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Rethinking the Huatabampo Archaeological Tradition of Northwest Mexico

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The Huatabampo tradition was first defined by Gordon Ekholm, in 1938, and refers to those sites in the coastal plain in northern Sinaloa and southern Sonora lacking architecture but containing well-manufactured plain ceramics with complex shapes. Recent investigations in the region are helping to refine the chronology, geographical extension, cultural attributes, and ethnicity. With 20 radiocarbon dates, we can place this tradition as spanning from 200 BC to AD 1450. The maximum geographical extension ranges from the Middle Rio Yaqui in the north to the Rio San Lorenzo in Sinaloa. The associated sites of this complex are represented by dispersed houses, indicative of *ranchería*-type settlements, funerary mounds, shell middens, and petroglyph sites. At about AD 1150, Aztatlán pottery and other commodities from southern Sinaloa were incorporated mostly as mortuary offerings. We also provide evidence that the Huatabampo archaeological tradition is a local culture representing the occupation of the Cahitan-speaking groups, Yoremem/Mayos and Yoemem/Yaquis, of the coastal plain.

La tradición Huatabampo fue definida por primera vez por Gordon Ekholm, en 1938, y se refiere a aquellos sitios en la planicie costera en el norte de Sinaloa y el sur de Sonora que carecen de arquitectura pero que contienen cerámica lisa fina con formas complejas. Investigaciones recientes en la región están ayudando a refinar la cronología, la extensión geográfica, los atributos culturales y la etnicidad. Con 20 fechas de radiocarbono, podemos colocar esta tradición que abarca desde 200 aC hasta 1450 dC. La extensión geográfica máxima se extiende desde el Medio Río Yaqui en el

norte hasta el Río San Lorenzo en Sinaloa. Los sitios asociados de este complejo están representados por casas dispersas, indicativas de rancherías, montículos funerarios, concheros y sitios de petrograbados. Alrededor del año 1150 DC, cerámica Aztatlán y otros productos del sur de Sinaloa se incorporaron principalmente como ofrendas mortuorias. También proporcionamos evidencia de que la tradición arqueológica de Huatabampo es una cultura local que representa la ocupación de los grupos de habla cahita; Yoremem / Mayos y Yoemem / Yaquis, de la planicie costera del sur de Sonora y Norte de Sinaloa.

KEYWORDS Huatabampo, Serrana, Cahita, Yoreme, Yoeme, northern Sinaloa, southern Sonora, Guasave

The Huatabampo archaeological tradition of northern Sinaloa and southern Sonora (currently dated to circa 200 BC to AD 1450) presently remains a little-studied and poorly known archaeological complex, within mainland northwest Mexico. Importantly, this region lies astride the boundary of two of the principal cultural macro-traditions of North America – Mesoamerica/West Mexico and the Greater Southwest/Northwest Mexico.

Sites affiliated with the Huatabampo tradition are located within the Northwest Mexican Coastal Plain, one of the principal physiographic provinces of northern Mexico (Rzedowski 1981:25). The coastal plain originates in central Nayarit, where the transverse volcanic belt, which includes many of Mexico's prominent volcanoes such as Pico de Orizaba, Popocatepetl, and Ixtaccíhuatl, reaches to the Pacific. Proceeding northward, the coastal plain runs parallel to the Gulf of California to its uppermost reaches in the region surrounding the lower Colorado River in extreme southwestern Arizona. The Huatabampo Tradition overlaps with the distribution of Sinaloa Desert Scrub in the coastal plain from Guaymas to Mazatlán. The tradition extends from the San Lorenzo River just south of Culiacán, Sinaloa, to the Middle Yaqui River Valley near Tónichi, Sonora (Figure 1).

The foothills and mountains of the Sierra Madre Occidental define the eastern limits of the coastal plain. Thus, wedged between the sea and the Sierra Madre Occidental (SMO), the width of the coastal plain varies, from but a few kilometers in its southern extreme, to approximately 250 kilometers at its maximum width in north-central Sonora (Perez Bedolla 1985:115).

Cultural History

The initial occupation of the North Mexican Coastal Plain occurred sometime prior to the end of the Pleistocene. Evidence for Paleoindian traditions is widespread in northern Sonora, with more than 145 Clovis points and 12 sites known. The most emblematic and important site found in Sonora is Fin del Mundo, a Clovis site with a gomphothere kill locality and an extensive camp and lithic quarry. A total of 25 Clovis points has been recovered from the site, and a radiocarbon

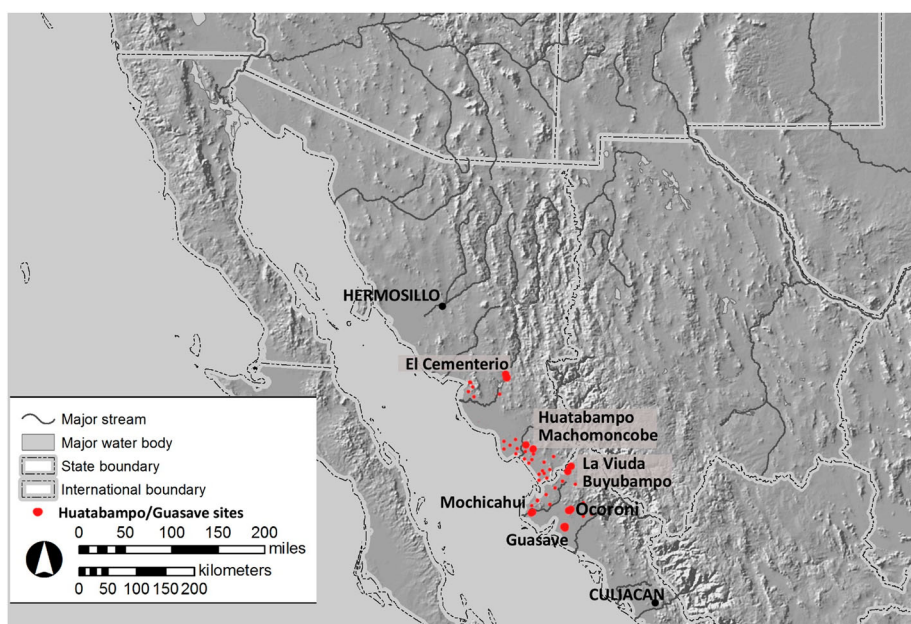


FIGURE 1. Location of the Huatabampo cultural tradition and important sites.

date was obtained at 13,450 calBP (Sanchez 2016; Sanchez et al. 2014; Sanchez and Carpenter 2021). C. Blick (1938) reported on a human cranium found by Gentry in Pleistocene deposits at Chinobampo, Sonora along a tributary arroyo of the Río Mayo. This location was subsequently visited by Sauer and Ekholm (1941: 46) and Lehmer (1949), confirming the Pleistocene context of the stratum, but failed to find evidence of additional materials. Arturo Guevara Sanchez (1989) described isolated finds of Clovis-like projectile points from Sinaloa de Leyva, along the Río Sinaloa approximately 40 kilometers upriver from Guasave.

Cochise Archaic materials (Sayles 1983; Sayles and Antevs 1941) are widespread throughout Sonora, western Chihuahua, and northwestern Durango (Carpenter et al. 2018). In 1985, Ana María Álvarez with a group of students from the Escuela Nacional de Antropología e Historia, in Mexico City, carried out an extensive survey in the coastal plain of southern Sonora and Northern Sinaloa, finding an important Archaic occupation along the coast (Álvarez Palma 2007). Early Agriculture Period (circa 1500 BC to AD 150) assemblages are found throughout Sonora, including the Huatabampo and Río Sonora regions (Carpenter et al. 2018; Ekholm 1941; Pales 1972), as well as in western Chihuahua (Hard and Roney 2020; MacWilliams 2018) and the western highlands of Durango (Lazalde 1987; Spence, 1978). The distribution of San Pedro phase assemblages indicates that the Cochise Archaic was predominantly a northwest Mexican tradition that extended over the international border into the southern half of Arizona and New Mexico. This perspective also suggests that the Early Agriculture Period may correspond with the distribution of the southern, or Sonoran branch of Uto-Aztecan (Carpenter et al. 2023).

Archaeological Investigations in the Huatabampo Region

Few investigations have been carried out in the northern Sinaloa and southern Sonora regions. Modern mechanized agriculture and shrimp farms have, unfortunately, destroyed much of the surface of the alluvial and coastal plains throughout this region – making Ekholm’s observations, although after almost 100 years, especially significant today.

The Sonora-Sinaloa Archaeological Project

The Sonora-Sinaloa Archaeological Project was conceived and directed by George Vaillant of the American Museum of Natural History (AMNH), with the express purpose of bridging the *terra incognita* that lay between the American Southwest and the Mesoamerican frontier (Carpenter 1996:159). Gordon F. Ekholm, then a graduate student at Harvard, was appointed as field representative of the AMNH in charge of conducting the fieldwork. Over the course of three field seasons of approximately six months each, Ekholm recorded a total of 181 archaeological sites between Nogales, Sonora, and Culiacán, Sinaloa, approximately 980 linear kilometers south of the border. Site reconnaissance was also carried out in the vicinities of Mazatlán, Sinaloa, Ixtlán, Nayarit, and Guadalajara, Jalisco.

