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The Jolja' Cave Project



Research Year: 2001

Culture: Contemporary Ch'ol Maya

Chronology: Early Classic to Post Classic

Location: Misopa' Mountain, Chiapas, México

Site: Jolja' cave

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Abstract

The site of Jolja' consists of three caves on a mountain cliff at the headwaters of the Ixtelja River, Chiapas (N 17 20.916' W92 19.509'). The caves are on the property of the Ch'ol Maya ejido of Joloniel. All three caves contain pre-Columbian pottery shards. An Early Classic Maya mural and seven groups of hieroglyphic texts are painted on the walls of Cave #1. These are the only Early Classic cave paintings ever found in the Maya region, and they refer to rituals performed in the cave between A.D. 300 and A.D. 435. The Ch'ol Maya of the region believe a god named Don Juan inhabits Jolja' and each year at Cave #1 they perform a Day of the Cross ceremony in his honor.

Resumen

El sitio Jolja' está conformado por tres cuevas ubicadas en la cima de una montaña en la cabecera del Río Ixteljá, Chiapas (N 17 20.916' W92 19.509'). Las cuevas están dentro de los límites del ejido maya ch'ol conocido como Joloniel. Las tres cuevas contienen restos de cerámica precolombina. Un mural maya del clásico temprano y siete grupos de textos jeroglíficos están pintados en las paredes de la Cueva #1. Estas son las únicas pinturas en cuevas del Clásico Temprano encontradas en la región Maya y hacen referencia a rituales realizados en la cueva entre los años 300 y 435 d.C. Los mayas ch'oles de esta región creen en un Dios llamado don Juan que habita en Jolja' y cada año (el 3 de mayo), en la Cueva #1, celebran en su honor el Día de la Cruz.

Submitted 02/28/2002 by:
Karen Bassie
rick.bassie@nucleus.com

Introduction

The site of Jolja' in northeastern Chiapas, México, consists of three separate caves. Although each one contains pre-Columbian artifacts, Cave #1 also has seven groups of Early Classic paintings, including a mural and hieroglyphic texts, which date from A.D. 300-500. These material remains indicate that the ancient Maya conducted rituals and made offerings to their gods at this sacred site. The contemporary Ch'ol Maya continue to use the caves for similar purposes. They believe a mountain deity called Don Juan inhabits these caves as well as several others in the region, and they perform annual cave ceremonies dedicated to him. This long history of cave use provides a rare opportunity to compare and contrast pre-Columbian and contemporary cave uses. The Jolja' Cave Project was initiated in the spring of 1999 in order to record and reconstruct the Jolja' paintings, and to recover as much information as possible regarding the nature of the pre-Columbian and contemporary uses of the caves.

The 2001 fieldwork funded by FAMSI was carried out by Karen Bassie, Robert Laughlin, Christina Halperin, Ausencio Cruz Guzmán, Jorge Pérez de Lara and Alonso Méndez. At the suggestion of Antrop. Héctor Álvarez Santiago (who was then the Director del Centro INAH-Chiapas), INAH archaeologist Andrés Brizuela Casimir accompanied us during the initial visit to Actiepa Yochib and during the first two days of work at the Jolja' caves. Mtro. Brizuela was then the Coordinador del Proyecto Protección Técnica y Legal del Patrimonio Arqueológico en el estado de Chiapas.

We would not have been able to carry out our research at Jolja' without the permission and support of the Joloniel community. We deeply thank them for the honor of conducting research in their community. We were directly assisted in our work by numerous members of the Joloniel community, and we acknowledge in particular the contributions of Eulalio Pérez Moreno (the current Comisariado), Domingo Pérez Moreno (President of Joloniel), Manuel Torres Peñate (the former Comisariado of Joloniel) and Felipe Pérez Montejo (the Joloniel *tatuch*). Special acknowledgment is also given to the *tatuches* Miguel Arcos Méndez of Tumbalá and Domingo Méndez Montejo of Actiepa Yochib.

We also wish to warmly thank Doc. Enrique Florescano (National Coordinator of Historical Projects), Doc. María Teresa Franco (former Director General of INAH), Doc. Alejandro Martínez Muriel (National Coordinator for Archaeology - INAH), Antrop. Héctor Álvarez Santiago (former Director of INAH-Chiapas) and L.A.E. Juan Antonio Ferrer Aguilar (Director de la Zona Arqueologica Palenque, Yaxchilán y Bonampak) for their support of our project.

We are profoundly grateful to FAMSI for its financial support. Without this important funding, we could not have accomplished our objectives. A number of people have also provided additional financial support, logistical assistance and encouragement. We thank Joel Skidmore, Alfonso Morales, Julie Miller, Dr. Susanna Ekholm, Mary Ciaramella, Dr. Geoffrey McCafferty, Dr. Scott Raymond and Dr. Andrea Stone. Our thanks also go to Fabiola Sánchez, Ian Hollingworth and Alejandro Shesena for sharing their Jolja' research with us.

Site Location and Name

The site of Jolja' is located on Misopa' Mountain in a river gorge at the headwaters of the Ixtelja River (N 17 20.916' W92 19.509') ([Figure 1](#)). The site is at an altitude of 900 m on this 1,650 meter high mountain. All three caves are on property owned by the community of Joloniel which is an ejido within the district of Tumbalá. Joloniel's community center is located 1.45 km below the caves at an elevation of 600 m.



Figure 1. The dark streak on the side of Misopa' Mountain is the Ixtelja River gorge. Jolja' is located at the top of the gorge.

The caves of Jolja' are situated adjacent to one another on a white cliff face. When facing the cliff, Cave #1 (which contains the paintings) is located to the upper left, Cave #2 is near the center, and Cave #3 is at the upper right. The headwaters of the Ixtelja River flow from the mouth of Cave #2, and cascade down a steep, boulder-strewn gorge to the Ixtelja Valley below ([Figure 2](#)). In addition, water spills down the cliff face from springs located higher on the mountain. The Joloniel community refers to the site as Jolja', and we defer to their choice. The term Jolja' is a compound term meaning "head of the water" in Ch'ol, and this phrase is commonly used to describe the headwaters of a river. For example, the settlement at the headwaters of the Tulijá River is called Joltulija.



Figure 2. Headwaters of Ixtelja River flowing from the mouth of Jolja' Cave #2. Project member, Christina Halperin in foreground.

Cave #1 is also referred to as the cave of Don Juan by the local Ch'ol Maya. The published accounts of Jolja' refer to it as Cueva de Don Juan, Cueva de Joloniel or Cueva de Ixtelha (Blom Museum Catalogue; Thompson 1975; Riese 1981; Graham

1982:185; Miguel Meneses López 1986, 1997; Bonor Villarejo 1989; Alejos García 1994; Stone 1995; Pincemin Deliberos 1999). Joloniel is a Ch'ol word that means "where it ends", "the end" or "termination" (Aulie and Aulie 1978:75; Meneses 1986, 1997:206). In a story about rain ceremonies at Jolja', Miguel Meneses Peñate stated that the cave was called Joloniel because it was the final stop on the ritual circuit that was made to sacred locations to petition for rain (Miguel Meneses López 1986, 1997). This explanation of the name suggests that the cave was not named after the community of Joloniel, but rather that the community got its name from the cave (Alejos García 1994:34-37).

The name Joloniel is intriguing because the paintings in the cave refer to Early Classic rituals that ended important time periods in the ancient Maya calendar. Establishing a link between these rituals and the name Joloniel is highly speculative, but it is not as improbable as it might sound. Without an in-depth archaeological survey of Jolja', it is impossible to ascertain how the caves were utilized from the time the paintings were produced in the Early Classic until the twentieth century. Nevertheless, the Jolja' area was inhabited by Postclassic Ch'ol Maya who were still literate at the time of the Spanish conquest, and even a semi-literate Maya would have been able to grasp the calendrical significance of the cave texts. The Early Classic Maya did not call this cave Joloniel, but it is possible that the contemporary name arose from the cave's use as a place of ancient termination rituals.

Regional Description

Jolja' is in a semi-tropical, deciduous forest environment. The steep sides of Misopa' Mountain that are adjacent to the site are a mix of forest, coffee groves and corn fields. The Misopa' Mountain range is a massive limestone formation about 18 km long and 10 km wide that runs on a northwest/southeast axis. To the east of the mountain range and running parallel with it is the Ixtelja Valley, then the low Cordon Sumidero range (400 m), the Tulijá Valley, the Don Juan Mountain range (1100 m) and finally the coastal plain. The Classic Period site of Palenque is located on the north side of the Don Juan Mountain range some 32 km northeast from Jolja' as the crow flies ([Figure 3](#)).

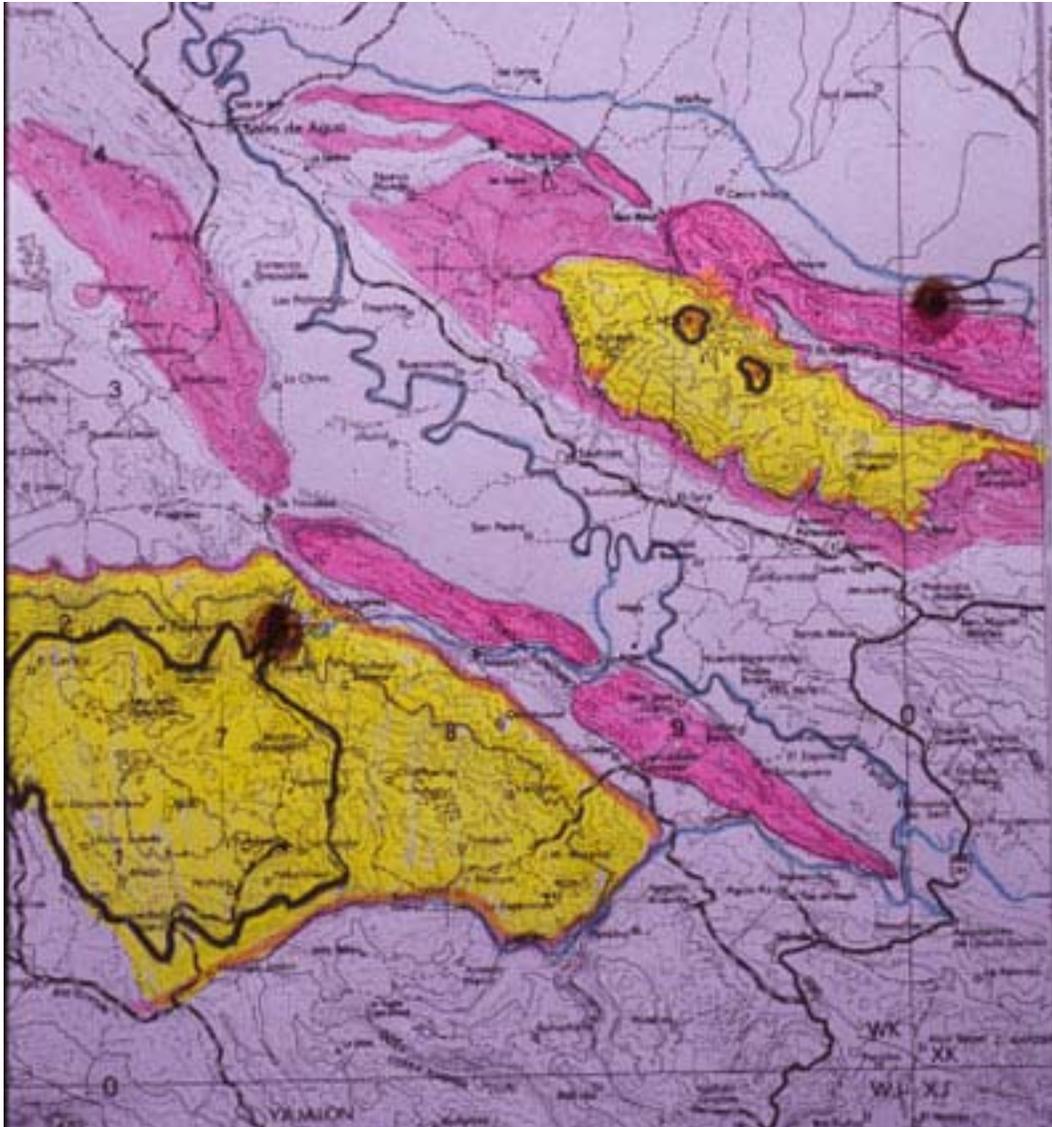


Figure 3. Map of the area between Palenque, on the right, and Jolja' on the left.

