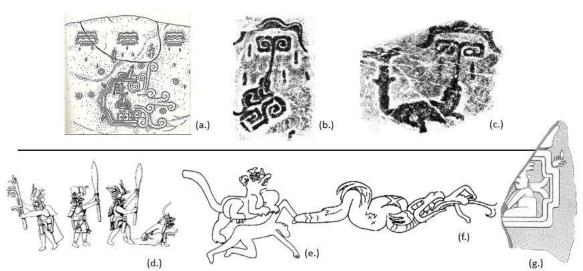


Figure 62: Chalcatzingo's Iconographic Tableau: Dualistic Cerros via Maize and Water Symbolism (with water above, maize below):
(a.) Mon. 1 (Grove 1984: 27; Fig 5); (b.) Mon. 14 (Grove 1987: 134; fig 10.3); (c.) Mon. 8 (Grove 1987: 133; fig 10.2); (d.) Mon. 2 (Tello et al. 2015: 25); (e.) Mon. 4 (Grove 1984: 113; Fig. 30); (f.) Mon. 5 (Grove 1984: 112; Fig 29); (g.) Mon. 13 (Grove 2000: 285; fig 13)

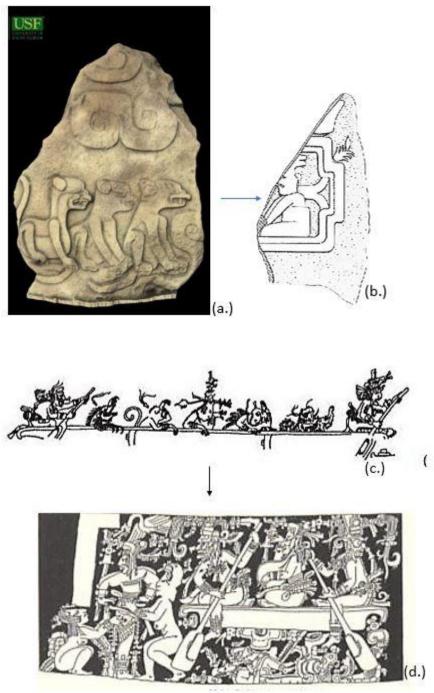


Figure 63: Cosmic Travel in Creation Episodes (Chalcatzingo Felines and Maya Canoe Episode):

(a.) Chalcatzingo Mon. 41 (Tello et al. 2015: 29; Fig 33); (b.) Chalcatzingo Mon. 13 (Grove 2000: 285; fig 13); (c.) The canoe carrying the Maize God to the place of Creation (Schele and Villela 1994: Fig. 6b; Smith 2017: 116; Fig 34); (d.) Maize god canoe episode, Maize God reborn from the mouth of the snake, and dressing of the Maize God (Freidel et al. 1993: 93; Fig 2:27a)

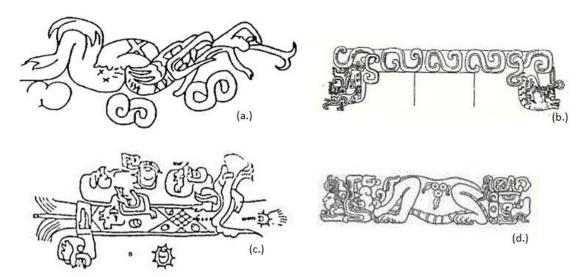


Figure 64 : Olmec and Maya Cosmic Monsters:
(a.) Chalcatzingo Mon. 5 (Grove 1984: 112; Fig 29); (b.) Late Classic Structure 22 at Copán (From Milbrath 1999: 278; Fig 7.5); (c.) The Alligator Gar Zoomorph on "Slim" (Reilly 1991: 165; Fig 18 d); (d.) Mayan Cosmic Monster (Freidel et al. 1993: 86; Fig 2:22)

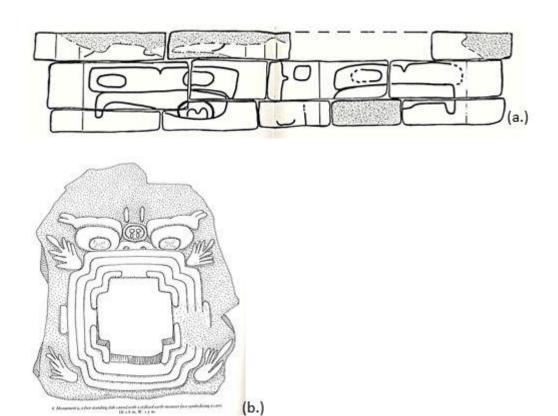


Figure 65: Chalcatzingo's Northern Cave Monuments: Mon. 22 and Mon. 9: (a.) Mon. 22 (Grove 1984: 66-67; Fig 15); (b.) Mon. 9 (Grove 1984: 48; Fig 8)