Collections were gathered from 106 archaeological sites while existing collections from seven additional sites were purchased. Many of these sites could be attributed to previously defined prehistoric cultural components, including 20 Trincheras sites, 40 Rio Sonora sites, and 14 coastal sites attributed to the Comcaac. Several other sites were identified as Colonial Spanish or historic Yaqui and Mayo. Along the coastal plain, Ekholm encountered numerous sites (between 15–20) that he ascribed to a yet undefined cultural component, which he designated as “the Huatabampo complex” after the nearby modern community (1939, 1940, 1941, 1942). Distributed along the abandoned channels of the lower reaches of the Rio Mayo were several prehistoric sites consisting of dense artifact scatters but without any evidence of architecture or other surface features. In March of 1938, test excavations were conducted at the largest of these – two kilometers long (Site No. 87, Huatabampo), followed by more extensive trenching in March of 1939.

This site, situated on a deeply silted floodplain covered with dense Sinaloan thornscrub, consists of an abundant, though discontinuous, scatter of sherds (1941:50). The pottery was characteristically well-made coil-and-scraped redware and brown ware in the form of small bi-lobed jugs, jars, and open bowls. Several ceramic earspools and at least one modeled spindle whorl was reported (1942:25). Shell remains were also conspicuous, consisting of clam and oyster, but also included numerous shell bracelets and the blanks generated by their production (1941:51). Fire-cracked rock, reflecting the remains of disarticulated hearths and roasting features, was prominent. Among the ground stone assemblage was a unique mano form, which had overhanging ends, and was associated with narrow slab metates. Two prismatic blades of obsidian were also found in association with the Huatabampo materials (Ekholm 1942:125).

The excavations uncovered seven burials, four of which were full-length inhumations, lying on the back with arms to the side and with heads oriented to magnetic north (1941:55–56). Among these was a child approximately six years of age with pronounced frontal cranial deformation (1941:53). A secondary burial of partially articulated elements, with the head placed to the south, was also found. No grave goods were found with these burials. Though burnt adobe fragments were occasionally observed, no indications of houses or other architectural features were encountered. Based on the presumed antiquity of these sites, inferred from their association with the relic courses of the Rio Mayo, along with evidence for figurine fragments, stone palettes, three-quarter grooved axes encountered in surface collections, and the absence of painted ceramics, Ekholm suggested an affiliation with either the Hohokam or Mogollon (1940:325–326; 1942:136), although he also noted that it should not be considered as a Southwestern complex (1942:77).

Along the Rio Fuerte, Ekholm began to find a few painted sherds among the surface assemblages, which otherwise appear to have been consistent with the Huatabampo materials. On the west side of an abandoned oxbow of the lower Rio Sinaloa approximately six kilometers southwest of Guasave, Ekholm observed the first evidence of artificial mound construction. This was a low mound approximately one meter high and 40 meters in diameter and, as the only vertical relief in the area, it had come to be known locally as “*El Ombligo*” or “the umbilicus” (1942:35). According to a local informant, there had originally been two mounds – the smaller one having recently been leveled for agricultural improvements, a fate that was then facing the sole remaining mound as well. This site has come to be known as the Guasave site. Prior to excavation, Ekholm felt that these remains likely reflected a trash midden (1942:35) or possible house mound (letter to George Vaillant, May 2, 1938). However, the initial excavations quickly revealed that the El Ombligo mound was a formal cemetery. Intermittent excavation over the next two field seasons produced 196 burials with evidence of a diverse mortuary program, and elaborate material culture (1939, 1940, 1942).

Ekholm described three basic ceramic complexes (1942:45): The Guasave Red and Brown wares were clearly associated with the Huatabampo pottery tradition and were presumed to reflect a tradition indigenous to northern Sinaloa and southern Sonora, which extended from the Rio Mayo south to the Rio Mocorito. Guasave Red-on-buff bowls and plates and polychromes affiliated to the Aztatlán tradition of southern Sinaloa and Nayarit. The material culture associated with the polished red or brown ware complex suggested affinities with both Mesoamerica and the Southwestern United States. Mesoamerican traits identified by Ekholm included earpools, modeled-clay spindle whorls, prismatic blades, and the overhanging-end mano form. On the other hand, the polished redware pottery, along with the worked shell, stone palettes, and figurine fragments were considered to have affinities among the Hohokam and Mogollon cultures, with parallels suggested between the Guasave/Huatabampo redware complex and San Francisco Red (Ekholm 1942:136).

The red-on-buff and polychrome pottery, on the other hand, was attributed to the Aztatlán complex. As originally defined by Sauer and Brand, the Aztatlán complex referred to both a geographical region corresponding to the contact-period

provincias of Aztatlán and Culiacán and the predominant archaeological assemblage found there (1932). Kelly (1938:19, 36) essentially defining a ceramic phase (Grosscup 1976:248). Several scholars, including Ekholm (1942:52–55), followed Kelly in assigning stylistically similar ceramics to an Aztatlán complex. Eventually, Kelley (2000) and others (Di Peso 1979; Publ 1985, 1990) added a host of traits to the complex, including copper implements, spindle whorls, elbow and stemmed smoking pipes, cylinder stamps, clay masks, and cranial deformation. Whatever interpretation of Aztatlán employed, it is unanimously accepted as the northernmost extension of Mesoamerican society penetrating northwestern Mexico (Carpenter 1996).

The sophisticated design elements, which included motifs identified through comparison with representations in the Borbonicus, Borgia, Vaticanus B, and Magliabecchiano codices as *Tlahuiscalpantecutli* (god of the evening star), *Xochipilli* (flower or fertility goddess), *Quetzalcoatl* (feathered-serpent god), *Mictlantecutli* (god of death), *Xicalcolihqui* (flint knife motif) which, along with the feather and stepped grecque motifs, all suggested to Ekholm clear symbolic and stylistic relationships with the Mixteca-Puebla (Aztec I and II) tradition of the central Mexican highlands around Cholula. This similarity between the Guasave and Mixteca-Puebla pottery motifs led Ekholm to suggest an occupation that could date no earlier than the stylistic developments in central Mexico which, following Vaillant (1940), could not have begun before about AD 1100. Vaillant correlated the initial occurrence of Mixteca-Puebla style polychromes with the beginning of Aztec II, which he dated to AD 1299. Allowing for a brief time-lapse, Ekholm proposed that the Mixteca-Puebla/Aztatlán complex at El Ombligo dated to circa AD 1350 (1942:130).

Richard Pailes' Southern Sonora Project

An intensive site survey, accompanied by test excavations was conducted in the foothills between the Río Mayo and Río Fuerte in southern Sonora and Northern Sinaloa by Richard Pailes for his dissertation research (Pailes 1972:1). He recorded 117 sites, and excavations were carried out at three sites. La Colmena Cave (SON:S:16:01) was excavated in order to reconstruct the chronological framework; twenty-four 1 × 1 m units were excavated to a depth of 110 cm. The only features found were an undefined rock alignment, and two inhumations, recently radiocarbon dated to the late prehispanic and colonial period between AD 1440 and 1680 (Hinojo et al. 2017). The excavations in the cave revealed that Venadito Brown is the earlier ceramic, dated between 1 BC and AD 700 (Pailes 1972, 1976:142). The Venadito Brown type is very comparable to Huatabampo Brown, and generally like the Alma series of Mogollon brown (Pailes 1972:355–356). Pailes dated the beginning of the Huatabampo ceramic complex about 600 AD or earlier. More than 120 manos and 36 metates were found in the cave which could be interpreted as a habitation site occupied from approximately 400 BC to AD 1600 (Pailes 1972:185).

The Río Sonora/Serrana chronology was constructed based on eight radiocarbon dates, two obsidian hydration dates, and the presence of intrusive ceramics from

Sinaloa (Pailes 1972:329). Pailes (1972) collected 77 Huatabampo sherds and seven red-on-buff Guasave sherds; and a handful of Aztatlán polychromes; the rest of the 7,008 sherds collected, were ceramic types of the Serrana tradition such as Venadito, Batacosa, Cuchujaqui, and the historic San Miguel (Figure 2).

Other artifacts associated with the Serrana sites include molded spindle whorls, a cylindrical seal and stone “idol,” ceramic whistles, numerous stone cruciforms, relatively few projectile points, stone tools, shell ornaments, and abundant manos and metates. Grinding stones include overhanging-end manos and their narrow metates (Pailes 1972:261–327). In general, the settlements in southern Sonora seem to reflect small ranchería-like communities of one to a few extended families (Pailes 1972:364).