Shown in [Figure 3](#), the right dot is Palenque and the left black dot is Jolja'. Palenque is located on a ridge of hills overlooking the plain. Immediately to the south of Palenque is the Chacamax Valley. Behind the Chacamax is the massive Don Juan Mountain range. This mountain range has two peaks called Cerro Norte and Don Juan. On the south side of the Don Juan range is the Tulijá River Valley. A low mountain range separates the Tulijá Valley from the Misopa' Mountain Range. The Ixtelja River flows down the side of Misopa' Mountain and winds its way through a break in the lower mountain range to join with the Tulijá. Jolja' is located at the headwaters of the Ixtelja. The Tila Valley is located on the other side of Misopa' Mountain to the west of Jolja'.

North of Misopa' Mountain is the El Limar Valley, the Panwitz range (600 m), the lower Tulijá River and the coastal plain. The Classic site of Tortuguero is located at the edge

of the coastal plain approximately 47 km northwest of Jolja'. The Tila Valley and the mountain ranges of northern Chiapas are to the west. The town of Tumbalá is at the southeast end of Misopa' Mountain at an altitude of 1500 m, and below Tumbalá is the Yajalón valley that leads to the Ocosingo Valley of central Chiapas. The Classic site of Toniná is located in this latter valley, 57 km southeast of Jolja'.

Tumbalá is connected by paved road to the Yajalón Valley highway. This highway, in turn, leads north to Salto de Agua via Tila or south to Highway 186 (the Palenque/San Cristóbal highway). A narrow, dirt road descends along the eastern slopes of Misopa' Mountain, and connects Tumbalá to La Trinidad at the eastern edge of the El Limar valley. From La Trinidad, a paved highway eventually leads to Salto de Agua via the Tulijá Valley. Joloniel is situated adjacent to the Tumbalá/La Trinidad dirt road, some 19 km from Tumbalá. The only reliable all-weather route to Joloniel is from Tumbalá because the section of the road below Joloniel is so rocky, rutted and steep that it is only passable by trucks with very high clearance.

Sacred Caves

There are a large number of sacred caves used by the Ch'ol Maya of the region that have never been systematically documented. In addition to Jolja', four caves in particular are associated with Don Juan. The most important one is near Cerro Norte on the Don Juan Mountain range to the northeast. It is referred to as the Cueva de Don Juan but the project calls it the Cerro Norte Cave to distinguish it from the Cueva de Don Juan at Jolja'. The Ch'ol Maya of the adjacent village of Actiepa Yochib believe the Cerro Norte Cave is inhabited by Don Juan, and pilgrimages to petition for rain are still made to the cave (see below for further discussion of this cave). It is said to contain pre-Columbian remains. The other three caves associated with Don Juan are located near Los Angeles in the Ixtelja Valley, near Mariscal Subikuski on Cerro San José on the northwest end of Misopa' Mountain range and on the Pan Witz range (Domingo Pérez Moreno, Felipe Pérez Montejo, personal communication 2001).

The notion that Don Juan can manifest himself in many locations is reflected in a prayer addressed to Don Juan that was made by the Tumbalá tatiche Miguel Arcos Méndez (2001). In this prayer he notes that Don Juan also lives at Cerro Norte and at Cerro San José. Alejos García (1984:34-35) recorded the Ch'ol tradition of making a ritual circuit to three Don Juan caves beginning with one on Cerro San José, then going to the cave on Cerro Norte, and finally concluding at Jolja'. Such a journey would likely take at least a week to complete given the distances between these sites. These caves are also visited on an individual basis. The cave on Cerro San Antonio near Tila, which is associated with the famous Black Christ of Tila, is also an important ritual location for the Ch'ol Maya.

The importance of caves in Ch'ol world view was evident after the eruption of the volcano El Chichón in 1982. In early April of that year, El Chichón, which is located 90 km directly east of Jolja', exploded and covered a large part of Chiapas in ash. In the

Jolja' region, housing, livestock and the corn fields were destroyed. The elders of the Ch'ol communities went to their ritual caves and petitioned for rain. Their prayers were answered, and the strong rains of May washed away the ash (Alejos García 1994:69; Domingo Pérez Moreno, personal communication 2001).

Regional Archaeological Reports

Archaeological investigations and reports on the Jolja' region are limited. In the Tila Valley to the west, there is a site that once contained stelae (Roman Piña Chan 1967:83). One of these monuments includes the Long Count dates of 9.12.13.0.0 10 Ahau 3 Zotz (A.D. 685) and 10.0.0.0.0 7 Ahau 18 Zip (A.D. 840). Another Late Classic site is located at Chuctiepa' (Cutiepa) some 26 km south west of Jolja' (Blom and La Farge 1926-27:215). It contained an eroded hieroglyphic altar and a stela that is in the round style found at both Toniná and Palenque.

A preliminary survey of the Tumbalá, Tila and Yajalón regions was conducted by Carlos Navarrete, Eduardo Martínez and Adolfo Muñoz in the early 1970s but their data have not been published. It is known that they visited both Jolja' and another cave near the village of Yaleltsemen, which is located on a mountain at the southern extreme of the Yajalón valley. Yaleltsemen Cave contains a Late Classic hieroglyphic text and a painting of a young lord (Thompson 1975; Becquelin and Baudez 1982:2:601; Stone 1995:91). A place name in the Yaleltsemen text matches one found at Jolja' (David Stuart, personal communication 2000).

It is noted in the 1939 Atlas of Chiapas and the 1967 Atlas Arqueológico de la República Mexicana (Roman Piña Chan 1967:58) that a cave near the community of El Porvenir contained pre-Columbian pottery and human skulls. El Porvenir is approximately 1.5 km higher up the mountain from Jolja'. Although the project has yet to visit this cave, Dr. Eduardo Escalona Luna, who was the resident medical doctor at El Porvenir at the time of our field work, informed us that El Porvenir residents still perform rituals there. In 2001, he attended such a ritual on the Day of the Cross (May 3).

Postclassic and Colonial History

The region around Jolja' was occupied by Ch'ol speaking Maya when the first Spaniards arrived in this zone around A.D. 1535. The Tila Valley contained a well established Ch'ol community, and the neighboring Tzeltal town now known as Petalcingo was subject to its rule. The Spanish subjugation of the Ch'ol Maya living in the adjacent lowlands involved forced re-location to the established communities at Tila, Tumbalá and Bachajón, or to newly created towns such as the modern town of Palenque.

An ancient road from central Chiapas to Palenque passed close to both Jolja' and the Cerro Norte Cave. The American traveler John L. Stephens (1841) gives a vivid description of this route which he took in 1840. On the first day, he and his companion

Frederick Catherwood journeyed from the Ocosingo Valley through the Yajalón Valley to Tumbalá at the high southern end of Misopa' Mountain. On the second day, they descended down the eastern face of Misopa' Mountain within a few kilometers of Jolja', and then crossed the Ixtelja' River, climbed up and over the Cordon Sumidero range, and finally arrived at the village of San Pedro Sabanilla in the Tulijá Valley. The third day they crossed the Tulijá Valley and climbed up and over the Don Juan Mountain range skirting its western peak called Cerro Norte, and passing close to the Cerro Norte Cave. They then descended the north side of the mountain near the San Leandro River drainage, coming out on the coastal plain near the present village of Agua Blanca. The following morning they traveled southeast along the base of the Don Juan Mountain range to Palenque. Although Stephens complained bitterly about the steepness of Cerro Norte, this was the only route over the Don Juan Mountain range without crossing a second valley and set of hills. The Classic site of Miraflores, which was a subsidiary of Palenque, is adjacent to Agua Blanca, and it appears to have been so situated to control this important route.

Making ritual offerings to the mountain god was and still is an important Maya custom. In A.D. 1675, Dominican friars journeyed through the mountains of Alta Verapaz, Guatemala to convert the Chol Maya living in the region (Villagutierre Soto-Mayor 1983:100). At the top of a mountain pass, they found a ritual site where travelers made offerings to the mountain god. In 1894, Karl Sapper journeyed from northern Alta Verapaz to Yucatán via the Petén, and returned via Tabasco and Chiapas. He noted that:

At the crossing of the roads, all the Indians of Guatemala and Chiapas belonging to the tribes of the Maya family erect crosses, to which the passerby pay their respects in a singular fashion. Usually the Indian, who crosses such a pass for the first time, carries with him a stone, so that stone heaps of considerable size are frequently to be seen at these crosses...On important mountain passes the Kekchi Indian presents incense offerings burning a certain amount of copal before the cross and there repeats his prayer. At many crosses in addition to these ceremonies he dances. If a Kekchi Indian on his journey over a mountain road comes to a place where there is no cross he still presents the same offering, but addresses his prayer not to the Christian God but his chief heathen divinity, Tzulteccá (mountain/valley god) (Sapper 1897).

Sapper also noted that his Kekchi carriers stopped performing rituals altogether when they entered Belize and Yucatán because they saw no evidence that Tzulteccá was present there:

They then discontinued for two full months all religious exercises (apart from a single visit to the church at Merida on Good Friday), until in the region inhabited by the Choles in Chiapas on an elevated pass (between Sabanilla and Tila) some large wooden crosses with flowers fastened to them, were found, then Sebastian Botzoc began to attend to the devotions for himself and the others (Sapper 1897).

Jolja' is adjacent to the route from Sabanilla to Tila. Both Jolja' and the Cerro Norte Cave were, thus, appropriate and accessible ritual locations not only for the local population, but also for travelers journeying through this region.