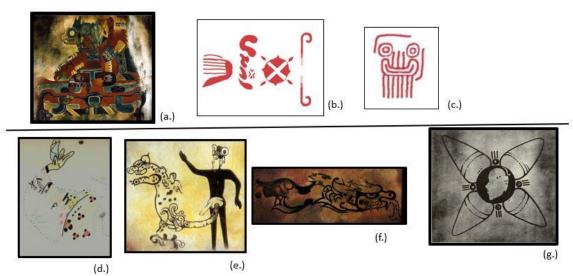
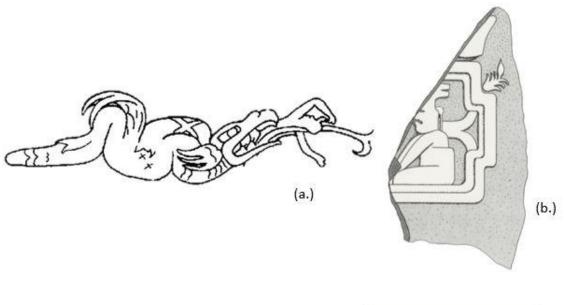


Figure 66: The Dualistic Cave Grottos of Oxtotitlan: Cave of wind / water and Cave of Solar Maize:

(a.) Mural I (Grove 1970: 2); (b.) Painting A-1 (Grove 1970: 25; Fig 25); (c.) Painting A-3 (Grove 1970: 26; Fig. 28); (d.) Mural 2 (courtesy of Kent Reilly) (based on Grove 1970: 11; Fig 5); (e.) Painting 1-d (Courtesy of Kent Reilly) (from Grove 1970: 17; Fig 13; Rendering by Felipe Davalos); (f.) Painting I-c (from Grove 1970: 16; Fig. 12); (g.) Painting I-a (from Grove 1970: 13; Fig. 7)





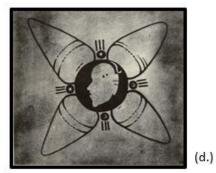
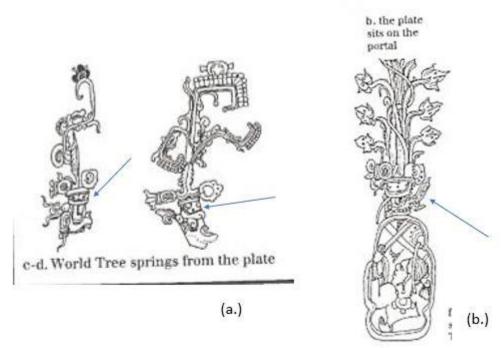


Figure 67: Eastern Maize Deities Dawning at Creation:
(a.) Chalcatzingo Mon. 5 (Grove 1984: 112; Fig 29); (b.) Mon. 13 (Grove 2000: 285; fig 13; (c.) Oxtotitlan Paintings I-c (Grove 1970: 16; Fig. 12); (d.) Painting 1-a (Grove 1970: 13; Fig. 7)



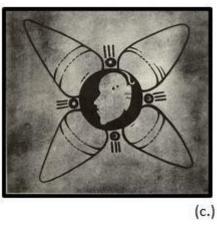


Figure 68: Mayan Iconography of the World Tree with Flower and Solar Images (Notice the Kin' Glyph at the Base of the Offering Plate and World Tree in all three Mayan examples):

(a.) World Tree Springs from the Plate (Freidel et al. 1993: 218; Fig 4:29 c-d); (b.) The plate sits on the portal: the world tree sprouts from the plate (Freidel et al. 1993:218; Fig 4:29 b); (c.) Oxtotitlan Painting 1-a (Grove 1970: 13; Fig. 7)

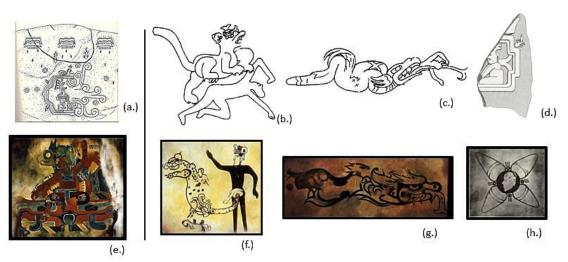


Figure 69: Oxtotitlan and Chalcatzingo's Dualistic Tableaus (Caves of wind / water, Caves of Maize):