Time	Río Sonora (Doolittle 1988)	Río Sonora (Pailes 1973)	Serrana Baja (Pailes 1973) (Carpenter 2014)	Serrana Alta (Pailes 1973) (Carpenter 2014)	Huatabampo (Carpenter & Vicente 2009)	Huatabampo (Álvarez 2001)	Culiacán (Kelley & Winters 1960)
1950							
1900							
1850							
1800							
1750							
1700							
1650							
1600							
1550							
1500	Above Ground Adobe	Above Ground Adobe					
1450							
1400							
1350		Transition		San Bernardo			La Quinta
1300							
1250	Transition				Guasave	Phase IV	Yebalito
1200		Pithouse	Cuchu- jaqui				La Divisa
1150	Pithouse						
1100							
1050							
1000				Los Camotes			
950							
900							
850							
800		Pre-Mesa				Phase III	
750							
700							
650							
600							
550			Batacosa	Batacosa			
500							
450						Phase II	
400							
350			Batacosa- Venadito	Batacosa- Venadito			
300							
250							
200							
150							
100			Venadito from ~200 BC	Venadito from ~200 BC	Venadito from ~200 BC	Phase I from ~175 BC	
50							
1/1							

FIGURE 2. Phase chronology of the region.

The Proyecto Huatabampo

In 1979 with hopes of further defining the prehispanic agricultural populations of the coastal plain in northern Sinaloa and southern Sonora, the Instituto Nacional de Antropología e Historia-Noroeste in Hermosillo carried out a surface assessment (Álvarez Palma and Villalpando Canchola 1979). Following an extensive survey that examined areas from just north of the Río Mayo south to the Río Sinaloa, excavations focused on the site of Machomoncobe (Son T:1:5), approximately 19 kilometers northwest of Huatabampo, Sonora. This site was selected because of its undisturbed subsurface deposits in a region where most archaeological sites have been destroyed through agricultural activities (Álvarez Palma 1990:13).

Excavations revealed extensive trash deposits, a dog burial, and a secondary burial of an adult and infant, represented only by a poorly preserved skull along with a few digits from an infant (Álvarez Palma 1990:41). No additional features, nor evidence of architecture was encountered. Several anthropomorphic figurine fragments reflect at least five distinctive styles. These are similar to Hohokam types, though Álvarez Palma (1990:51) suggests that her Type B may be related to Kelly's (1938:57) "smooth face" style from Chametla and Grosscup's Type S figurine from Amapa, Nayarit (1961:398).

Five radiocarbon dates were reported for Machomoncobe; all were obtained from charcoal samples taken from a trench excavated in a trash-mound, ranging from 200 BC to AD 1010 (Álvarez Palma 1990:93, Figure 8b). Although acknowledging the difficulty of establishing a chronology based on a few radiocarbon dates, Álvarez proposes an occupation span equivalent to the maximum range represented by the reported dates, or approximately 200 BC to AD 1000 (Figure 2).

Shell was an important trade item, which Álvarez suggests may have been used in exchange for non-local resources such as turquoise, obsidian, olivine, and vesicular basalt (1990:76). The few prismatic blade fragments indicate that at least some obsidian was obtained from the south. Due to the lack of evidence for settlements postdating the proposed AD 1000 abandonment, no direct link could be established between the prehistoric occupants of the Huatabampo region and the Cáhita-speaking Mayo who inhabited the area at the time of contact. However, the settlement and subsistence patterns are consistent with descriptions of the contact period Cáhita, and Álvarez, like Ekholm, suggests that the Huatabampo peoples may represent the bio-cultural ancestors of the Cáhita (1990:77).

Reanalysis of El Ombligo

For his dissertation research, John Carpenter reanalyzed the El Ombligo funerary mound assemblage (Guasave site) (Carpenter 1996), excavated by Ekholm (1942). Traditionally Guasave site served to mark the northern terminus of the Postclassic-period (AD 900 to Contact) Mesoamerican/west Mexican expansion along the North Mexican Coastal Plain. The site consisted of a low mound measuring approximately one m high and 40 m in diameter and was situated approximately 100 m west of an abandoned meander of the Río Sinaloa, some six km to the southwest of the town of Guasave. Excavation over the course of three field seasons between 1938 and 1940, indicated that the mound was a formal cemetery,

with the remains of 196 individuals reflecting a varied mortuary program (Ekholm 1939, 1940, 1942). The mortuary practices included extended inhumations with heads oriented to the north, south, and west; secondary bundle burials of disarticulated remains; and secondary interment in large funerary ollas. Tabular-erect cranial deformation was prevalent, and several cases of tooth filing and staining were also observed. Funerary offerings associated with these graves revealed an elaborate material culture, with several pottery types including red wares, red-on-buff, finely incised wares, several types of highly detailed polychrome pottery, alabaster vases, copper implements, shell ornaments, pyrite and turquoise jewelry, paint-cloisonné gourd vessels, ceramic masks, clay smoking pipes, modeled spindle whorls, a cylinder stamp, prismatic obsidian blades, cotton textiles, bone daggers, human trophy skulls, and food remains (Ekholm 1942:120).

Considering variability in mortuary treatment, depth of interment, orientation, and grave lots, in conjunction with 10 new radiocarbon dates, these data indicate two chronological components reflecting a much greater temporal span than previously recognized (Carpenter, 1996). The earliest Huatabampo period occupation is dated to approximately AD 700/800 to AD 1100/1150, with the subsequent Guasave period placed between approximately AD 1100/1150 and AD 1350/1450.

Sometime around AD 1100, sophisticated polychrome vessels, clay masks, and smoking pipes associated with the Aztatlán complex were either locally produced or imported from nearby Aztatlán neighbors. These objects are apparently restricted to funerary contexts and likely function within an ideological/ritual realm. There are relatively few, if any, tangible indications of an actual Aztatlán occupation at Guasave.

Although there are marked differences between the Huatabampo and Guasave periods, continuity of occupation is demonstrated by both the mortuary program and the material culture. In general, the Guasave-period burials reflect variations on practices established in the Huatabampo period. The most notable difference between periods is the appearance of secondary burials in ollas during the terminal portion of the Guasave period. However, these burials, along with the other Aztatlán components, do not reflect the long-reaching expansion of Mesoamerican/West Mexican societies into the northern frontier, but traits adopted from neighboring communities on the North Mexican Coastal Plain of Sinaloa. The Aztatlán component at El Ombligo appears to be strongly associated with the ideological realm, with little evidence for either political or economic integration on a macro-regional scale. However, the manipulation of symbolically or ideologically important objects may have served both political and economic ends for high-status individuals and may also have promoted regional interaction within the Sinaloan coastal plain.

Proyecto Norte de Sinaloa

Between 2004 and 2011 several projects funded by INAH, CONACYT, and Minera Corner Bay were carried out in Northern Sinaloa and Southern Sonora. Here, we will discuss the sites and data relevant to understanding the Huatabampo tradition.

La Viuda (SIN A:6:17), and Rincon de Buyubampo (SIN A:6:18), Choix, Sinaloa

The Janalacahui Valley is in the lower bajada of the Sierra Madre just a few kilometers south of the Sonora border, and 80 km east from Mochicahui. From 2006 to 2011, investigations in the sites of La Viuda and Rincón de Buyubampo revealed that during the late prehispanic and protohistoric periods were densely inhabited; several masonry room block structures with patios were excavated. Agriculture was the primary economic activity; however, in this humid subtropical valley, organic preservation was very poor, and archaeobotanical studies were impossible (Carpenter et al. 2006; Carpenter and Sanchez 2022).

La Viuda and Rincón de Buyubampo should be categorized as sites of the Serrana tradition with strong influences of Huatabampo. The most common ceramics are affiliated with the Serrana Tradition; Batacosa and Cuchujaqui types described by Pailes (1972). The Huatabampo and Guasave phases are very well represented; 2992 Guasave sherds and 843 Huatabampo sherds were recovered (Table 1), and one figurine head. Two radiocarbon dates ranging between 655–886 years cal AD, were obtained from wood charcoal from an occupational surface associated with Huatabampo sherds (unit 4, 163 cmbs) (Figure 2). Evidence of shell ornament production is also abundant (more than 3000 shell fragments); analysis of marine shell ornament production revealed their manufacture was expedient and at the domestic level (Rodríguez-Obregón 2017).

Artifacts recovered from both sites indicate that they participated in the Aztatlán long-distance exchange system; at La Viuda site 570 Aztatlán sherds were recovered and at Rincón de Buyubampo site 217 sherds (Table 1). Evidence of interaction with the Aztatlán tradition is indicated by a type 1C1a copper bell, prismatic obsidian blade fragments, a cylinder seal, modeled spindle whorls, several Culiacán Polychromes, and Tuxpan Red-on-orange pottery (Carpenter et al. 2006). Additional intrusive ceramics include Arivechi Red-on-brown, and two sherds of Babicora Polychrome from Chihuahua – the latter together with a worked Carretas polychrome sherd found near Guamúchil represent the only Chihuahuan polychromes found in Sinaloa (Figure 5).

In sum, La Viuda and Rincon de Buyubampo are nearby sites that were occupied for over 1200 years, from 600 to 1800 AD. The later Novohispanic occupation above the prehispanic level in Rincón de Buyubampo obscured the indigenous occupation. A *camino real* connecting El Fuerte, Sinaloa with Alamos, Sonora passed through both sites in the Janalacahui Valley (Carpenter et al. 2023).