The Previous Studies of Jolja'

The Jolja' paintings were first brought to the attention of outsiders in 1961 by Wilbur and Evelyn Aulie. The Aulies were missionaries working in the Tumbalá region who compiled a Ch'ol/Spanish dictionary, and recorded some of the contemporary Ch'ol beliefs (Aulie and Aulie 1978). In the Aulies' dictionary, it is noted that the Joloniel cave was used for rituals (Aulie and Aulie 1978:53):

Hay una cueva en Joloñel donde nuestros antepasados entraron a adorar a sus dioses.

"There is a cave in Joloniel where our ancestors entered to adore their gods".

Their dictionary also includes references to Don Juan as does an article on Ch'ol religion by Whittaker and Warkentin (1965).

Gertrude (Trudy) Duby Blom and her husband Frans Blom lived in San Cristóbal de las Casas. Frans was a Maya archaeologist and Trudy was an avid photographer who was well known for her pictures of Chiapas. On April 26 of 1961, Trudy, Wilbur Aulie, his son Edward and several members of the Tumbalá community journeyed by mule from Tumbalá to Jolja'. Near the cave, they were joined by Joloniel community members. The expedition spent several hours in the cave during which Trudy photographed Groups 2, 3, 4, 5 and 6 using black and white 120 format film. In some cases, she made several exposures of the same group with varying degrees of success. None of Blom's photographs are completely in focus, and this problem speaks to the difficulty of photographing in a low light environment.

In May of 1961, Frans Blom forwarded photographs of the Jolja' paintings to Eric Thompson, who eventually published examples from Group 2 and Group 5 in his 1975 introduction to the reprint edition of Henry Mercer's *The Hill-Caves of Yucatán*. Thompson commented on the early style of the paintings, and suggested a date of A.D. 300.

As noted above, Navarrete, Martínez and Muñoz conducted an archaeological investigation of the region including Jolja' in the early 1970s. In a Mexican newspaper article, Navarrete noted that several of the inscriptions had been damaged (Excelsior Newspaper 4.8.1974). Recently, Navarrete published a color picture of Group 2 Painting 2 in a magazine article on Tila (Navarrete 2000).

The negatives and photographs made by Trudy Blom during her lifetime are housed in the Na Bolom Museum in San Cristóbal de las Casas. Some of the Jolja' negatives in

the archives are copy negatives made from photographs. It would appear that the original negatives were misplaced by Blom at some point, and replacement negatives were made by photographing a photograph. For example, the original negative for the Group 2 picture which was published by Thompson (1975) is missing, and subsequent publications of this image are from a copy negative. The copy negatives as well as the remaining original negatives have been assigned archival numbers by the museum.

Berthold Riese (1981) made drawings based on Blom's photographs, and published them in a short Mexican article. These included examples from Groups 2, 3, 4, 5 and 6. Riese's Group 3 drawing is, however, oriented the wrong way. It should be turned 90 degrees so that the number prefixes of the calendar round are in the position of superfixes.

José Alejos García (1994) visited Jolja' in 1984 while researching an ethnographic study of the Joloniel area. His black and white photographs include examples from Groups 2, 4, 5 and 6. Of particular interest is his picture of an idol in the form of a dripwater formation and several pre-Columbian axe blades. Alejos García also briefly referred to some of the contemporary ceremonies conducted in the cave in another volume on twentieth century land reform (Alejos García 1999).

In his 1986 book on the history of Tumbalá, local historian Miguel Meneses López recorded in both Ch'ol and Spanish some of the contemporary beliefs about the Jolja' cave, and reproduced a color photograph of the figures in Group 2. In 1988, he also published a pamphlet in San Cristóbal that contained references to the ceremonies and beliefs about the cave. In 1997, a second edition of his 1986 volume was issued with some modifications. A significant deletion in the new edition is a story that concerns a *tatuch* who entered the back of the cave to pray for rain.

In several articles and in her survey book on Maya cave paintings, Andrea Stone (1987, 1989, 1995) reproduced three of Blom's photographs of Group 2. She also presented her own drawings of Groups 2, 4, 5, and 6 based on Blom's photographs and Riese's drawings. She discussed the Early Classic style of the paintings, and correctly noted that the different groups were not contemporary with each other. Jolja' is also mentioned in two other general surveys on Maya caves and rock art (Bonor Villarejo 1989:177; Pincemin Deliberos 1999:99-102).

In 1998, members of the Joloniel community discovered a looter's trench in the inner recesses of Cave #1. With funding from the Instituto Nacional Indigenista, the community installed a concrete wall, wire fence and metal gate across the mouth of the cave to protect it. This was an enormous undertaking that required the men of the community to haul huge cement blocks on their backs from the village to the cave. Because of the remoteness of the cave and the lack of a full time caretaker, the paintings are still vulnerable to looting and vandalism.

In that same year, Walter (Chip) Morris, who was at the time the director of the Na Bolom Museum, was awarded a National Geographic Society grant to organize the museum archives. As part of that process, the archivist Fabiola Sánchez, her husband

Ian Hollingworth and anthropologist Alejandro Shesena traveled to Joloniel and assessed the present condition of the paintings. They also made a preliminary map of the main passageway of Cave #1, and recorded a cave petition made on their behalf by the Tumbalá *tatuch* Miguel Arcos Méndez (Arcos Méndez 2001).

In January of 2000, Karen Bassie, Alfonso Morales and Julie Miller visited Jolja' while touring the region. With permission from INAH, Karen Bassie, Marc Zender and Jorge Pérez de Lara photographed the paintings with ultraviolet film and made preliminary drawings in April.

The 2001 Jolja' Cave Project Field Season

In January of 2001, Karen Bassie met with Antrop. Héctor Álvarez Santiago (the Director del Centro INAH-Chiapas) to discuss the goals of the project. Other subjects that were addressed were Joloniel community concerns about development, conservation issues and future archaeological work at Jolja'.

Through the assistance of Susanna Ekholm (a Na Bolom board member), the Jolja' negatives made by Blom were examined, and reprints of the suitable negatives were subsequently ordered from the museum. Two of the Jolja' paintings photographed by Blom have been destroyed by humans, and Blom's negatives are the only known records of these texts. An important future project should be to digitize and enhance the Blom negatives.

Fieldwork was conducted in January and March of 2001 by Karen Bassie, Robert Laughlin, Christina Halperin, Ausencio Cruz Guzmán and Jorge Pérez de Lara at Jolja', Joloniel, Tumbalá, Actiepa Yochib, Mariscal Subikuski, the Tulijá Valley and the north and west slopes of Cerro Norte.

INAH archaeologist Andrés Brizuela Casimir and the project members met several times with the Joloniel community to explain our project and answer any community questions or concerns. While working in the caves, community members accompanied project members at all times in order to keep the community fully informed.

GPS readings could only be obtained for Cave #2 because of the steep nature and heavy foliage of the river gorge (N 17 20.916' W92 19.509'). Cave #1 is located approximately 30 m to the east.

To document the context of the paintings, the main passageway of Cave #1 was mapped with a tape and transit compass at a 1:500 m scale.

The walls of Cave #1 were examined for evidence of additional paintings. The project located, measured and photographed a total of seven groups of paintings, including three previously unpublished paintings. Preliminary, composite drawings have been made from the various images that were produced.

Interviews with Ch'ol Maya on the history, mythology and use of the caves were recorded on both digital audio disks and video tape. Interview tapes were translated from Ch'ol Maya into Spanish and English.

A planned trip to the Cerro Norte Cave was postponed after several members of the Actiepa Yochib community expressed concerns over allowing outsiders to visit the cave. Two incidents that occurred over fifty years ago have made the community of Actiepa Yochib reluctant to grant outsiders permission to visit the cave. The oral traditions about these events are not completely consistent but the general consensus is that several individuals from the La Trinidad area in the extreme east end of El Limar Valley visited the Cerro Norte Cave sometime during the mid-fifties. These men removed several idols that the locals believed were capable of producing rain. Some time later, Protestant villagers from the Tulijá Valley poured gasoline in the mouth of the cave and set it on fire in an attempt to stop what they considered pagan practices. It is the belief of the Actiepa Yochib community that the direct result of these actions was a marked reduction in the local harvests. Fear of further desecration of their ritual site is a valid concern for the community. Although we were unable to visit the cave, we were able to obtain significant data about its location and the rituals performed there. While investigating the Ch'ol communities on the north and west slopes of Cerro Norte, the project also encountered the pre-Columbian site of Miraflores, and subsequently escorted INAH regional director Juan Antonio Ferrer to this location.

In May 2001, Karen Bassie, Ausencio Cruz Guzmán and Alonso Méndez attended the Day of the Cross ceremonies at Jolja'. The event was recorded using digital audio disks and video tape. Further interviews on the history and mythology of Jolja' were also conducted.

In April 2001, our preliminary project findings were presented at the Society for American Archaeology meeting in New Orleans (Zender, Bassie and Pérez de Lara 2001). In November, Laughlin and Bassie (2001) presented a paper on the sacred nature of Jolja' at the Thirty-fourth Annual Chac Mool Conference held at the University of Calgary.

Description of Jolja' Cave #1

As noted above, Jolja' Cave #1 is situated on a white limestone cliff at the headwaters of the Ixtelja River. In general, the cave runs from north to south, and contains a spacious, rectangular shaped passage about 200 m long, 4-25 m wide and 1-20 m high (Halperin 2001). A large percentage of the cave floor is covered with limestone breakdown that ranges between 5 cm-2 m in diameter. The cave also contains 4 small chambers.

The entrance to Cave #1 can be accessed by a steep climb up the cliff from the river gorge or by a narrow ledge leading along the cliff from Cave #2. The floor of the cave entrance contains hundreds of freshwater snail shells (*Pachychilus* sp.), known locally

as *puy*. The appearance of *Pachychilus* shells in Classic period Maya caves is not uncommon, and may signify the remains of an offering or ritual feast (Halperin 2000).

The wall and gate constructed by the Joloniel community across the mouth of Cave #1 is located 7.4 m in from the cliff edge. Along the east wall of the cave opening, the community constructed a long concrete bench for ritual participants. Large breakdown boulders line the western side of the cave entrance. On the western wall is the first painting of the cave (Group 1).

The Group 2 paintings are located high up on a south wall about 50 m inside the cave. This area is faintly lit by diffused sunlight. Because of the angle of the cave opening, a ray of sunlight falls on the paintings and dramatically highlights them. Below the paintings is a narrow vertical passageway leading to a small chamber (Chamber 1) ([Figure 4](#)). A few feet to the east of the passageway opening is a foot wide shaft that looks down into Chamber 1 at an angle. Despite this opening, an artificial light source is required in the chamber. The bottom of the chamber floor is less than 2 square m but the sloping sides of the chamber provide additional room for sitting and standing. The chamber contains three modern wooden crosses before which the elders from Joloniel perform Day of the Cross and rain ceremonies ([Figure 5](#), shown below). [As discussed above](#), there are a number of stories about the Cerro Norte Cave in which it was subjected to acts of desecration. The conclusion of some of these stories is an episode in which Don Juan vacated the Cerro Norte Cave and journeyed across the Tulijá Valley to take up permanent residence at Jolja'. In these stories, he also brought with him a host of animals to live in the cave with him. Felipe Pérez Montejo (personal communication 2001) indicated that the oldest cross in Chamber 1 of Jolja' Cave #1 was erected by the *tatuches* after Don Juan moved to Jolja'.