(a.) Mon. 1 (Grove 1984: 27; Fig 5); (b.) Mon. 4 (Grove 1984: 113; Fig. 30; (c.) Mon. 5 (Grove 1984: 112; Fig 29); (d.) Mon. 13 (Grove 2000: 285; fig 13); (e.) Mural I (Grove 1970: 2); (f.) Painting 1-d (Grove 1970: 17; Fig 13); (g.) Painting I-c (Grove 1970: 16; Fig. 12); (h.) Painting I-a (Grove 1970: 13; Fig. 7)

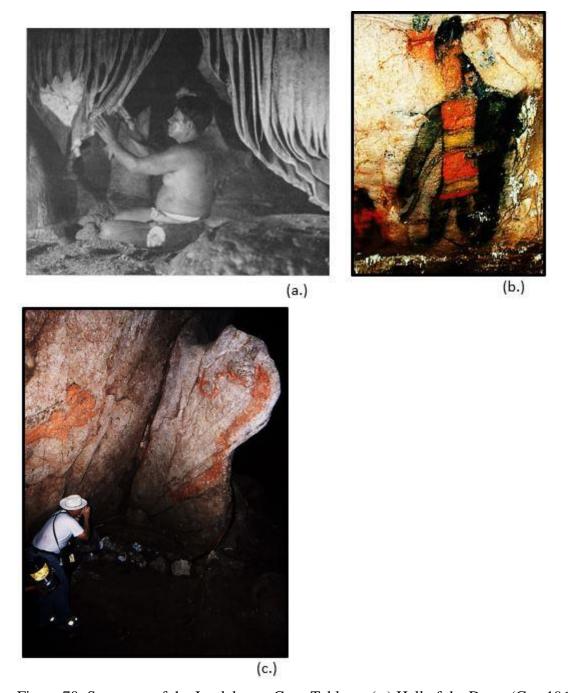


Figure 70: Summary of the Juxtlahuaca Cave Tableau: (a.) Hall of the Drum (Gay 1967: 33); (b.) Hall of the Ritual (Courtesy of Kent Reilly) (Photo taken by Lachniet in 2006, see Lachniet 2017); (c.) Hall of the Serpent (courtesy of Kent Reilly) (Photo taken by Lachniet in 2007; see Lachniet 2017)

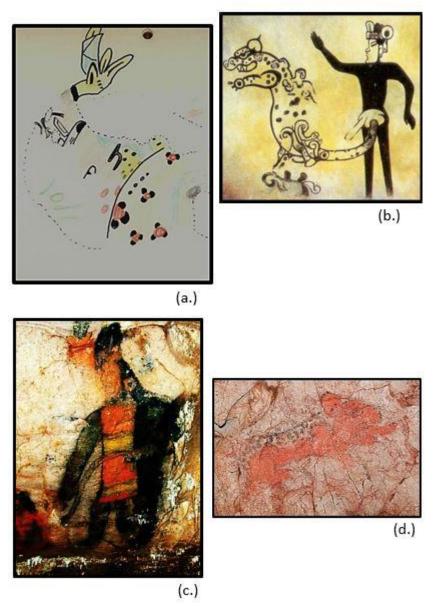


Figure 71: Oxtotitlan and Juxtlahuaca Feline Transformation Imagery: (a.) Murall II (courtesy of Kent Reilly) (based on Grove 1970: 11; Fig 5); (b.) Painting I-d (Courtesy of Kent Reilly) (based on Grove 1970: 17; Fig 13); (c.) Juxtlahuaca Hall of the Ritual (courtesy of Kent Reilly) (Photo taken by Lachniet in 2006, see Lachniet 2017); (d.) Jaguar of Hall of the Serpent (The Mesoweb – PARI Photo Archive. Photo by Jorge Perez de Lara http://www.mesoweb.com/photo/Juxtlahuaca/02.html (02/02/2020)

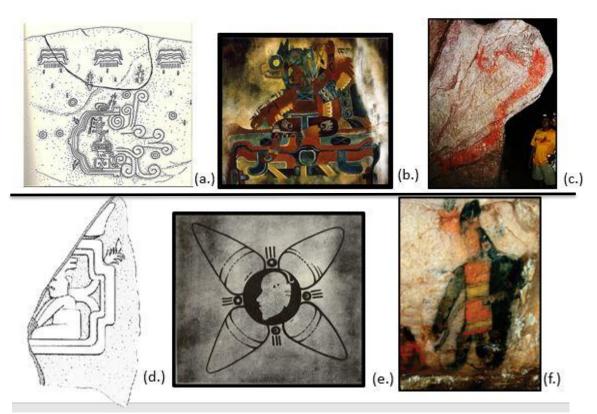


Figure 72: Twin Caves: the Primordial Mountain of Water and Maize (water symbolism above and maize below):