Mochicahui, El Fuerte, Sinaloa

Mochicahui is situated in the lower Río Fuerte Valley some 10 kilometers upriver from modern-day Los Mochis and, in the sixteenth century, was described by the Spaniards as the principal pueblo of the indigenous Zuaque – the most powerful of the groups occupying the valley. Today, it is the most important Yoeme (Mayo) ceremonial center. At least three funerary mounds have been documented here, and two petroglyph localities (one with a Guasave residential site on the bottom of the hill). In 1988, Talavera and Manzanilla (1991) recovered 15 burials from the small Los Bajos funerary mound in Mochicahui. In 2008, we

TABLE 1.
CERAMIC COUNTS FOR THE HUATABAMPO/GUASAVE SITES

SITES IN SINALOA	HUATABAMPO TRADITION CERAMICS		SERRANA TRADITION CERAMICS			AZTATLÁN TRADITION CERAMICS	TOTAL	Archeological Context
	Huatabampo (AD 200–1100)	Guasave (AD 1000–1600)	Venadito Brown (AD 0–400?)	Batacosa (AD 200–1250)	Cuchujaqui (AD 700–1550)	Aztatlán types (AD 1200–1550)		
La Viuda	756	2,992	7	2,713	2,189	570	9,227	surface/ excavation
Rincon de Buyubampo	86	1,453	0	4,737	408	217	6,901	surface/ excavation
Borboa de Mochicahui	50	9,705	0	0	0	7	9,762	surface/ excavation
Leyva de Mochicahui	0	215	0	0	0	0	215	excavation
Ruiz Felix de Mochicahui	0	509	0	0	0	0	509	excavation
Vialicahui	0	166	0	0	0	0	166	surface/ excavation
Nacho Feliz Ocolome	1	43	0	80	5	0	129	excavation
Ekholm 112	1	29	0	6	5	0	41	surface
La Playa de Ocoroni	0	94	0	7	1	0	102	surface
El Parnaso	0	101	0	7	1	0	109	surface
TOTAL	894	15,307	7	7,550	2,609	794	27,161	

documented the Leyva funerary mound that was thoroughly excavated in the late 1970s by Leonardo Leyva, the owner of the lot. This excavation produced an estimated 40 to 50 burials along with 80–120 ceramic vessels, some of which are curated in the museum collections of the Universidad Autónoma Indigenista de México (UAIM). This assemblage includes Huatabampo/Guasave red and brown wares (Figure 3), Guasave Red-on-buff (Figure 4), Guasave Polychrome, and Aztatlán Red-on-buff as well as the northernmost documented occurrence of complete Aztatlán Engraved and Polychrome vessels (Figure 5), and hollow and solid figurines depicting women and children (Figure 6). A third funerary mound, Borboa de Mochicahui, was discovered in November 2009, and subsequent excavations recovered four burials (Carpenter et al. 2010). Along with El Ombligo, these represent all the funerary mounds yet documented in Sinaloa. It is likely that El Opóchi (Santos 2004), located on the Río Sinaloa in the vicinity of Sinaloa de Leyva, presented an unrecognized funerary mound and there is an unconfirmed report of an additional funerary mound in the vicinity of Guamúchil.

The Borboa de Mochicahui site is a small mound, 50 cm high and 30 × 20 meters long with a discrete distribution of artifacts associated with the mound, located on



FIGURE 3. Huatabampo ceramic vessels recovered in Leyva de Mochicahui Mound (Photographs by the authors).

the second terrace of the Río Fuerte. We suspected that it was a funerary mound because between 1998 and 2005, Mr. Crispín Borboa, the owner of the lot, had found at least five burials when digging trenches for improvements (Carpenter et al. 2010).

The archaeological excavation was carried out, and four burials were found. Burial 1 is a young adult female between 20–30 years old (Watson 2011); buried in a supine position 50 cm under the surface. Burial 2 is a partially complete cranium of a child between 1–2 years old (Watson 2011); found 20 cm under the surface with a shell placed in the mouth. Burial 3 is a child between 1–2 years old with an artificial cranial modification; the cranial shape is a combination of tabular and annular forms of deformation (Watson 2011); it was buried in a supine position in a bed of ash and with a leaf-shaped shell pendant, was found 110 cm below the surface. Burial 4 is located near burial 3. It is a 3–5 year-old child, with the same type of artificial cranial modification observed in burial 3. The occipital is flattened and there is evidence for binding with soft pressure (textiles/bandages) on the frontal and parietals (Watson 2011). It was found buried in a supine position 130 cm below the surface. We obtained radiocarbon ages for burial 3 and 4; Burial 3 was dated to 583 $\pm$ 26, calibrated to cal AD 1302–1414 (AA113697), and burial 4 was dated to 1208 $\pm$ 21, calibrated to cal AD 772–886 (AA115530) (Figure 2). The stable isotope analysis of both burials indicated that maize constituted the primary food staple.

The archaeological excavations at the Borboa mound, produced a total of 11,006 sherds: 99.4% are Guasave type sherds, 265 are Guasave polychromes, including a restorable plate, and 255 are Guasave red-on-brown. Only 50 Huatabampo sherds were documented. Also, five engraved Aztatlán sherds and one engraved spindle whorl were collected (Table 1). Two tubular ceramic earspools were found

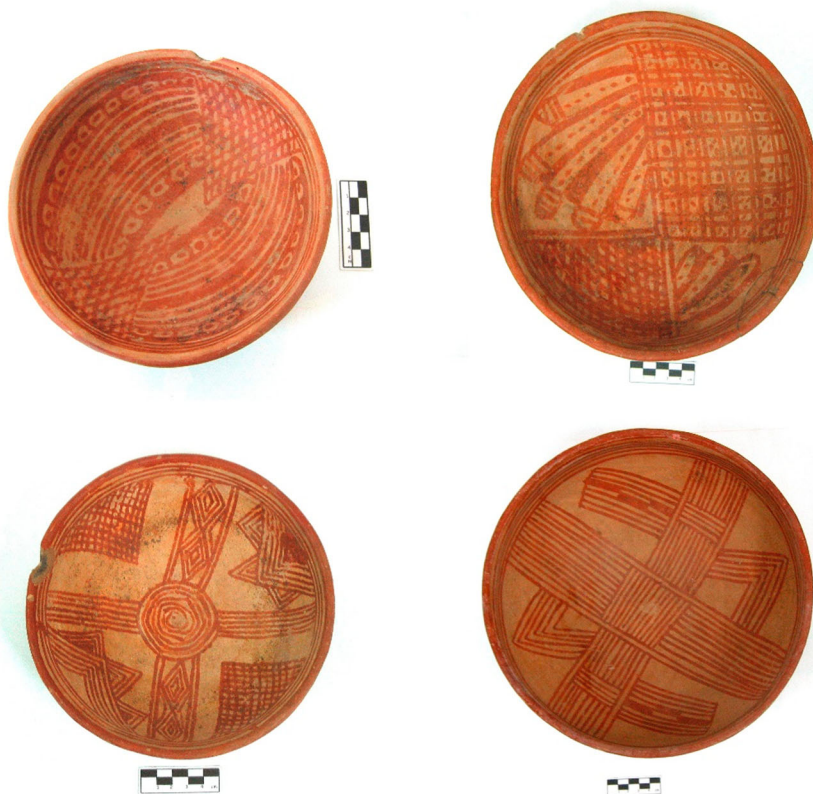


FIGURE 4. Guasave Red-on Buff bowls recovered in Leyva de Mochuicahui (Photograph by the authors).

(Figure 4) – four identical ear spoons were also found at the Guasave site (Ekholm 2008:80) and one at Los Bajos de Mochicahui (Talavera and Manzanilla 1991). A total of 862 shell fragments were collected during excavation; the majority were marine shells modified to make ornaments, although some food remains were found. Bivalves are the more frequent; *Laevicardium sp.* ($n = 80$), *Union sp.* ($n = 94$) *Mytilus californianus* ($n = 107$); only 15 complete ornaments were recovered (Rodríguez Obregon 2017). Also, two hanging-end manos were documented.

At both, Leyva and Borboa mounds, funerary practices included placing a large mollusk shell beneath the head as a “pillow,” and placing a small shell in the mouth. Tabular-erect cranial deformation is evident among the burial population (Talavera 2005) and dental modification was reported by the looter of the Leyva mound (Carpenter et al. 2010). Yet, no urn burials have been documented in the Mochicahui assemblages, and the funerary offerings are much less elaborate in comparison with the Guasave site assemblage. Geographical distribution and the predominance of local materials suggest that these features can best be considered as an attribute of the Huatabampo tradition.