Figure 4. Group 2 paintings and entrance to Chamber 1. Project member, Jorge Pérez de Lara.



Figure 5. Day of the Cross ceremony in Chamber 1.

The second chamber of the cave is located approximately 125 m down the main cave passageway from the cave mouth. Chamber 2 is entered from the western side of the passage and it is approximately 8×4 m in size. Its floor is devoid of breakdown except for small rocks found at the very constricted end at the back.

Approximately 18 m past the beginning of the dark zone is a looter's pit that contains a large number of pottery sherds. It was this looting that motivated the Joloniel community to install the wall and gate. Chamber 3 is located on the east side of the main cave

passage and adjacent to the looter's pit. The floor of this 4x6 m space is covered with breakdown rocks, and it slopes downward to the east. Although the chamber has no passageways, the local belief is that it leads through the mountain to a cave near the town of Tila (Domingo Pérez Montejo, personal communication 2001). The Ch'ol Maya also believe that Jolja' is connected by an underground passage to the Cerro Norte Cave. The belief that caves are interconnected is prevalent in Maya culture. For example, while investigating Toniná in the Ocosingo Valley, Stephens (1841:260) found a collapsed building that the locals believed to be a cave. He was told that this "cave" led all the way to Palenque.

One hundred and sixty-five meters into Cave #1, the main passageway constricts to a small opening 1 m high and 4 m wide. This constriction then opens again into the last 35 m of passage which contains the remaining cave paintings along its western wall ([Figure 6](#)). Half way between the constricted entrance and the first painting is a broken speleothem and a cylinder-shaped limestone block that shows clear evidence of human modification. Although they are now nestled under a groove in the wall, they were recently placed there by a looter who had moved them from their original location near Group 3 (Domingo Pérez Montejo, personal communication 2001).



Figure 6. Main passageway approximately 180 meters into the cave. Project member, Marc Zender.

The only active cave formations found in Cave #1 are located at the very end of the cave passage. The floor of this area is dominated by a large, oval flowstone formation in

the form of a small hill. On and around this slippery formation are about 50 small stalagmites (approximately 5-15 cm in height and less than 10 cm in width) and two large columns. The ceiling above is covered with hundreds of small soda straws. The south and west walls are covered in flowstone, and at the bottom of the southwestern wall is a small crawl space. Immediately in front of this space is largest column (about 0.8 m in diameter). The floor of the crawl space contains a tiny pool of water and broken speleothems (dripwater formations). The column and the crawl space are the focus of the contemporary petitions for rain. The second column is to the right of this area, adjacent to Group 7.

The majority of the stalagmites in this area have been sawed off or intentionally cracked, and both columns have pieces of stalagmites at their bases. The Ch'ol Maya remove speleothems from this cave and others in the region to use in their rain ceremonies. The cuts on a number of the stalagmites, however, suggest that some were modified in antiquity. The pre-Columbian Maya are also known to have removed speleothems from their ritual caves.

The Paintings

The majority of the Jolja' paintings can be dated to the Early Classic Period based on style and calendar notations. Different scribes appear to have produced each group. Although most of the dates can not be securely assigned to Long Count positions, it is clear that the paintings represent events at the cave that occurred over a range of time. During the 2002 field season we will be conducting multispectral imaging of these paintings, which will greatly add to our understanding of the chronology. An in-depth report on the content of the Jolja' hieroglyphic texts is in preparation, but some preliminary observations about these remarkable works can be made.

Group 1

Group 1 consists of a glyph-like painting that is encrusted in calcite deposit. It is at the mouth of the cave on the western wall. Its nature can not be ascertained until multispectral imaging has been conducted.

Group 2

Group 2 is composed of three paintings (Painting 1, Painting 2 and Painting 3) ([Figure 7](#)). These images are painted one above the other but on separate rock surfaces. Physical access to Paintings 1 and 2 is difficult because of their location high on the wall above a rock shelf. Their inaccessible location appears to have partially protected them from vandalism. The lower painting (Painting 3) is beneath the rock shelf, and has not been as fortunate. A comparison of its present condition with the Blom photographs

reveals that the lower right corner has been chiseled off. The damage happened prior to 1986 because the corner is also missing in the 1986 photograph published by Alejos (1994:95).

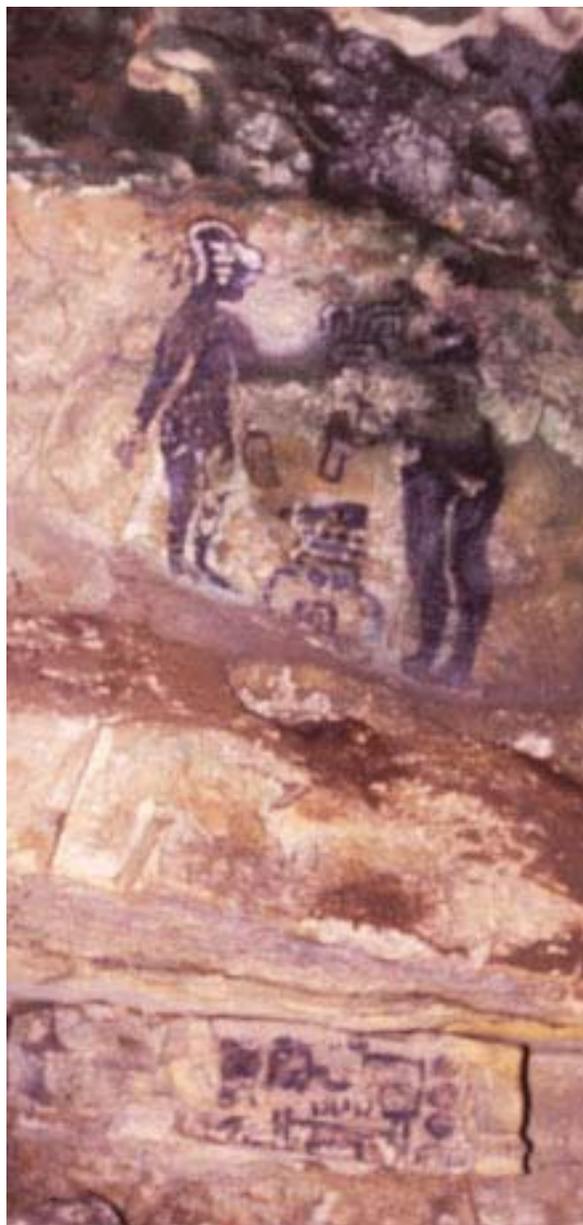


Figure 7. Group 2 paintings.

The surface of the rock wall is uneven, and the paintings become significantly distorted when viewed from anywhere but immediately in front. A large percentage of the wall surface around the paintings is covered in green algae growth which is a result of the

moisture in the rock and the sunlight that strikes the wall. Black residue is also evident and may be the result of smoke from torches or copal.

Group 2 - Painting 1

Painting 1 is a glyph-like painting that did not appear in the Blom photographs because it is covered in algae growth. Infrared photographs reveal an Ahau sign in Early Classic style ([Figure 8](#)). The remainder of the painting requires further enhancing in order to decipher its meaning.



Figure 8. Infrared photograph of Group 2, Painting 1.



Figure 9. Infrared photograph of right figure in Group 2, Painting 2.

Group 2 - Painting 2

Painting 2 is 90 cm wide and just over a meter tall. It illustrates two figures flanking a 9 Ahau day sign with a wedge shape above it. The figures and day sign are executed in Early Classic style similar to that found on the earliest of Maya monuments (Proskouriakoff 1950; Stone 1995). Parts of the right figure are obscured by algae growth but infrared photography has revealed portions of the face, upper body and left arm ([Figure 9](#), shown above). The right figure holds a donut-shaped object in his left

hand and a torch in his right. The left figure stands with his hands at his sides. He wears a feather headdress, and his face is decorated with white paint on the nose, under his eye and on the crown of his head ([Figure 10](#), shown below).



Figure 10. Infrared photography of figures in Group 2, Painting 2.

The hands on both figures are formed using a black outline while their bodies are solid black. Rather than being simple representations of human figures, this treatment suggests that the bodies of these ritual participants were painted black (Stone

1989:330). The use of black body paint is well known. For example, Landa (Tozzer 1941:89, 152, 161) noted that in Post-classic Yucatán, ritual participants painted their bodies black when they fasted for a ceremony. The Chol of Alta Verapaz also blackened their bodies. Mace (1970:20, 108-109) noted that both the pre-Columbian and contemporary highland Maya painted their bodies black during rain rituals.

In the Maya calendar, the Long Count calculations were divided into units of 360 days called tuns. All tun ending events occurred on days that were named Ahau. Although the Maya performed important rituals on the fifth, tenth, thirteenth and fifteenth tun endings, the major Period Ending ceremonies were performed at the end of every katun (20 tuns). Between the Painting 2 figures is a 9 Ahau day sign with a wedge shape above it. Stone (1995:87-88) has argued that this motif represents an altar that is similar to Ahau altars found at other sites. Such altars commemorated Period Ending events and Stone has concluded that the Jolja' scene represents such an event. I concur with her conclusion.

As noted, Painting 2 is executed in an Early Classic style. Although tun ending dates that occurred on 9 Ahau happened approximately every 13 years, important Period Endings only occurred on 9 Ahau dates four times during the first part of the Early Classic Period:

- 8.13.0.0.0 9 Ahau 3 Zac (Dec 14, A.D. 297)
- 8.13.13.0.0 9 Ahau 18 Yaxkin (Oct 8, A.D. 310)
- 8.16.5.0.0 9 Ahau 3 Mac (Jan 8, A.D. 362)
- 8.19.10.0.0 9 Ahau 3 Muan (Feb 1, A.D. 426).

If the 9 Ahau of Painting 2 is a katun date, it must refer to 8.13.0.0.0. Although this date is consistent with the early style, the Ahau altars found at other sites such as Toniná are also used to commemorate fifth, tenth and fifteenth tuns. So it is impossible to unequivocally date this painting at the present time except to say that it was created at the beginning of the Early Classic Period.

One of the primary activities associated with Period Ending ceremonies is the performance of prognostications for the forthcoming time period. There is widespread documentation that both the ancient and contemporary Maya performed divinations within caves. It is, therefore, quite likely that at least one of the gentlemen illustrated in Painting 2 performed a divination in Jolja' Cave.