(a.) Chalcatzingo Mon. 1 (Grove 1984: 27; Fig 5); (b.) Oxtotitlan Mural I (Grove 1970: 2), (c.) Juxtlahuaca Avian Serpent (courtesy of Kent Reilly) (Photo taken by Lachniet in 2007; see Lachniet 2017), (d.) Chalcatzingo Mon. 13 (Grove 2000: 285; fig 13), (e.) Oxtotitlan Painting I-a (Grove 1970: 13; Fig. 7; (f.) Juxtlahuaca Hall of the Ritual (courtesy of Kent Reilly) (Photo taken by Lachniet in 2006, see Lachniet 2017)

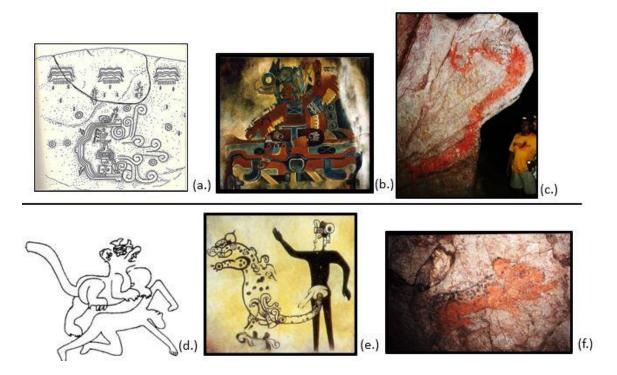


Figure 73: The Dualistic Deities of Creation:
(a.) Chalcatzingo Mon. 1 (Grove 1984: 27; Fig 5); (b.) Oxtotitlan Mural I (Grove 1970: 2); (c.) Juxtlahuaca Avian Serpent (Courtesy of Kent Reilly) (Photo taken by Lachniet in 2007; see Lachniet 2017); (d.) Chalcatzingo Mon. 4 (Grove 1984: 113; Fig. 30); (e.) Oxtotitlan Painting I-d (Courtesy of Kent Reilly) (based on Grove 1970: 17; Fig 13); (f.) Juxtlahuaca Jaguar (Photo taken by Lachniet in 2007; see Lachniet 2017)



Figure 74: Olmec Imagery of Feathered Serpent / Rain and Wind Deity:
(a.) La Venta Mon. 19 (Photo by Author from museo nacional de antropologia, Mexico, D.F.); (b.) Juxtlahuaca Avian Serpent (Courtesy of Kent Reilly) (Photo taken by Lachniet in 2007; see Lachniet 2017); (c.) Oxtotitlan Mural I (Grove 1970: 2); (d.) Chalcatzingo Mon. 1 (Grove 1984: 27; Fig 5)

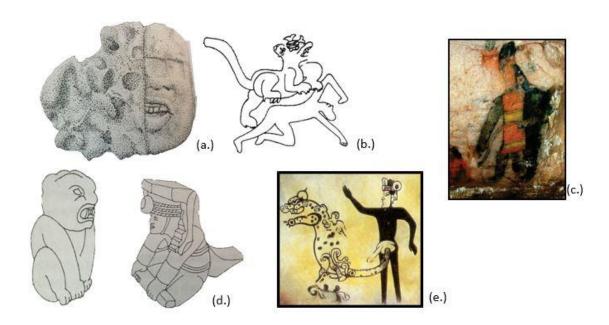


Figure 75: Jaguar Nahualism in Olmec art:
(a.) San Lorenzo Uay Monument (Reilly and Garber 2003: 134; Fig 8.1c); (b.)
Chalcatzingo Mon. 4: a Ruler's Nahual (Grove 1984: 113; Fig. 30); (c.) Juxtlahuaca
Ruler dressed as a Jaguar (courtesy of Kent Reilly) (Photo taken by Lachniet in 2006, see Lachniet 2017); (d.) El Azulzul Monument Grouping (Reilly and Garber 2003: 140; Fig 8.5a); (e.) Oxtotitlan Ruler and Jaguar Nahual (Courtesy of Kent Reilly) (based on Grove 1970: 17; Fig 13)