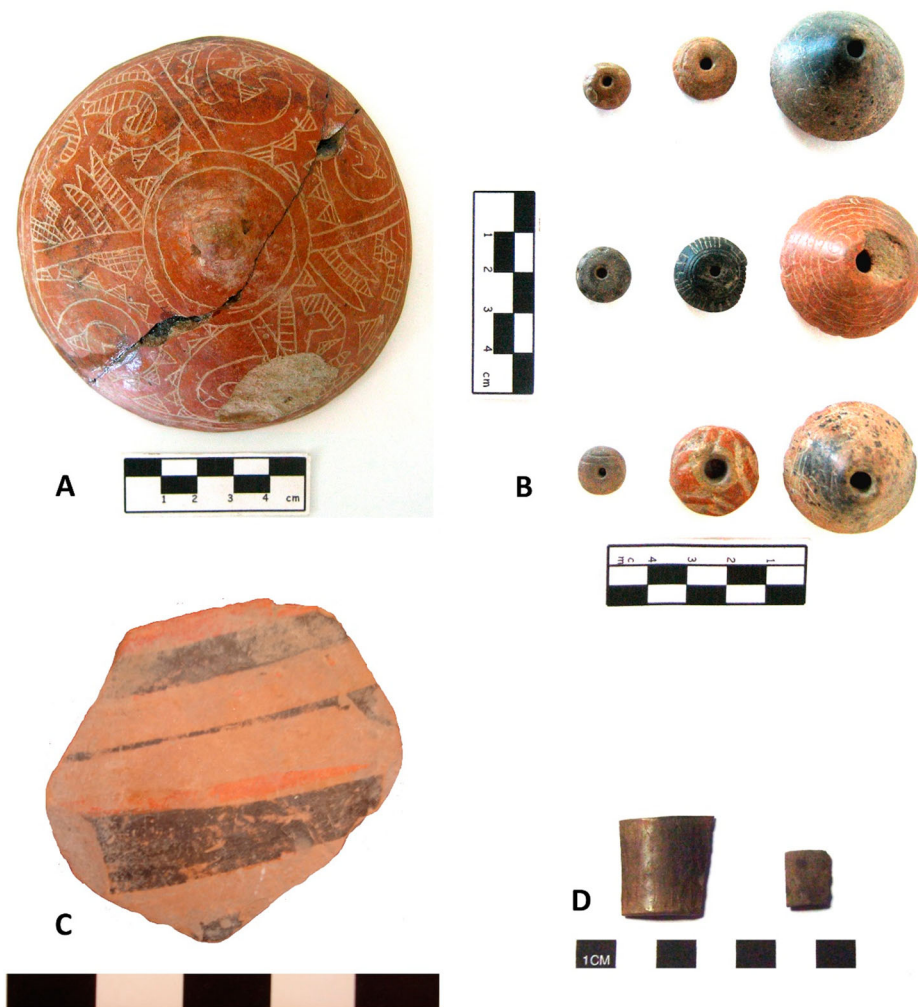


FIGURE 5. Foreign ceramic objects: (A) Aztatlán engraved from Leyva de Mochicahui, (B) Aztatlán engraved Spindle whorls, (C) Carretas polychrome, Chihuahua in the Museo of Guamuchil collection, (D) tubular ceramic earspools from Borboa de Mochicahui (Photographs by the authors).

Arizona State University's Southern Sonora Archaeological Project

Between 2008 and 2015, an Arizona State University project led by Cristina García-Moreno and Ben Nelson was carried out between the Río Yaqui and Río Mayo, on the lower bajada and the coastal plain of Sonora. the first two seasons the research focused on the foothills of the Río Mayo. At the Batacosa site (SON S:7:2), 10% of the ceramics collected ($n = 49$) were Huatabampo/Guasave types, and a complete Huatabampo stirrup vessel in a private collection was recorded (García-Moreno 2009).

In 2011 the project area moved to the north, and the efforts were concentrated in the middle Río Yaqui Valley. A funerary mound 170 × 400 m, and two meters high,



FIGURE 6. Figurines recovered from Leyva de Mochicahui Mound (Photographs by the author).

known as the El Cementerio site (SON P:10:8) located in the town of Ónavas, was excavated during four field seasons. One hundred and ten inhumations were recovered, and the burials were dated between AD 900 and 1635 (Garcia-Moreno et al. 2021). The bulk of the ceramics found at the site were local plainwares; the few foreign sherds were Huatabampo and Guasave types (2%); a Huatabampo gourd shape vessel was found at burial/feature 65 as an offering, the burial bone was dated to 940+/-30, cal AD 1025-1170, Beta 363319 (Watson and García 2016:226). Most of the constructible crania have elongated forms of cranial modification (95%) and 35% presented dental modification (Garcia-Moreno 2013;

Watson and Garcia 2016). In the town of Tónichi, where the Yaqui River turns to the north, a Huatabampo-type stirrup jar very similar to the one at Batacosa was registered in a private collection (García-Moreno 2011:15).

During the sixth season (2013), a survey of the coastal plain between Huatabampo and the border with Sinaloa, was conducted; twenty sites were visited, and 16 new sites were registered (Figure 1). The survey detected those seven sites recorded by Álvarez Palma and Villalpando Canchola (1979) that had been destroyed by shrimp farms. Unfortunately, García-Moreno (2013) did not review Gordon Ekholm's field notes (1941) and it is impossible to know if they visited some of the original Huatabampo sites recorded by Ekholm. The types of sites recorded are mostly shell middens associated with dunes, but a few artifact concentrations without architecture were found. A handful of pottery sherds were collected on 13 sites; all the sites contain Huatabampo or Guasave plain pottery (García-Moreno 2013).

Rethinking Huatabampo

In the previous sections, we presented an overview of the archaeology of sites affiliated with Huatabampo located in southern Sonora and Northern Sinaloa, that have been investigated in the last 40 years. Huatabampo and Machomocobe are agricultural communities without architecture near the Río Mayo; Guasave and Mochicahui are funerary mounds near the Río Sinaloa and the Río Fuerte; la Viuda and Buyubampo are complex sites with a strong Huatabampo/Guasave affiliation in the Serrana region; El Cementerio and Cueva de la Colmena are sites with few influences of the Huatabampo Tradition. Also, we include information for other sites that were tested, or surface collected to help us understand the regional settlement pattern, ethnicity, chronology, subsistence, integration, and interaction.

Unfortunately, the dating record for Northwest Mexico can only be described as impoverished. For example, there are only approximately 250 dates available for all post-Archaic Sonora, and only a handful of these dates prior to 1000 CALBP. However, there is substantial contextual evidence to indicate Northwest Mexico and the western flank of the Sierra Madre Occidental were critical in the emergence of the patterns widely accepted as Mogollon (Diehl 2007). The potential roots of the Mogollon culture are in the Early Agricultural Period, even if the developmental sequence is particular for each branch, the common traits could be traced in the greater Mogollon area through the tenth century AD (Diehl 2007:146). We acknowledge an origin in the Early Agricultural period of the terminal Cochise tradition dated to between ca. 2500 BC and AD 150, with ceramic traditions emerging between ca. 400 and 200 BC, and with a generalized architectural sequence consisting of pit houses that remained until the tenth century (Diehl 2007; Pailes 2015).

Chronology

Based upon 20 radiocarbon dates (Figure 7), we suggest that the term Huatabampo "period" should be substituted for "phase." The subsequent Guasave phase marks the occurrence of Aztatlán traits in Huatabampo communities, reflected in the

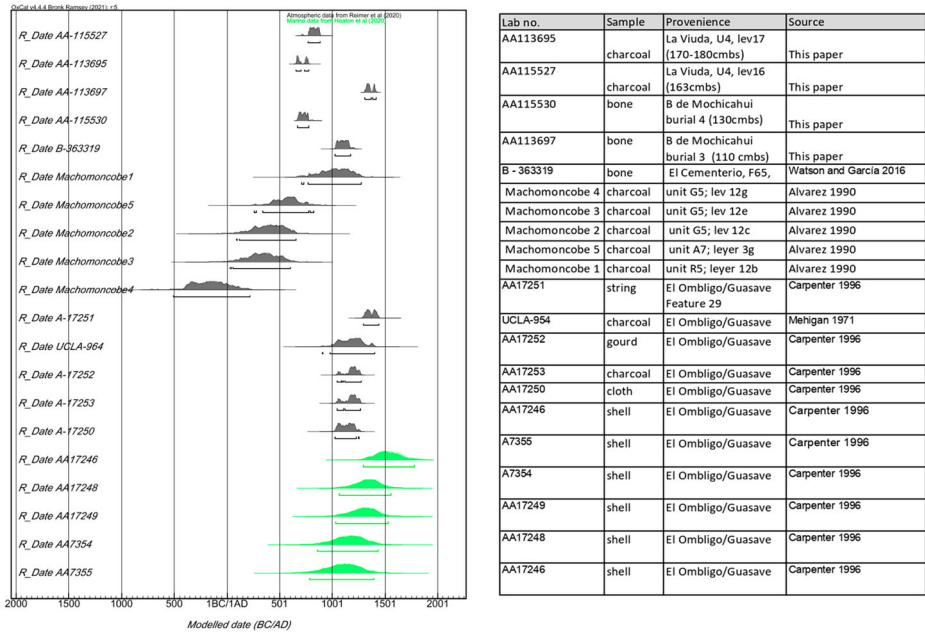


FIGURE 7. ¹⁴C Huatabampo plot OXCAL (Reimer et al. 2020). Table (by Matthew Pailles) with provenience information.

presence of Aztatlán sherds, Guasave red and brown, and Guasave polychrome pottery. Both Talavera and Manzanilla (1991) and Mehigan (1971) suggest an initial date of circa AD 1100, while Ekholm placed the Aztatlán materials at Guasave to around AD 1350. We believe that the Aztatlán traits influenced the Huatabampo culture after AD 1100.