The placement of the Group 2 paintings immediately over the entrance to Chamber 1 suggests that the Classic Maya may have utilized this space for their Period Ending rituals. As noted above, the right figure in the scene holds a torch. During daylight hours, a torch is not needed in this section of the cave because of the diffused sunlight coming from the cave mouth. The artificial light is, however, needed in Chamber 1. Furthermore, the base line of Painting 2 follows the downward slope of the rock shelf below it, which gives the impression that the figures are standing on a slope. This position is just how ritual participants stand in Chamber 1. This circumstantial evidence

suggests that the Painting 2 scene illustrates a Period Ending ceremony that was performed in Chamber 1.

The contemporary Maya believe that wind originates from caves, and this belief is based on the fact that cool winds frequently blow from the mouth of caves. A related phenomenon occurs in Chamber 1. The bottom of the chamber is a small space, and most of the Day of Cross participants perch on the tiny ledges of the chamber walls. Although the heat from the bodies, incense and candles should make the chamber atmosphere oppressive, the bottom of the chamber has a strong, cool breeze rising out of the lower crevices. During the Day of the Cross ceremony, the shaman placed offerings in the largest of these wind crevices because this is where Don Juan is said to manifest himself. This air movement may have been one of the reasons why the ancient Maya chose this location for their rituals.

Group 2 - Painting 3

Painting 3 portrays a head with a split on top ([Figure 11](#)). There are numerous examples of ritual participants standing on place name motifs that indicate the location of the ritual (Stuart and Houston 1994). The position of the Jolja' Group 2 head below the ritual scene indicates that it functions in a similar manner, that is, it is one of the ancient names for Jolja'. In order to discuss this name, a digression to review Maya world view is necessary. The primary purpose of world view is to give a sense of order and control to life. At its most basic level, world view explains the creation of life, and provides a means for maintaining and renewing it. The Maya were corn farmers living in a tropical environment with a distinct wet and dry season that dictated the timing of the corn cycle, and shaped their world view. The myths concerning the creation of the earth and the first human beings focus on the establishment of the rain and corn cycle, and on the creator deities who brought about these cycles. Mountains and caves played an important role in these stories.

The creation stories indicate that in the beginning there was a great sea that housed the creator grandparents. Below the sea was an underworld full of death gods. Above the sea was the dark sky of the storm and lightning bolt gods. The gods of the sea and sky made the surface of the earth come forth from the sea. In addition to the valleys and mountains of the world, there were four great mythological mountains on the earth's surface, one for each direction. After covering the earth's surface with vegetation, the creator deities and their offspring prepared it for human habitation and the cultivation of corn. They accomplished this by creating the celestial cycles and weather patterns, and by creating a quadrilateral space on its surface. Where the solstice sun rises and sets defined the corners of the quadrilateral world, and the four great directional mountains demarcated its sides. Humans could safely live within the quadrilateral world if they made the proper offerings to the gods.



Figure 11. Group 2, Painting 3.

Each of the four mythological mountains had a cave opening through which the destructive forces and essential elements entered the world of humans. For example, it was thought that all the water of the world originated in the great sea on which the world floated, and that it came to the surface of the earth through these caves as well as those locations in the local landscape that represented those caves. Clouds and wind were also thought to originate from these caves.

In Maya mythology, the gods created the first successful human beings from corn that was found hidden within the great eastern mountain. These corn seeds were the buried remains of the Corn God's wife who represented the corn ear and its seed (Bassie-Sweet 1998, 1999). The contemporary Maya still refer to corn seed as bone and as being female. In order to access the buried corn seeds, a lightning god split open the stone with a bolt of lightning in the form of an axe. The creator grandmother ground some of this corn seed into dough which was then used to form the first humans. The Corn God also used some of these corn seeds to plant the first corn on the surface of the newly created earth.

In the Popol Vuh creation story, the corn mountain is called Paxil. In Quiché, pax means "break into pieces" and in Mam it means "split". The name Paxil is a reference to the breaking open of the corn stone by lightning (Edmonson 1965:87, 1971:146). There is a large mountain called Paxil in northeastern Guatemala. In the contemporary Mam stories concerning the discovery of corn by humans, corn is said to have been first discovered in a cave on this mountain (Wagley 1941:20; Oakes 1951:244, 74; Miles 1981). The cave is also said to have a spring that is used for divinations related to the success of the corn cycle, and it is also the place where rain ceremonies and petitions

for the welfare of the corn are performed. Other areas have their own version of the corn mountain which indicates that many communities had a replication of this mythological location in their landscape.

In addition to being the source of corn, east is the direction of the prevailing winds in the lowlands and the first heavy rains of the season that are critical for the success of the corn cycle originate from there. Classic period imagery and myths indicate that pools of water and dripwater formations within the eastern cave were thought to be the source of this rain. For example, in some of the myths a lightning bolt deity fills his jug with water from the cave, and as he flies across the sky, he empties the jug causing the rain to fall.

The symbols used in Classic period imagery to represent mountains and caves incorporate references to the eastern corn mountain. One of these symbols was nicknamed a cauac monster because it is decorated with elements found on the T528 sign that represents the day name Cauac. The Cauac sign is a side view of a cave enclosure shape with a stalactite formation in the form of a grape cluster hanging from the roof (Bassie-Sweet 1991:109-119, 1996:68-69). Below the stalactite element is a hooked element. This element is also found on illustrations of corn ears, and it represents the corn bud located on the upper stalk of the corn plant. It is from this corn bud that the ear of corn will eventually grow. In the context of the Cauac sign, it represents the corn hidden within the immovable rock of the cave, in other words, a stalagmite.

Humans and gods are frequently enclosed by the cauac monster which led to the conclusion that it likely represented a cave (Coe 1978; Taylor 1978). The hieroglyphs that represent the word mountain have been identified, and the cauac monster illustrated on the Palenque Tablet of the Foliated Cross is labeled using one of these signs (Stuart 1987). Cauac monsters are, thus, also mountain symbols. The head of the Tablet of the Foliated Cross cauac monster is split open creating a cave mouth. The split takes the form of a partial quatrefoil shape, which is frequently used to represent the mouth of the cave (Coe 1978; Taylor 1978; Bassie-Sweet 1991). The quatrefoil cave opening can be shown as a full frontal view or a partial side view with figures emerging from it or enclosed by it. On the Palenque Tablet of the Foliated Cross, corn foliage emerges from the quatrefoil split. This symbol represents the mountain in which corn was found.

The central icon on the Tablet of the Foliated Cross is an effigy corn plant. It can be surmised that it is a young, green corn plant because the Maya break and bend over the stalks of mature corn plants. The two young, green ears of corn on this plant are represented by young males, in contrast to the general belief that corn ears are female. These young male ears of corn are parallel to the green corn planted by the hero twins in the Popol Vuh. In this story, the green corn represents the fate of the hero twins. The cauac monster illustrated on the base of Bonampak Stela 1 is another representation of the corn mountain. In this example, the effigy corn plant has been conflated with the cauac monster, and the heads of the two young corn ears appear in the corn foliage on the sides.

In the hieroglyphic texts, other logographic signs that represent the word mountain also incorporate the cauac and split elements. These mountain signs are paired with other words to specify particular mountains whether they be natural mountains or man-made pyramids (Stuart 1987; Stuart and Houston 1994).

Another aspect of the great eastern cave is that it was located adjacent to a white cliff. In the Popol Vuh, the entrance to the eastern cave is described as being adjacent to a cliff. Paxil Mt. also has white cliffs, and its non-indigenous name is White Rock. In many areas, white cliffs are viewed as sacred locations specifically associated with lightning gods and rain (Tozzer 1907:81; La Farge and Byers 1931:131, 135; Wilson 1995:51; Mace 1970:140). In some contemporary stories concerning the first discovery of corn by humans, the corn is hidden in a cliff crevice. Cliff openings and the rock falls that are frequently found at the base of cliffs were likely seen by the Maya as evidence of the cliff being fractured by a lightning bolt. The intimate relationship between caves and cliffs is reflected in the Tzotzil word *ch'en*, which refers to both caves and cliffs (Laughlin 1975:132). In summary, the vital qualities of the eastern cave are that it was the source of the corn used to create humans, it was on or near a white cliff, it contained dripwater formations and it was a primary source of water, clouds, wind and lightning.

Jolja' has all the elements of the eastern corn cave, and the contemporary Ch'ol Maya still value these qualities. During the wet season, the Ixtelja River rushes out of the cave and dramatically falls over the edge of the cave mouth. In addition, water from springs located higher on the mountain pours down the cliff face. Although water still comes out of the cave during the dry season, it is at a significantly diminished volume. It begins to abundantly flow again with the first rains of the season. From a scientific perspective, the river water increases in volume because of the rain falling at higher elevations on the mountain. But, from the world view of the Ch'ol Maya, the river water increases because they petition Don Juan to release the water, and by extension, the rain. The Ch'ol Maya also associate Don Juan with corn. In a story collected in 1981, Don Juan is said to have provided petitioners with corn seed and rain during a drought (Ausencio Cruz Guzmán cited in Spero 1987). In a prayer by Tumbalá *tatuche* Miguel Arcos Méndez it is stated that the Jolja' Cave contains the spirit of corn (Arcos Méndez 2001). The Ch'ol also believe that there are lightning bolt spirits who live in the cave and who assist Don Juan in his tasks (Domingo Pérez Moreno, personal communication 2001).

The Jolja' Group 2 head has the partial quatrefoil split found on cauac monsters. The side curls are marked with a line of dots found on the corn bud curls of the Bonampak cauac monster. In the center of the Jolja' head are three u-shapes where the eyes and nose would appear on a cauac monster. While these elements suggest that the Jolja' head represents a cauac monster, there is a bar and four dots representing the number 9 (*b'alunn*) on the right side of the Jolja' head, an eroded element on the left side and four large circles positioned over the split. The number nine is reminiscent of a place name that occurs in many contexts in Maya art. It is composed of the number nine, a central element with either a quatrefoil or u-shaped opening in its top, and a pair of footprints (Kubler 1977). The number nine and the footprints can appear in front, on top or behind the central element. Although we must await multispectral imaging of the eroded element on the Group 2 head to ascertain its nature, it has the general shape of

the footprints sign, and it is highly likely that the Group 2 head is an Early Classic variant of the "nine footprint" place name.

The "nine footprint" place name appears in the art of Palenque. The Palenque Cross Group texts discuss the triad of gods known by the nicknames GI, GII and GIII. In this narrative, there is an event which occurred on 9.12.18.5.16 2 Cib 14 Mol (23 July, 690 A.D). In the months preceding and following this date, Jupiter, Mars and Saturn appeared in the same area of the night sky, and their paths interwove as they came in and out of conjunction. Because of these alignments, it has been argued that these heavenly bodies were manifestations of the Palenque triad of gods. In addition to their planetary associations, the Palenque Triad have traits that indicate they are directly parallel to the Popol Vuh lightning bolt gods known as Juraqan Lightning Bolt, Ch'ipi Lightning Bolt and Raxa Lighting Bolt (Bassie-Sweet 2001). The Cross Group consists of three temples facing a quadrilateral plaza. Each temple contains an small inner sanctuary that replicates a sweatbath/cave, and the hieroglyphic texts within each temple refer to the birth of the triad deity who was thought to have been born from that particular cave. The Temple of the Cross is situated on the north side, and relates the birth of GI, the western Temple of the Sun relates the birth of GIII while the eastern Temple of the Foliated Cross relates that of GII. On the Tablet of the Cross, the young Kan B'ahlam stands on the "nine footprint" place name while performing a pre-accession event at a sweatbath cave associated with the birth of GI.