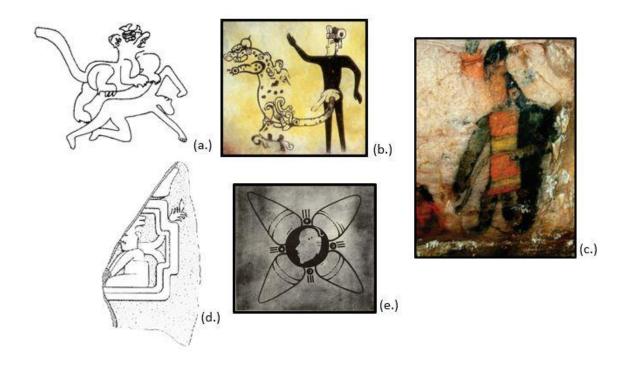


Figure 76: Olmec Central Highland Rulership and Mythical Maize Imagery: (a.) Chalcatzingo Mon. 4 (note the Maize God Headress) (Grove 1984: 113; Fig. 30); (b.) Oxtotitlan Painting I-d (note the Maize God Headress) (Grove 1970: 17; Fig 13; Courtesy of Kent Reilly); (c.) Juxtlajuaca Painting 1 (a ruler dressed as a jaguar wearing the Maize God Headress) (Photo taken by Lachniet in 2006, see Lachniet 2017; courtesy of Kent Reilly); (d.) Chalcatzingo Mon. 13 (the Maize God within the mountain cave) (Grove 2000: 285; fig 13); (e.) Oxtotitlan Painting 1-a (the head of the Maize God blossoming in rebirth) (Grove 1970: 13; Fig. 7)

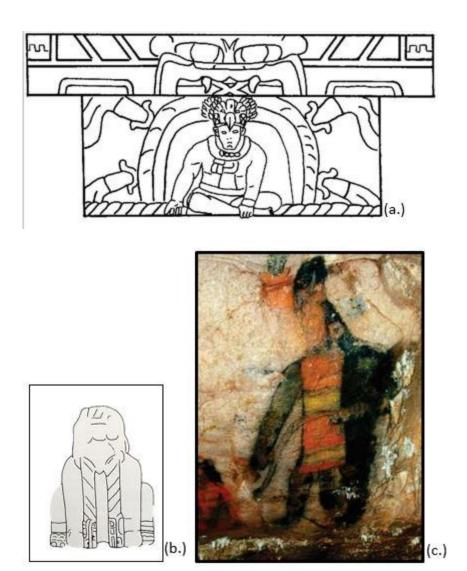


Figure 77: Olmec Rulership Imagery with Supernatural Rope Motifs: (a.) La Venta Altar IV (Reilly 1995: 40; Fig 30) (b.) La Venta Mon. 80 (a Late Formative jaguar holding bicephalic serpent rope (Taube 1995: 93; Fig 13f; from Gonzalez Lauck 1988), (c.) Juxtlahuaca Painting 1 (a jaguar dressed ruler holds a serpent-like rope and wears the Jester God headdress) (Photo taken by Lachniet in 2006, see Lachniet 2017; courtesy of Kent Reilly)

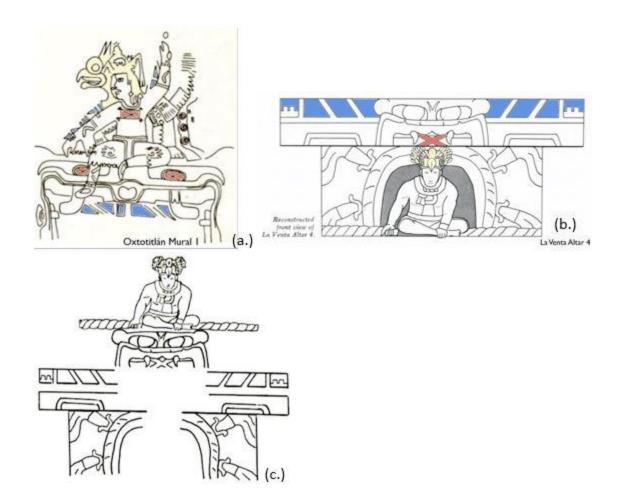


Figure 78: Olmec Thrones with Sky Ropes and Sky Bands (i.e. crossed bands): (a.) Oxtotitlan Mural I (Sky Bands In Blue, crossed bands in red) (Colors added by author, line drawing from Reilly 1995: 39; Fig. 27) (from Stanley and Smith 2015); (b.) La Venta Altar 4 (sky bands in blue, crossed bands in red) (colors added by author, line drawing from Reilly 1995: 30; Fig 30) (from Stanley and Smith 2015); (c.) La Venta Altar 4: the ruler's ascension into the sky (Reilly 1995: 41; Fig 32)