The reanalysis of the data from El Ombligo by Carpenter (1996), identified two chronological components at the site: The earlier Huatabampo period, dated between AD 500 and 1100, followed by the Guasave period, dated between AD 1100 and 1450. Between AD 1100 and 1250, sophisticated ceramic vessels with Mesoamerican gods, clay masks, and pipes associated with Aztatlán complex were either produced locally or imported from the surrounding areas of the Aztatlán culture at Culiacán or Chametla. These sophisticated ceramics have been used to identify Guasave as a Mesoamerican trade center; however, the variability of burials and type of offerings indicate an intensification of the social networks with Aztatlán people during the Guasave phase and do not appear to signify the imposition of a Mesoamerican state or polity. For example, J. Charles Kelley (2000), had identified the most elaborate burial feature at El Ombligo (feature 29) as likely the first burial of likely pochteca, however, this feature was, in fact, among the last final burials of the mound, dating to cal AD 1294–1445 (Carpenter 1996).

Cahitan Connection

The area encompassed by the distribution of Huatabampo traits closely parallels the region historically occupied by the Cahíta, and both Ekholm (1942) and

Álvarez Palma (1982, 1990) have suggested a probable link between the Huatabampo tradition and the Cahíta. This inference is further supported by both the linguistic and ethnographic data presented by Carpenter (1996, 2008; Carpenter et al. 2001; Carpenter and Sanchez 2022). Based on these combined data, we suggest Tara-Cahitan-speaking groups are long-term residents that occupied a linear distribution stretching almost 1,000 kilometers along the Sierra Madre Occidental and adjacent coastal plain, from the transverse volcanic belt to the Arizona/New Mexico border. The Tahue have been recognized as the northernmost Mesoamericans, whereas the Ópata, northernmost of the Cahitans, are regarded as “southwestern” (Carpenter et al. 2023).

As David Wilcox (1986) has previously proposed, the existence of a linguistic continuum would have facilitated the transmission of information and goods between West Mexico and the American Southwest. Importantly, this perspective turns attention from the imperial role of complex Mesoamerican polities to the localized selection and adaptation of both material and ideological traits. This scenario also suggests that the presumed withdrawal of the Mesoamerican frontier during the fourteenth century was neither linked to regional abandonment predicated by shifting ethnic boundaries nor linked to the collapse of politico-economic systems. Instead, continuity of occupation by Cáhita-speaking peoples in northern Sinaloa by the beginning of the Christian era indicates the declining participation in the overt ideological and iconographic symbols associated with their linguistic kin in the Culiacán region. It is possible that the Aztatlán-derived ideology may have eventually been reshaped into local interpretations, as may be suggested for the Mesoamerican elements associated with the late prehistoric period and contemporary Puebloans of the American Southwest (Mathiowetz 2011; McGuire 1980).

Moreover, analyses of the burial data (Carpenter 1993, 1996, 2008) suggest that there is little if any, indication of an actual Mesoamerican/West Mexican occupation. Instead, the Guasave/El Ombligo site appears to have been continuously inhabited by Huatabampo peoples between approximately AD 750 and 1400/1450 (Carpenter 1996). Radiocarbon dates for the Huatabampo site of Machomoncobe range from approximately 180 BC to AD 900 (Álvarez Palma 1990). Radiocarbon dates at Borboa de Mochicahui range from AD 700 (AA115530) to AD 1400 (AA113697), revealing a continuous occupation over almost 1000 years. The burial mound at the Cementerio site ranges from AD 900 to 1650, and it is located within a multicultural region of Opata/Cahita and Pima Bajo/O’ob Nokim. However, the initial burial mound certainly has a Huatabampo/Cahita origin.

Cultural Traits of Huatabampo

Huatabampo is identified as a local tradition emerging from the preceding Early Agricultural Period. The initial ceramic horizon, represented by Huatabampo Brown/Venadito Brown, developed sometime between approximately 200 BC and AD 200, and was followed shortly thereafter by the appearance of redware. This general pattern has been noted throughout the regions where Early Agricultural Period assemblages and would include the Río Sonora/Serrana and

Tacuichamona traditions, along with Loma San Gabriel, the various Mogollon groups, Trincheras and Hohokam (cf., Álvarez Palma [1990]; Carpenter et al. [2023]; Foster [2019]; Heidke [2003]).

Current evidence suggests that the origins of both the Huatabampo and the Batacosa/ Cuchujaqui phases of the Río Sonora/Serrana archaeological tradition, lie within a single early brown ware tradition (Álvarez Palma 1982, 1990; Pailes 1972, 1976). Both ceramic traditions lack painted decorations, and instead reveal a preference for textured surfaces, including pattern incised, scored, brushed, punctate, and, in the case of the southern Río Sonora, corrugation. Thus, these ceramics can best be associated with the Sonoran Brown ware pottery tradition which, as Ekholm suggested, is considered part of the broader Mogollon complex (Álvarez Palma 1990:75; Braniff 1992:105; Ezell 1954:16; McGuire and Villalpando 1991:33–34; Pailes 1976:145–154).

The cultural traits that represent the Huatabampo tradition include well-made plain wares (red, black, and brown) (Figure 3), and the later Guasave type (red, brown, red-on-brown or buff, and polychrome (Figure 4). We suggest that the painted Guasave pottery red-on-brown and polychrome were influenced by the Aztatlán tradition, between AD 1100–1250. Figurines, occasionally both hollow and most frequently solid, are part of the Huatabampo phase repertoire (Figure 7); it is very likely that they developed from the Early Agriculture Period figurines. Overhanging-end manos and funerary mounds are also diagnostic features of the Huatabampo cultural tradition and were collected at Huatabampo, Mochomoncobe, Mochicahui, Guasave, and La Viuda. Shell ornaments are an important part of the cultural inventory, in the sites of Borboa de Mochicahui, La Viuda and Buyubampo is an expedient domestic shell technology, and the manufacture technique appear to be independent of the shell work observed in the Trincheras area.

The Huatabampo tradition extends along the coastal plain from the Río San Lorenzo in central Sinaloa (Grave 2014), north to the Middle Río Yaqui Valley; here, the transition to the Serrana archaeological tradition is imperceptible. A fact that is not surprising, as we recognize the Río Sonora/Serrana traditions as ancestral to the Ópata, in turn, acknowledged as the northernmost of Cahitan-speakers. The most northern Huatabampo sherd in the coastal plain has been found at Empalme near Guaymas, Sonora (Ekholm 1941; García Ferrusca 2018). Between 50 to 60 sites are known to be affiliated with the Huatabampo tradition in northern Sinaloa and Southern Sonora.

Settlement and Subsistence

Settlement data, reflected primarily by artifact scatters, indicate a *rancheria* pattern characterized by small villages or hamlets of dispersed households along the alluvial plain of the principal rivers. The absence of architectural remains suggests that domestic structures were constructed of *jacal* or cane in a similar fashion to those observed in the sixteenth-century Cáhita. Funerary mounds, shell middens and petroglyphs sites along the rivers, are included in the Huatabampo settlement pattern.

All the subsistence data was obtained from trash middens at the Mochomoncobe site (Álvarez Palma 1990); unfortunately, the sites in Sinaloa are in a tropical

environment with very poor organic preservation. Subsistence was based on the cultivation of maize, beans, and squash (Álvarez Palma 1990). Following ethnographic data for the region, agricultural production depended upon periodic inundation of the floodplain during the summer months; however, prehispanic canal irrigation is also possible. *Amaranthus* and *Chenopodium* are also present. Curiously, no remains of *Cucurbita* were recovered, especially considering that some of the Huatabampo *tecomates* replicate the form of *Lagenaria siceraria*, which was cultivated at the time of contact (Alessio Robles 1981:76).

Hunting and gathering of wild foodstuffs were also important. Faunal remains from the site indicate numerous individuals of white-tail deer (*Odocoileus virginianus*), javelina (*Dicotyles tajacu*), cottontail rabbit (*Sylvylagus audobonii*), and jack-rabbit (*Lepus alleni*) (Álvarez Palma 1990). Fish remains were particularly abundant in the midden deposits. Most of the fish species present were snapper (*Lutjanus*), corvina (*Cynoscion*), and bagre (*Arius*), with lesser amounts of *robalo* (*Centropomus*), *cabicucho* (*Diplectum*), manta (*Dasyatis*), and shark (*Carcharinus*) (Álvarez Palma 1990:68). The importance of the marine environment is reaffirmed by the thirty-three species of mollusks also recovered from the site (Álvarez Palma 1990).

Complexity, Integration, and Interaction

Despite the marked differences between the presumed degree of both social differentiation and material wealth observed at El Ombligo, the proportional distribution of relative inequality between the two phases is remarkably similar. According to the Lorenz curve, the relative inequality for Huatabampo and Guasave Phases is very similar (Carpenter 1996:352). These documented differences, which arguably define significant differences in absolute inequality, cannot be ignored. For example, there is a tremendous gulf represented by the wealthiest Huatabampo Phase and that of Feature 29.

However, the overall similarity reflected in the distribution of relative inequality is no less significant, suggesting that the basic social organizational principles which structured the Huatabampo Phase society were largely maintained in the following Guasave Phase. Or, conversely, the relative nature of inequality observed in the Guasave Phase assemblage was established in the preceding phase. Thus, the roots of inequality and rank-ordered corporate lineages can be argued to have been established in indigenous developments and need not be attributed to exogenous dominion (Carpenter 1996:353).