In Maya art, the "nine footprint" place name is most often paired with a second place name composed of a number seven, a black sign and *k'an* "yellow or precious" sign (Kubler 1977). On the Tablet of the Sun, these place names flank the central icon. The focus of the Tablet of the Sun is the deity GIII who was a fire and meteor god. On Tikal Stela 31, the "seven black *k'an*" place is followed by a compound sign composed of a *k'ahk'* "fire" glyph coming out of a split mountain sign, and confirms the association of these place names with mountains. The Palenque Cross Group indicates that the "nine footprint" place and "seven black *k'an*" place are specifically associated with the sweatbath caves of GI and GIII. As discussed above, the Temple of the Foliated Cross replicates the eastern corn mountain. Based on these parallels, I suggest that Jolja' replicates the same mythological locations as the sweatbath caves of the Palenque Cross Group. Furthermore, the three caves of Jolja' are reminiscent of the three sweatbath caves of the Cross Group.

Another common feature between Jolja' and the Cross Group is that both sites are located near the headwaters of an all-season river. The Cross Group is situated at the base of a hill called Mirador, and the Otolum River (which runs past the Cross Group) originates from a spring coming out of Mirador. The spring source of the Otolum is located about 200 m due south of the Cross Group just behind Temple 19. Like Ixtelja, the Otolum continues to flow even during significant dry periods. Furthermore, Merle Greene Robertson (1991:6) has noted that the Cross Group is situated in a pocket that traps mist. This mist can occur even when the sun is shining on other parts of Palenque, and gives the impression that the Cross Group is a source of this precious moisture. Mist also frequently lingers around the cliff face of Jolja' even when other parts of the mountain are clear (personal observation).

Another parallel between the Cross Group and Jolja' is found in the name of the Otolum spring, which is called *lakam ha'* "great water" and the *chan ch'een* "sky cave", and the cave of the deity or deities called B'aluun Chac "nine or many lightning bolts" (Stuart 2000). The split in the Group 2 head indicates the presence of lightning bolt gods and as noted above, the contemporary Ch'ol still believe Jolja' is inhabited by lightning bolt gods.

A final parallel between the Cross Group and Jolja' is found in the place name Descending Quetzal Mountain that occurs in the texts of Cross Group. It has been suggested that this is the ancient name for the Mirador hill (Stuart 2000). Quetzal birds only live on mountains with elevation in excess of 1200 m, and Misopa' Mountain which contain Jolja' Cave is such a mountain. In fact, the indigenous name of Tumbalá which is located at the south end of Misopa' Mountain is K'uk' Witz, Quetzal Mountain.

It is not my intention to suggest that Kan B'ahlam traveled to Jolja' on the occasion of his pre-accession ceremony and accession. I am suggesting that the Maya had both natural and man-made ritual sites that replicated the same mythological locations. The Cross Group and Jolja' are just such sites.

Group 3

Jolja' Group 3 is located in the back section of the cave, and it is the first inscription encountered after the constricted passageway opens up. It is painted in black and consists solely of the calendar round date of 7 Cauac 5 Ceh. Unfortunately, Cauac and a month position of 5 can not occur together in the Maya calendar system. Group 3 has been significantly smeared since Aulie and Blom's visit. To complicate the issue more, the negative on file in the Blom archives is a copy negative.

Group 4

Group 4 is composed of seven paintings located just south of Group 3 ([Figure 12](#)). Six short inscriptions outlined in thick red paint are located on the west wall of the cave (Paintings 1-6). In front of these texts is a slab of stone lying on the cave floor. It is evident from the fracture marks on the wall that it was chiseled from the area immediately below the wall paintings. Blom's photographs show that the stone was painted with 32 glyphs in four columns (Painting 7). Like the upper texts, a thick red line encased the glyphs. Blom's photographs indicate that the looting occurred prior to her visit because she has several views of Painting 7, and it is already on the floor. The large and heavy size of the stone likely prevented its removal from the cave.



Figure 12. Group 4 paintings.

Today virtually none of the Painting 7 glyphs are visible and only portions of the red outline remain. Some of this degradation has occurred because of the moist condition of the cave floor but visitors to the cave also sit on this stone because it makes a convenient seat. The upper paintings of Group 4 have also suffered vandalism. Since Blom's time, small chunks of the surface have been chipped off. In addition, Painting 6 is missing its lower edge which was apparently destroyed when Painting 7 was chiseled off.

The six upper paintings of Group 4 all appear to be personal names ([Figure 13](#)). Painting 1 is composed of four glyphs which can be read in part as "this is the image of Leley Hix K'ahk' Witz" (Zender 2000). Our present understanding of this phrase is that it should accompany an image of someone. As noted, there was an altar in the vicinity of Group 3 so it is possible that the Painting 1 text refers to an idol that was on this altar. A more likely alternative is that it refers to a painting of someone or something that was originally located between the upper texts and Painting 7. This scenario is a viable option because the lower edges of the wall do not match the upper edges of the Painting 7 slab. Furthermore, Aulie mentions in his correspondence with Thompson and Blom that a stone in this vicinity had an eroded painting on it (Fabiola Sánchez, personal communication 2001). Future investigation of the stone fragments under Group 4 may shed more light on this issue.



Figure 13. Group 4, Paintings 1-6.

Painting 2 of Group 4 consists of four glyphs and includes the word kele'em "youth". Paintings 3, 4 and 5 are each composed of two glyphs, but only the outlines of these glyphs are now visible. The three glyphs in Painting 6 are clearer than the others, and this text begins with a compound sign that reads u ts'ihb "his writing" (Stone 1995:90). U ts'ihb phrases are used in other contexts to introduce the name of a scribe (Stuart 1987), and Painting 6 may be the earliest known example of this kind of phrase.



Figure 14. Group 5 paintings. Jorge Pérez de Lara and Domingo Pérez Moreno. (Joloniel president).

Group 5

Group 5 is the next text encountered on the west wall ([Figure 14](#), shown above). It is composed of at least 18 glyphs arranged in two columns ([Figure 15](#), shown below). A thick red band of semi-transparent pigment is painted over the center of the two columns overlapping the black inscription. This convention is also found on Early Classic pottery such as K5618. This vase was excavated from the Mundo Perdido Complex at Tikal, and has been given a date of manufacture ranging from A.D. 357 - A.D. 495 (Reents-Budet 1994:327).

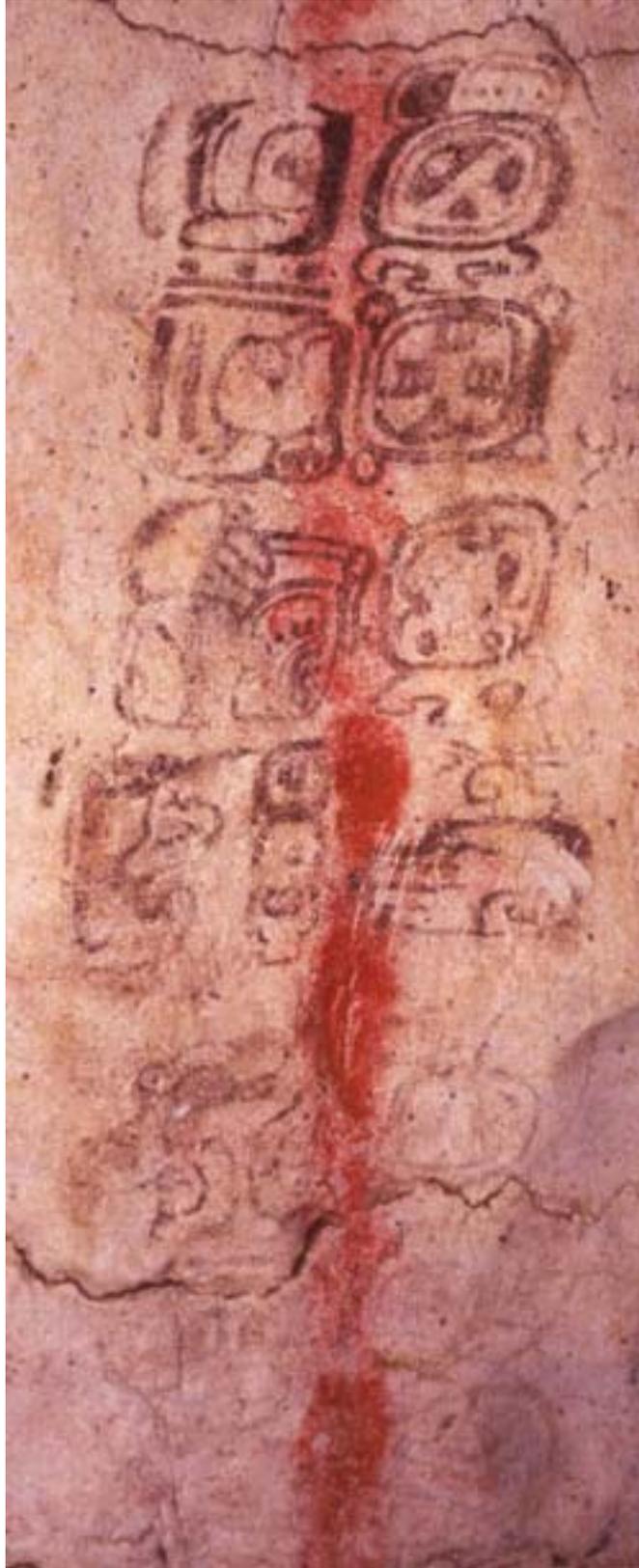


Figure 15. Group 5 painting.

The painting style of Group 5 is more refined than Group 4. The first nine glyphs of Group 5 are exceptionally clear, but the remaining ones are faded to the point that they are mere outlines. Blom's original negative is missing, but reprints of the copy negative show that these faded glyphs were much more pronounced in 1961. Glyph A4 and Glyph B4 have both suffered some vandalism since Blom's time. The prefix on Glyph A4 has been smeared, and the hand in Glyph B4 has been scratched.

A number of small crosses executed in charcoal are found adjacent to the Group 5 text and also appear in the Blom photograph. These Christian symbols suggest that this text was a focus of ritual activity at some point for the contemporary Ch'ol Maya.

The Group 5 text refers to the dates 8.19.19.7.7 3 Manik seating of Uo and the 9.0.0.0.0 Period Ending ceremony in A.D. 435. The sign used to represent the Period Ending verb is composed of a hand grasping a rod-like object (A3). Similar signs in this style are found on an Early Classic celt (Schele and Miller 1986:plate 22c) and Early Classic Tikal Stela 39.