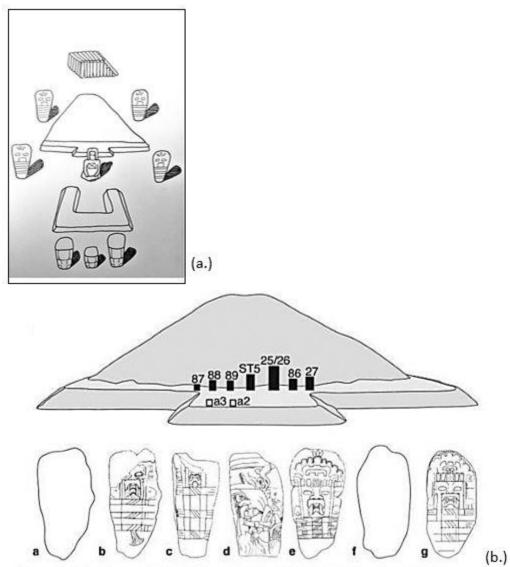


Figure 46: stela at base of La Venta Mound C (Tate 2012: fig. 8.20. Drawing of Stela by Carolyn Tate. drawing of mound by Corey Escoto.)

Figure 79: The Central Earthen Pyramid Mountain of La Venta: The First True Mountain of Maize:

(a.) La Venta Sculpture Narrative, Tara Smith 2017: 138; Fig. 48; (b.) Stela at base of La Venta mound (Smith 2017: 128; Fig 46; from Tate 2012: fig. 8.20)



Figure 80: San Martin Pajapan Clefted Mountain and Mon. 1: The Place the Sky Was Raised: (a.) Photo of San Martin Pajapan (photo taken by author); (b.) Mon. 1 (Freidel et al. 1993: 133)

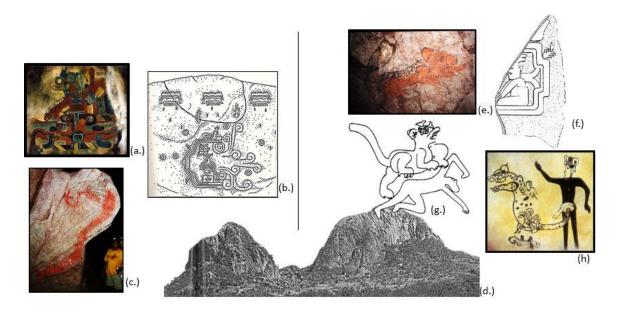


Figure 81: The Central Highland Dualistic Mountain of Creation:
(a.) Oxtotitlan Mural I (Grove 1970: 2); (b.) Chalcatzingo Mon. 1 (Grove 1984: 27; Fig 5); (c.) Juxtlajuaca Avian Serpent (Courtesy of Kent Reilly) (Photo taken by Lachniet in 2007; see Lachniet 2017); (d.) Chalcatzingo's Clefted Cerros (Grove 1984: 90 -91); (e.) Juxtlahuaca Supernatural Jaguar (Photo taken by Lachniet in 2007; see Lachniet 2017; Courtesy of Kent Reilly); (f.) Chalcatzingo Mon. 13 (Grove 2000: 285; fig 13); (g.) Chalcatzingo Mon. 4 (Grove 1984: 113; Fig. 30); (h.) Oxtotitlan Painting I-d (Photo taken by Lachniet in 2006, see Lachniet 2017; courtesy of Kent Reilly



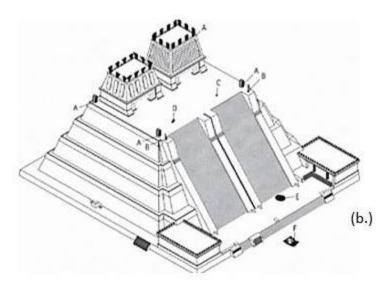


Figure 82: Central Highland Dualistic Pyramids in Classic and Post-Classic Periods: (a.) Pyramids of the Moon and Sun at Teotihuacan, photo by author; (b.) Aztec Templo Mayor, 7; Lopez et al. 2017: 7; Fig 43.5 (Drawing by Tenoch Medina)

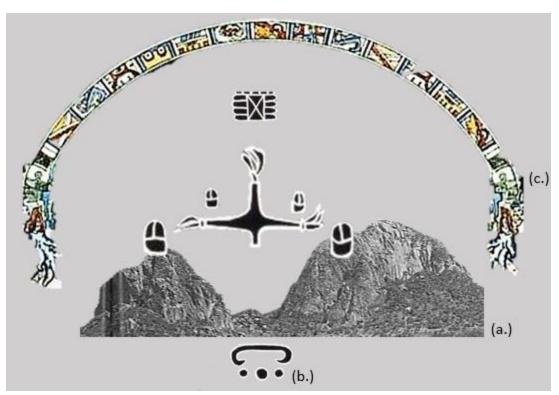


Figure 83: The Sacred Center Place of Chalcatzingo:

(a.) the Clefted Cerros (Grove 1984: 90 -91); (b.) Cosmological symbols from the Dallas Plaque- the three stone place, cave maw of the crocodile, the maize world tree, and the House of North in the center of the sky (all symbols shown in black) (taken from Freidel and Reilly 2009: Fig 14; Smith 2017: 129; Fig 47); (c.) The Cosmic Dragon and Milky Way, the Bicephalic Serpent of the Ecliptic (Taken from the Cosmological Model Called *Maya Cosmos*, from March 1990 National Geographic "Ancient Skywatchers") (Image courtesy of Kent Reilly)

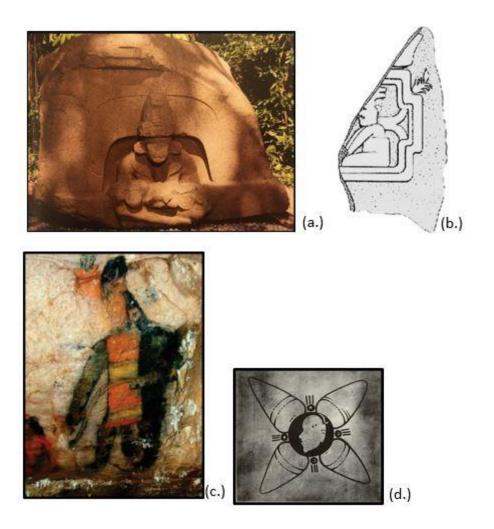


Figure 84: Central Mexican Highland and Olmec Heartland Cave imagery with Maize Symbolism:

(a.) La Venta Altar 5 (Berrin and Fields 2010: 151; Plate 64); (b.) Chalcatzingo Mon. 13 (Grove 2000: 285; fig 13); (c.) Juxtlahuaca Painting 1 (note the Maize God Headress worn by the ruler / ancestor) (Photo taken by Lachniet in 2006, see Lachniet 2017; courtesy of Kent Reilly); (d.) Oxtotitlan Painting 1-a (the flowering decapitated head of the Maize God) (Grove 1970: 13; Fig. 7)

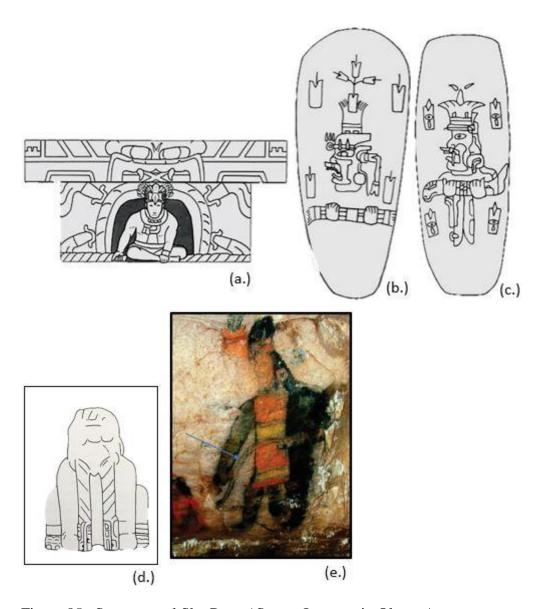
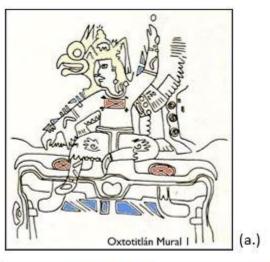
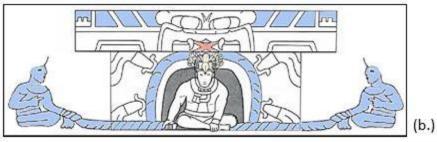


Figure 85: Supernatural Sky Rope / Sepent Imagery in Olmec Art: (a.) La Venta Altar 4 (Reilly 1995: 40; Fig 30); (b.) A ruler holds a feather bundle / sky rope, detail from an incised jade celt from Rio Pesquero (Joralemon 1976; Fig. 83; Taube 1995: 87); (c.) Incised jade celt from Rio Pesquero (Reilly 1995: 38; Fig 25); (d.) La Venta Mon. 80 (a Late Formative jaguar holding bicephalic serpent rope (Taube 1995: 93; Fig 13f; from Gonzalez Lauck 1988); (e.) Juxtlahuaca Painting 1 (a jaguar dressed ruler with a supernatural lineage rope) (Photo taken by Lachniet in 2006, see Lachniet 2017; courtesy of Kent Reilly)