The absence of funerary urns at Mochicahui appears to indicate that the Aztatlán influence was diluted in comparison with Guasave. Although the presence of two codex-style polychrome bowls depicting Mesoamerican gods appears to represent an influence from Aztatlán. Most of the grave lots (such as canteens, stirrup jars, and gourd-shaped vessels) are typical of the Huatabampo tradition. All the burials at Mochicahui are extended inhumations and many present cranial deformations with some evidence of filed teeth. Cranial deformation is a widespread trait throughout the Sinaloan coastal plain and is present in more than 60% of the burials from Marismas Nacionales to Mochicahui; filed teeth are also present throughout this region but with less frequency than that of cranial deformation.

Urn burials are a distinctive trait of the Aztatlán tradition of Sinaloa, representing over 75% of the burials excavated at Culiacán. At Chametla, urn burials were found in the early Baluarte phase (AD 550 to 750) and constitute 90% of the burials excavated by Kelly. Curiously, no urn burials were documented at Amapa, Nayarit, or in the Marismas Nacionales. Guasave urn burial appeared late in the Guasave Phase, and the northernmost urn burial presently known was found at Bahía de Agiabampo at the Sinaloa/Sonora border (Carpenter et al. 2010).

Funerary mounds are correlated with the Huatabampo tradition and at least six mounds have been documented, of which the El Ombligo mound, near Guasave, is the best-known and most spectacular. The El Cementerio-Ónavas in the Middle Río Yaqui Valley, represents the northernmost funerary mound known; affiliated with Huatabampo and Serrana traditions. Interestingly, the Yoreme community of La Playa de Ocoroni is located along a tributary arroyo of the Río Sinaloa, approximately 50 kilometers upriver from Guasave; here, two low platform mounds containing Guasave sherds, which have been incorporated into contemporary Yoreme (Mayo) rituals (Carpenter et al. 2010) (Figure 8).

Whereas Richard Pailes infers an affiliation with “Southwestern” traditions linked by the slender distribution of Río Sonora culture along the western slope of the Sierra Madre Occidental, Álvarez, along with Braniff, cites the bi-lobed vessel forms, ceramic figurines, modeled spindle whorls, prismatic blade fragments, and the overhanging-end mano form, as indicative of an “ancient Mesoamerican root.” These traits, however, except for the obsidian blades, have a widespread distribution throughout the North Mexican coastal plain, extending from Nayarit into the *Papaguería* of southwestern Arizona (Haury 1945, 1950). Reflecting upon this situation, Ekholm, although he compared the Huatabampo pottery most closely to the Mogollon and Hohokam, echoed Beals’ (1932) assessment of northwestern Mexico, in general, in suggesting that the Huatabampo culture be considered independent of either Mesoamerican or Southwestern traditions. According to Ekholm (1942:77):

The Huatabampo culture is not typically Middle American. We found some crude figurines and some modeled animal heads as lugs on pottery vessels, but, in general, the pottery is thin, and the legs and heavy use of modeled clay that is characteristic of Middle American ceramics are entirely absent. On the other hand, it is not a Southwestern complex, although the general simplicity of vessel form and certain aspects of shell carving suggest the Southwest. We cannot speculate on the origins of the culture but suggest that it is a local development with certain traits taken from both the Middle American and Southwestern areas.

The Huatabampo tradition is a local tradition developed from the Early Agriculture Period. Certainly, they are the ancestral Cahita Yoremen and Yoemen, a very religious indigenous people with a sophisticated religious organization, where sacred places in their ancestral land are fundamental for the equilibrium of their lives (Spicer 1980). Huatabampo is a frontier tradition that must be understood in its own right.

It is undeniable that long-distance social networks that allowed for the movement of commodities, beliefs, and ideas along the coastal plain were in place during the Aztatlán phase linking the Sinaloan traditions with West Mexican



FIGURE 8. Borboa de Mochicahui funerary mound on top and Guasave period Playa de Ocoroni mound with the ramadas of the Yoeme Ceremonial Center (Photographs by the author).

societies. As is apparent in the burial practices of Huatabampo tradition, these interactions occurred without the imposition of state power but were employed by local religious leaders (*caciques*) to legitimize their power in societies with deep roots in the region.

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References Cited

Alessio Robles, Vito

- 1981 *Francisco de Urdiñola y el norte de la Nueva España*. Biblioteca Porrúa Historia No. 76, Mexico City.

Álvarez Palma, Ana Maria

- 1982 Archaeological Investigations at Huatabampo. In *Mogollon Archaeology, Proceedings of the 1980 Mogollon Conference*, edited by Pat Beckett and Kira Silverbird, pp. 239–250. Acoma Books, Ramona, California.
- 1990 Huatabampo: Consideraciones sobre una comunidad agrícola prehispánica en el sur de Sonora. *Noroeste de México* 9:9–93.
- 2007 Reinterpretando Huatabampo. In *Memoria del Seminario de Arqueología del Norte de México*, edited by Cristina García and Elisa Villalpando, pp. 99–112. INAH Sonora, Hermosillo.

Álvarez Palma, Ana Maria, and Elisa Villalpando Canchola

- 1979 *Informe del reconocimiento de superficie del Norte de Sinaloa y Sur de Sonora*. Report in the Archives of the Centro INAH Sonora, Hermosillo.

Beals, Ralph L.

- 1932 Aboriginal Survivals in Mayo Culture. *American Anthropologist* 34:28–39.

Blick, John C.

- 1938 *Chinobampo Skull*. Manuscript on File in the Department of Anthropology. American Museum of Natural History, New York.

Braniff, Beatriz

- 1992 *La Frontera Protohistórica Pima-Opata en Sonora, México: Propositiones arqueológicas preliminares*. Vol. I. Colección Científica. INAH, Mexico City.

Carpenter, John P.

- 1996 El Ombligo en la Labor: Differentiation, Interaction and Integration in Prehispanic Sinaloa, Mexico. Unpublished PhD dissertation, Department of Anthropology, University of Arizona.
- 2008 *Etnohistoria de Tierra Caliente: Los Grupos Indígenas de Sinaloa al Momento de Contacto Español*. Difocur/Cobaes/Cronistas, Culiacán.

Carpenter, John, Jonathan Mabry, and Guadalupe Sanchez

- 2001 Arqueología de los Grupos Yuto-Aztecas Tempranos. In *Avances y Balances de las Lenguas Yuto-Aztecas: Homenaje a Wick R. Miller*, edited by Jose Luis Moctezuma and Jane H. Hill, pp. 359–374. Colección Científica 438. INAH-CONACULTA, Mexico City.

Carpenter, John, and Guadalupe Sanchez

- 2022 Archaeology and Ethnohistory of the Northwestern slope of the Sierra Madre Occidental. In *Borderlands Histories: Ethnographic Observations and Archaeological Interpretations*, edited by John Carpenter and Matthew Pailes, pp. 25–49. Utah Press, South Lake City. ISBN 9781647690236.

Carpenter, John, Guadalupe Sánchez, and Haydee Chávez

- 2006 *Informe Final del Proyecto Salvamento Arqueológico Álamo Dorado de la Minera Corner Bay S.A. de C.V.* Report in the Technical Archive, Coordinación Nacional de Arqueología, INAH, Mexico City.

Carpenter, John, Guadalupe Sanchez, and Ismael Sanchez Morales

- 2018 The Archaic in Sonora. In *The Archaic Southwest; Foragers in an Arid Land*, edited by Brady Vierra, pp. 98–111. University of Utah Press, Salt Lake City, Utah.

Carpenter, John P., Guadalupe Sanchez, and Matthew Pailes

- 2023 Confronting the Mogollon Monster: A Perspective from Northwest Mexico. In *Recent Research in the Mogollon Culture*, Utah Press, South Lake City.

Carpenter, John, Guadalupe Sánchez, Ismael Sánchez, Alejandra Abrego, Victor Hugo García, and Daniela Rodríguez

- 2010 *Proyecto Arqueológico Norte de Sinaloa: Rutas de Intercambio. Investigaciones en Mochicahu, Sinaloa 2009.* Report in the Technical Archives, Coordinación Nacional de Arqueología, INAH, Mexico City.

Di Peso, Charles C.

- 1979 Prehistory: Southern Periphery. In *Handbook of North American Indians*, Vol. 9, edited by A. Ortiz, pp. 152–161. Smithsonian Institution, Washington, DC.

Diehl, Michael W.

- 2007 Mogollon Trajectories and Divergences. In *Zuni origins: Toward a New Synthesis of Southwestern Archaeology*, edited by David Gregory and David Wilcox, pp. 146–166. University of Arizona Press, Tucson.

Eckholm, Gordon F.