The Period Ending is followed by the so-called "impinged bone" glyph that has been interpreted to pictographically represent a cave (Bassie-Sweet 1996:64, 95-103) and to represent the word *ch'een* "cave" (Stuart 1999). As noted, the corn seeds used to create the first human beings were the bone remains of the Corn Goddess. The Maya frequently deposited the bones of their ancestors within caves, in effect, returning them to their place of origin. The bone in this sign may, therefore, represent both the bones of the Corn Goddess and the remains of the ancestors.

Another well known Early Classic sign is found at A4. This is the head of an old, bald god with a hank of hair in front of his face. It occurs in a number of Early Classic monuments such as Tikal Stela 31 and El Zapote Stela 1. It has been interpreted by Stuart (1999) to represent the word *mam* and to have the meaning of grandfather or ancestor. When used in kinship, the word *mam* means grandfather or older male relative but as a title is used in many contemporary Maya communities to refer to elders who are held in the highest esteem. A second portrait glyph is found at A5. This zoomorphic deity has some of the characteristics of the Early Classic Chac portraits including the shell earring.

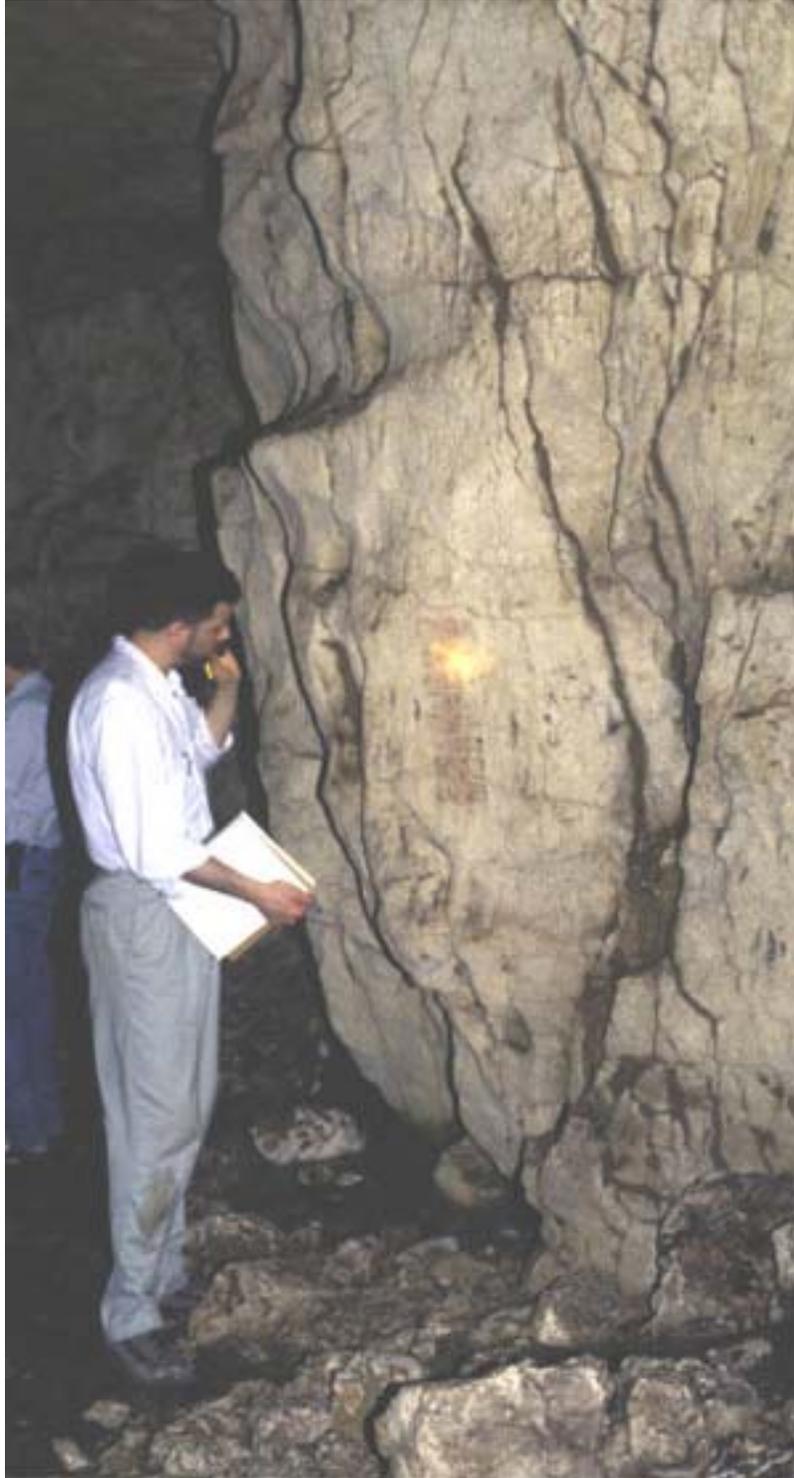


Figure 16. Group 6 painting with Marc Zender.

Group 6

Group 6 is located to the south of Group 5, and is composed of 16 glyphs in 2 columns with a red band again painted down the center ([Figure 16](#), shown above). Although both Group 5 and Group 6 share the red band feature, they were produced by different scribes. Of interest in the Group 6 text is the unusual placement of the calendar round date ([Figure 17](#), shown below). The Tzolkin day name of 9 Akbal appears at A1 while the month position of 11 Kankin is at B2 (9.2.1.12.3 A.D. 477) (Zender 2000). The statement between these glyphs is a phrase that reads hul-i t-u-ch'een "arrived at the cave" (David Stuart, personal communication 1999). Stuart also noted that a place name found in this text occurs at the cave site of Yaleltsemen.

Group 7

Group 7 is a glyph-like painting encrusted in calcite deposit. It is located adjacent to the smallest of the dripwater columns at the rear of the cave. We hope that multispectral imaging will provide more information about its nature.



Figure 17. Group 6 painting.

The Nature of Don Juan

The concept of a mountain god who owns the earth and controls the rains is found throughout the highlands and southern lowlands. Although many of these mountain gods are also thought to be Catholic saints, their primary attributes are rooted in the pre-Columbian creator grandfather who was called Itzamna in the lowlands, and

Xpiyacoc in the Popol Vuh. Itzamna and his wife Ix Chel were the deities of medicine, and the priests and healers invoked them in their prayers (Tozzer 1941:153-55; Taube 1992). Ix Chel was the first woman to spin cotton, weave, bear children and be a midwife. Itzamna was considered to have been the first priest and rainmaker. In the Postclassic Period, he was the principal deity to whom petitions were made to avert agricultural disasters. During the New Year ceremonies of Kan, Muluc and Ix years, offerings were made to him to prevent scarcity of water, locust infestations and famine (Tozzer 1941:144-47). Itzamna is portrayed in Maya art as a very old man with a bald head (see K1991). In his God N manifestation, he is the mountain lord (see Bassie 2001).

The mountain god Don Juan has Itzamna's attributes. Don Juan is known by a variety of names like our father, the cave lord, the spirit of the water, and owner of the earth (Whittaker and Warkentin 1965, Aulie and Aulie 1978). He is said to look like a very old, bald man. In other words, he looks very much like the portraits of Itzamna and the *mam* "grandfather" portrait found in the Group 5 text. Like Itzamna, Don Juan is associated with sickness and healing. It is said that Don Juan captures the souls of people and takes them to his cave. When he grabs a soul, it makes the person sick. To regain the person's health, a shaman must petition Don Juan and retrieve the soul.

Many of the traditional stories that focus on petitions for rain involve Don Juan. San Miguel who is the patron saint of Tumbalá often plays an important role in these stories as well. A Ch'ol story recorded by Aucencio Cruz Guzmán discusses a drought that occurred in the Tulijá Valley in the mid-sixties (Spero 1987:135-42). Ch'ol farmers from Salto de Agua asked the tatch of Actiepa Yochib to petition Don Juan on their behalf. They all journeyed to the Cerro Norte Cave and entered its inner recesses. After hearing their petition, Don Juan is said to have conversed with San Miguel who agreed to order the rain to fall. The farmers received corn seed from Don Juan to plant in their parched milpas, and before they even descended the mountain, the rain began to fall.

The importance of Don Juan is noted in a story told by Miguel Meneses Peñate (Miguel Meneses López 1986:205-207). He explains that during a drought his grandfather and the other tatches of Tumbalá made a pilgrimage to petition for rain at the churches in Tumbalá, Yajalón, Petalcingo and Tila. They were given a divine message to go to Jolja' and make offerings to Don Juan who would provide the necessary rain. They did as they were instructed, and Don Juan sent the rain.

In addition to the parallel attributes between Itzamna and Don Juan, there are also other contemporary Ch'ol myths that are a rich source of information about pre-Columbian beliefs. As an example, the bird manifestation of the creator grandfather Itzamna is based on a species of falcon called the waco or laughing falcon (Bassie 2001). This bird makes two kinds of calls: a "wa co" sound and a "ha-ha-ha" sound like laughter. The laughing falcon feeds almost exclusively on snakes including poisonous ones, and this ability must have been viewed by the Maya as an indication of enormous spiritual power. He is, thus, an appropriate manifestation for the powerful Itzamna. The call of the laughing falcon is said to bring the rain (Dickey and Van Rossem 1938:131; Lowery and Dalquest 1951:555). The Chorti say that:

And when we hear the waco singing, we say, "The waco is calling. It is going to rain." Because that waco is calling for rain. Because it is said that the waco is a padrino, or a rain-maker. (Fought 1972:388)

In the Chorti area, the padrino is the prayermaker in the village who conducts the ceremonies for rain, and Itzamna was the first rainmaker. The Maya word for water is ha', and the laugh of the laughing falcon makes this sound (ha, ha, ha) (Alonso Méndez, personal communication). On the Tablet of the Foliated Cross which replicates the eastern cave, the laughing falcon manifestation of Itzamna appears in a prominent position. There is also a laughing falcon nesting at the mouth of Jolja' Cave. When these birds call out ha ha ha from these caves, they are literally calling for the rain.

Several contemporary Maya groups view the laughing falcon as a healer which was one of the principal functions of the creator grandfather. For example, the Tzotzil believe that if a person can return the call of this bird without tiring, he will become a bonesetter (Laughlin 1975:362). At Joloniel we recorded a number of stories about the laughing falcon. The Ch'ol Maya believe that the laughing falcon can kill poisonous snakes because he knows how to cure himself if he gets bitten. It is said that the first woman to spin cotton (the moon goddess) was bitten by a poisonous snake, but a laughing falcon came and cured her. In pre-Columbian belief, the first woman to spin cotton was Ix Chel (the waning moon goddess), and she even wears the cotton spindle in her headdress. She is also directly associated with Itzamna for she is his wife. Furthermore, the laughing falcon story is likely related to the production of rain because there is a wide spread belief that the spinning of cotton produces rain clouds.