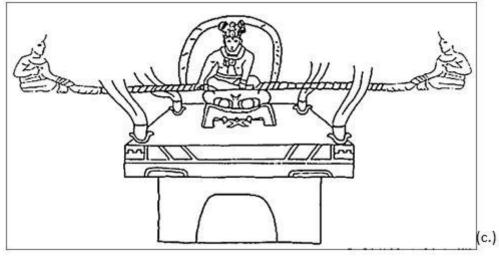


Figure 86: Oxtotitlan Mural I and La Venta Altar IV: avian rulers, sky ropes, and caves: (a.) Oxtotitlan Mural I (sky bands in blue, crossed bands in red, line drawing from Reilly 1995: 39; Fig. 27) (see Stanley and Smith 2015); (b.) La Venta Altar IV (colors added by author, line drawing from Smith and Stanley (2015) based on Reilly 1995: 40; Fig 30); (c.) La Venta Altar IV- a ruler ascension into the sky (Stanley and Smith 2015; Line drawing by Tara Smith, based on Reilly 1995: 41; fig.32).

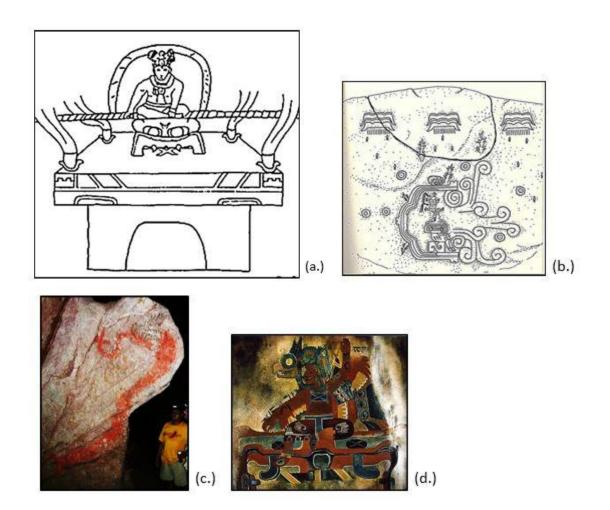


Figure 87: Central Mexican Highland and Olmec Cave Imagery with Avian Rope / Serpent Imagery:

(a.) La Venta Altar IV (Stanley and Smith 2015; based on Reilly 1995: 41; fig. 32); (b.) Chalcatzingo Mon. 1 (note the quetzal headdress and celestial serpent cave) (Grove 1984: 27; Fig 5); (c.) Juxtlahuaca Cave Avian Serpent (Courtesy of Kent Reilly) (Photo taken by Lachniet in 2007; see Lachniet 2017); (d.) Oxtotitlan Mural I (an Avian Serpent Cave with a celestial ruler) (Grove 1970: 2)

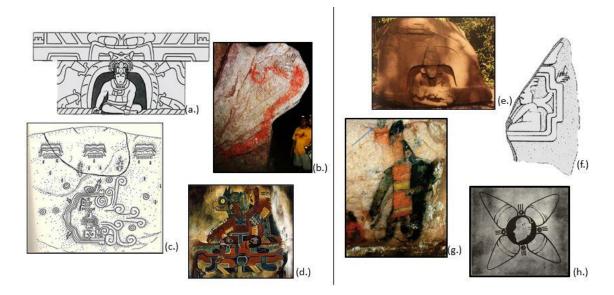


Figure 88: Possible Shared Cave Symbolism between the Central Highlands and Olmec Heartland: Supernatural Maize symbolism and Avian Serpent / Rope Imagery: (a.) La Venta Altar IV (Reilly 1995: 40; Fig 30); (b.) Juxtlahuaca Avian Serpent (Courtesy of Kent Reilly; see Lachniet 2017); (c.) Chalcatzingo Mon. 1 (Grove 1984: 27; Fig 5); (d.) Oxtotitlan Mural I (Grove 1970: 2); (e.) La Venta Altar V (Berrin and Fields 2010: 151; Plate 64); (f.) Chalcatzingo Mon. 13 (Grove 2000: 285; fig 13); (g.) Juxtlahuaca Painting 1 (note the Maize God Headress) (Lachniet 2017); (h.) Oxtotitlan Painting 1-a (Flowering Maize) (Grove 1970: 13; Fig. 7)

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