The Day of the Cross

Before the breakdown of the civil-religious hierarchy at Tumbalá, Jolja' played an important role in Tumbalá's Day of the Cross ceremony. In Catholic mythology, the Day of the Cross (May 3) commemorates the day in A.D. 326 when St. Helena (Elena) was said to have discovered the three crosses of Calvary on which Christ and the two thieves were crucified. Although it is no longer part of the official Roman Catholic calendar, Catholics in Latin America continue the tradition of celebrating this day. Most Day of the Cross celebrations include aspects of pre-Columbian rain rituals because May 3 coincides with the start of the rainy season, and the Ch'ol region is no exception. In the past, tatusches from Tumbalá always went to Jolja' to ensure that the rains would be adequate. With the radical social changes happening in the region, these visits now only occur during periods of drought.

Joloniel's Day of the Cross ceremony has also diminished but still includes a full day of rituals at Jolja' with events occurring at both Cave #1 and Cave #2. The formal rituals began at 8 AM at the Joloniel church. Candles, incense and liquor were offered to the Virgin del Carmen who is the patron saint of the village. An image of the Virgin and a cross were then transported in a procession up the mountain to Jolja' and set up at the mouth of the river cave (Cave #2). Prayers and offerings of candles and liquor were

made by the Joloniel tatuch while five musicians provided musical accompaniment. The Virgin was then left at the river cave, and the procession ascended to the upper cave (Cave #1). After a ceremony at the mouth of the cave, the participants moved to Chamber 1. For several hours, prayers and offerings of candles, incense and liquor were made to Don Juan and the three crosses of the chamber. Again the musicians provided accompaniment. During this period, numerous people from the community came and went. Although it is the custom to journey to the back of the cave to perform a formal petition for rain, this aspect of the ceremony was deemed unnecessary because the rains had already begun. Nevertheless, individual petitioners still made offerings in front of the large stalagmite column at the rear of the cave.

After concluding the Chamber 1 rituals, the procession returned to the mouth of Cave #2, and continued making prayers and offerings for the remainder of the afternoon. In late afternoon, the procession moved down the mountain with the Virgin and eventually returned to the church near sundown for further prayers and offerings. These ceremonies continued on until well after midnight.

Although the Maya ate a variety of foods, corn was, and still, is their staple. Corn seed can not be successfully stored for longer than a year in the heat and humidity of the tropics. It was, therefore, imperative that the annual corn harvest be a success, and that success was dependent on the rain cycle. It should, thus, come as no surprise that the Maya's most sacred deities, locations and pilgrimage sites were associated with the production of rain.

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[Figure 3.](#) Map of the area between Palenque, on the right, and Jolja' on the left.

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[Figure 15](#). Group 5 painting.

[Figure 16](#). Group 6 painting with Marc Zender.

[Figure 17](#). Group 6 painting.

Sources Cited

Alejos García, José

1994 *Mosojántel, etnografía del discurso agrarista entre los ch'oles de Chiapas*. Universidad Nacional Autónoma de México. México City.

1999 *Ch'ol/Kaxlan: Identidades étnicas y conflicto agrario en el nortede chiapas, 1914-1940*. UNAM, México.

Arcos Méndez, Miguel

2001 Rezo Para Solicitar Permiso de Entrada a la Cueva de Joloniél. Spanish translation by Miguel Meneses López, Carlos Aracos Vázquez and Nicolás Díaz. Manuscript in possession of author.

Aulie, Wilbur and Evelyn Aulie

1978 *Diccionario ch'ol-español; español-ch'ol*. Serie de Vocabularios y Diccionarios Indígenas Mariano Silva y Aceves, 21. México.

Bassie-Sweet, Karen

1991 *From the Mouth of the Dark Cave*. University of Oklahoma Press. Norman, Oklahoma.

- 1996 At the Edge of the World. University of Oklahoma Press. Norman, Oklahoma.
- 1998 The Maya Earth Goddess. Paper presented at the Sixteenth Maya Weekend. University of Pennsylvania Museum. Philadelphia.
- 1999 Maya Corn Deities and the Male/Female Principal in Maya Mythology. Paper presented at the Tercera Mesa Redonda de Palenque. Palenque, México.
- 2001 Maya Creator Gods. Manuscript at www.mesoweb.com
- Becquelin, Pierre and Claude F. Baudez
 1982 *Toniná: Une Cite Maya du Chiapas (Mexique)*. Mission Arqueologique et Ethnologique Francaise au Mexique, Paris.
- Blom, Frans and Oliver La Farge
 1926-27 *Tribes and Temples*. Middle American Research Institute Publications 1-2. New Orleans.
- Bonor Villarejo, Juan Luis
 1989 *Las Cuevas Mayas: Simbolismo y Ritual*. Universidad Comptense de Madrid, Madrid.
- Coe, Michael
 1978 *Lords of the Underworld*. Princeton: Princeton University Press.
- Edmonson, Munro
 1965 *Quiché-English dictionary*. Middle American Research Institute, pub. 30. New Orleans: Tulane University.
- 1971 *The book of counsel: the Popol Vuh of the Quiché Maya of Guatemala*. New Orleans: Middle American Research Institute.
- Fought, John
 1972 *Chorti (Mayan) Texts*. Philadelphia: University of Pennsylvania Press. Philadelphia.

Graham, Ian

1982 *Corpus of Maya Hieroglyphic Inscriptions*. Vol 3, Part 3. Peabody Museum. Cambridge, Mass.

Halperin, Christina T.

2000 Caches in Caves: Ancient Maya Use of the *Pachychilus Shell*. Paper presented at the 23rd Annual Midwest Mesoamericanist Meeting, Urbana-Champaign, IL.

2001 Report of Survey and Archaeological Reconnaissance at Jolja' Cave. Preliminary project report.

Kubler, George

1977 *Aspects of Classic Maya Rulership on Two Inscribed Vessels*. *Studies in Pre-Columbian Art and Archaeology*, no. 18. Washington D.C.: Dumbarton Oaks.

La Farge, Oliver, & Douglas Byers

1931 *The Yearbearer's People*. Middle American Research Series, Pub. 3. New Orleans: Tulane University.

Laughlin, Robert M.

1975 *The Great Tzotzil Dictionary of San Lorenzo Zinacantán*. Smithsonian Contributions to Anthropology, No. 19. Smithsonian Institution Press, Washington, D.C.

Laughlin, Robert M. and Karen Bassie

2001 The Sacred Geography of Jolja' Cave, Chiapas. Paper presented at the 34th Annual Chac Mool Conference. University of Calgary, Calgary.

Mace, Carroll Edward

1970 *Two Spanish-Quiché Dance Dramas of Rabinal*. Tulane University, New Orleans.

Meneses López, Miguel

1986 K'uk' Wits: Cerro de los Quetzales. Dirección de Fortalecimiento y Fomento a las Culturas de la Sub-Secretaría de Asuntos Indígenas, Secretaría de Desarrollo Rural. Tuxtla Gutiérrez, Chiapas: Gobierno del Estado.

Miles, Suzanna

1981 Mam Residence and the Maize Myth. In *Culture in History*, ed. Stanley Diamond. New York: Octagon Books.

- Navarrete, Carlos
2000 El Cristo negro de Tila, Chiapas. *Arqueología Mexicana* vol. 8, no. 46.
- Oakes, Maude
1951 *Two Crosses of Todos Santos*. New York: Pantheon.
- Pincemin Deliberos, Sophia
1999 *De Manos y Soles: Estudio de la Gráfica Rupestre en Chiapas*. Universidad de Ciencias y Artes del Estado de Chiapas, Tuxtla Gutiérrez.
- Piña Chan, Roman
1967 *Atlas Arqueologica de la Republica Mexicana*. Vol. 3, Chiapas. Instituto Nacional de Antropología e Historia, México.
- Proskouriakoff, Tatiana
1950 *A Study of Classic Maya Sculpture*. Carnegie Institution of Washington, Publ. 593. Washington, D.C.: Carnegie Institution.
- Reents-Budet, Dorie
1994 *Painting the Maya Universe: Royal Ceramics of the Classic Period*. Duke University Press, Durham.
- Riese, Berthold
1981 Maya-Hohlenmalereien in Nord-Chiapas. *Mexicon* Vol. 3, No. 4:55-56.
- Robertson, Merle Greene
2002 The Sculpture of Palenque: The Cross Group, the North Group, the Olvidado, and other Pieces. Vol. IV. Princeton University Press: Princeton.
- Sapper, Karl
1897 *Das Nördliche Mittelamerika Nebst Einem Ausflug nach dem Hochland von Anahuac*. Druck und Verlag, Brunswick.
- Schele, Linda, and Mary Ellen Miller
1986 *Blood of Kings*. Fort Worth: Kimbell Art Museum.
- Stephens, John Lloyd
1841 *Incidents of Travel in Central America, Chiapas and Yucatán*.
- Stone, Andrea
1987 Cave Painting in the Maya Area. *Latin American Indian Literatures Journal* 3(1):95-108.

- 1989 The Painted Walls of Xibalba: Maya Cave Painting as Evidence of Cave Ritual. In *Word and Image in Maya Culture: Explorations in Language, Writing, and Representation*, ed. by William Hanks and Don Rice. Salt Lake City: University of Utah Press.
- 1995 *Images from the Underworld*. University of Texas Press.
- Stuart, David
- 1987 Ten phonetic syllables. *Research Reports on Ancient Maya Writing*, 14. Washington D.C.: Center for Maya Research.
- 1999 Notebook for the 24th Maya Hieroglyphic Forum at Texas. Austin, Texas.
- Stuart, David & Stephen Houston
- 1994 *Classic Maya Place Names*. Washington D.C.: Dumbarton Oaks.
- Taylor, Dacey
- 1978 The cauac monster. *Tercera Mesa Redonda de Palenque, Vol. 4*, edited by Merle Greene Robertson and Donnan Call Jeffers, pp. 79-89. Pre-Columbian Art Research, Monterey.
- Thompson, J. Eric
- 1975 Introduction. In *The Hill-caves of Yucatán*, by Henry C. Mercer, vii-xliv. Norman: University of Oklahoma Press.
- Tozzer, Alfred M.
- 1907 *A Comparative Study of the Mayas and the Lacandonas*. Archaeological Institute of America, New York.
- 1941 *Landa's Relación de las Cosas de Yucatán*. Papers of the Peabody Museum of American Archaeology and Ethnology, Vol. 18. Cambridge.
- Villagutierre Soto-Mayor, Juan de
- History of the Conquest of the Province of the Itzá. Edited by Frank E. Comarato. Labyrinthos, Culver City.

Wagley, Charles

1941 *Economics of a Guatemalan village*. American Anthropological Association, Memoir 58. Menasha: American Anthropological Association.

Whittaker, Arabelle and Viola Warkentin

1965 *Chol Texts on the Supernatural*. Summer Institute of Linguistics, Oklahoma.

Wilson, Richard

1995 *Maya Resurgence in Guatemala*. Norman: University of Oklahoma Press.

Zender, Marc

2000 Preliminary Report. Jolja' Cave Project.

Zender, Marc, Karen Bassie and Jorge Pérez de Lara

2001 *Art and Ritual in Jolja' Cave, Chiapas México*. Paper presented at 66th Annual Meeting of the Society for American Archaeology. New Orleans.