- 1939 Results of an Archaeological Survey of Sonora and Northern Sinaloa. *Revista Mexicana de Antropología* 3(1):7–11.
- 1940 The Archaeology of Northern and Western Mexico. In *The Maya and Their Neighbors*, edited by Ray, Clarence I, Ralph L. Linton, Samuel K. Lothrop, Harry L. Shapiro and George C. Valiant, pp. 307–320. D. Appleton-Century Company, New York.
- 1941 *Fieldnotes 1937–1939.* Ms. on File at the American Museum of Natural History, New York.
- 1942 *Excavations at Guasave, Sinaloa, Mexico.* Anthropological Papers of the American Museum of Natural History, vol. XXXVIII, Part II. American Museum of Natural History, New York.

Eckholm, Gordon E.

- 2008 *Excavaciones en Guasave, Sinaloa*, Siglo XXI Press, Mexico City.

Ezell, Paul

- 1954 An Archaeological Survey of Northwestern Papagueria. *The Kiva* 19(2–4):3–36.

Foster, M. S.

- 2019 The Loma San Gabriel Occupation of Zacatecas and Durango, México. In *The Archaeology of West and Northwest Mesoamerica*, edited by Foster Michael and Phil C. Weigand, pp. 327–351. New York: Routledge.

Garcia Ferrusca, Hugo

- 2018 *Informe técnico del proyecto de salvamento arqueológico gasoducto Puerto Libertad – Guaymas – limite estatal.* Report in the Technical Archive, Coordinación de Arqueología, INAH, Mexico City.

García-Moreno, Cristina

- 2009 *Informe de la Primera Temporada de Campo del Proyecto Interacciones Southwest/Noroeste y Mesoamérica: Proyecto Arqueológico del Sur de Sonora*. Report in the Technical Archive of the Coordinación Nacional de Arqueología, INAH, Mexico City.

García-Moreno, Cristina

- 2011 *Informe de la Cuarta Temporada de Campo del Proyecto Interacciones Southwest/Noroeste y Mesoamérica: Proyecto Arqueológico del Sur de Sonora*. Report in the Technical Archive of the Coordinación Nacional de Arqueología, INAH, Mexico City.

García-Moreno, Cristina

- 2013 *Informe de la Sexta Temporada de Campo del Proyecto Interacciones Southwest/Noroeste y Mesoamérica: Proyecto Arqueológico del Sur de Sonora*. Report in the Technical Archive of the Coordinación Nacional de Arqueología, INAH, Mexico City.

García-Moreno, C., P. O. Hernández Espinoza, and J. T. Watson

- 2021 Childhood and Identity Acquisition in the Late Prehispanic Ónavas Valley, Sonora, Mexico. *Childhood in the Past* 14(1):38–54.

Grave, Alfonso

- 2014 *Informe primera etapa (reconocimiento de superficie): proyecto arqueológico de salvamento gasoducto El oro-Mazatlán*. Report in the Technical Archive, Coordinación Nacional de Arqueología, INAH, Mexico City.

Grosscup, Gordon L.

- 1961 A Sequence of Figurines from Mexico. *American Antiquity* 26(3):390–406.
1976 The Ceramic Sequence at Amapa. In *The Archaeology of Amapa, Nayarit*, edited by Clement Meighan, pp. 209–274. Monumenta Archaeologica, Volume Two. University of California Press, Los Angeles.

Guevara Sanchez, Arturo

- 1989 Vestigios Prehistóricos del Estado de Sinaloa. Dos Casos. *Arqueología* 1:9–29. Revista de Monumentos Prehispánicos, Instituto Nacional de Antropología e Historia, México.

Hard, Robert J., and John R. Roney

- 2020 *Early Farming and Warfare in Northwest Mexico*. The University of Utah Press, Salt Lake City.

Haury, Emil W.

- 1945 The Problem of Contacts Between the Southwestern United States and Mexico. *Southwest Journal of Anthropology* 1:54–74.
1950 *The Stratigraphy and Archaeology of Ventana Cave, Arizona*. University of Arizona Press, Tucson.

Heidke, James M.

- 2003 Tortolita Phase Ceramics. In *Roots of Sedentism: Archaeological Excavations at Valencia Vieja, a Founding Village in the Tucson Basin of Southern Arizona*, edited by H. D. Wallace, pp. 145–192. Anthropological Papers No. 29. Center for Desert Archaeology, Tucson.

Hinojo, Adriana, Patricia Olga Hernández, and Blanca E. Contreras

- 2017 La Cueva de la Colmena: análisis bioarqueológico de dos entierros humanos del Sonora-Sinaloa Project / R. A. Pailes 1967. *Rutas de Campo* 3:19–32.

Kelley, Charles J.

- 2000 The Aztatlán Mercantile System: Mobile Traders and the Northwestward Expansion of Mesoamérica Civilization. In *Greater Mesoamerica the Archaeology of West and Northwest Mexico*, edited by Michael Foster and Shirley Gorenstein, pp. 137–154. University of Utah Press, Salt Lake City.

Kelly, Isabel

- 1938 *Excavations at Chametla, Sinaloa*. Ibero-Americana:14.

Lazalde, Jesús F.

- 1987 *Durango Indígena: Panorámica cultural de un pueblo prehispánico en el noroeste de México*. Museo de Historia de la Universidad Juárez del Estado de Durango, Durango.

Lehmer, Donald J.

- 1949 Archaeological Survey of Sonora, Mexico. *Chicago Natural History Museum Bulletin* 20:4–5.

MacWilliams, Arthur

- 2018 Archaic Chihuahua, Many Points Few Sites. In *The Archaic Southwest Foragers in an Arid Land*, edited by Bradley Vierra, pp. 145–154. The University of Utah Press, Salt Lake City.

Mathiowetz, Michael D.

- 2011 The Diurnal Path of the Sun: Ideology and Interregional Interaction in Ancient Northwest Mesoamerica and American Southwest. PhD dissertation, University of California, Riverside.

McGuire, Randall H.

- 1980 The Mesoamerican Connection in the Southwest. *The Kiva* 46(1–2):3–38.

McGuire, Randall H., and Elisa Villalpando

- 1991 *Proyecto Reconocimiento Arqueológico en el Valle de Altar, Trabajo del Campo, Primavera 1988*. Report in Technical Archive, Coordinación Nacional de Arqueología, INAH, Mexico City.

Mehigan, Clement

- 1971 Archaeology of Sinaloa. In *Handbook of Middle American Indians*, Vol. 11, edited by G. F. Ekholm and I. Bernal, pp. 754–767. University of Texas Press, Austin.

Pailes, Richard

- 1972 An Archaeological Reconnaissance of Southern Sonora and Reconsideration of the Rio Sonora Culture. PhD dissertation, Department of Anthropology, Southern Illinois University, Carbondale.
1976 Recientes investigaciones arqueológicas en el sur de Sonora. In *Sonora: Antropología del Desierto*, edited by Braniff C. Beatriz and Richard S. Felger, pp. 137–155. Colección Científica Diversa No. 27. INAH-SEP, México.

Pailes, Mathew C.

- 2015 *The Political Landscapes of Eastern Sonora, Mexico: A Reconsideration of Scale and Organization*.

Perez Bedolla, Raul Gerardo

- 1985 Geografía de Sonora. In *Historia General de Sonora, Vol. I: Periodo Prehistórico y Prehispánico*, edited by Gobierno del Estado de Sonora, pp. 111–172. Gobierno del Estado de Sonora, Hermosillo.

Publ, Helmut

- 1985 Prehispanic Exchange Networks and the Development of Social Complexity in Western Mexico: The Aztatlan Interaction Sphere. Unpublished PhD dissertation, Department of Anthropology, Southern Illinois University, Carbondale.
1990 Interaction Spheres, Merchants, and Trade in Prehispanic West Mexico. *Research in Economic Archaeology* 12:201–242.

Reimer, P. J., W. E. N. Austin, E. Bard, A. Bayliss, P. G. Blackwell, C. Bronk Ramsey, M. Butzin, H. Cheng, R. L. Edwards, M. Friedrich, P. M. Grootes, T. P. Guilderson, I. Hajdas, T. J. Heaton, A. G. Hogg, K. A. Hughen, B. Kromer, S. W. Manning, R. Muscheler, J. G. Palmer, C. Pearson, J. van der Plicht, R. W. Reimer, D. A. Richards, E. M. Scott, J. R. Southon, C. S. M. Turney, L. Wacker, F. Adolphi, U. Büntgen, M. Capano, S. M. Fahrni, A. Fogtmann-Schulz, R. Friedrich, P. Köhler, S. Kudsk, F. Miyake, J. Olsen, F. Reinig, M. Sakamoto, A. Sookdeo, and S. Talamo

- 2020 The IntCal20 Northern Hemisphere Radiocarbon Age Calibration Curve (0–55 cal kBP). *Radiocarbon* 62(4):725–757. DOI:10.1017/RDC.2020.41.

Rodriguez Obregón, Daniela

- 2017 Los Objetos de Concha en el Norte de Sinaloa: Su Producción y Comercio en el Noroeste de México. Unpublished Licenciatura thesis, ENAH, México City.

Rzedowski, J.

- 1981 *Vegetación de México*. Editorial Limusa, México City.

Sanchez, Guadalupe

- 2016 *Los Primeros Mexicanos: Late Pleistocene and Early Holocene People of Sonora*. Anthropological Series Vol. 76. University of Arizona Press, Tucson.

Sanchez, G., and J. P. Carpenter

- 2021 Tales of the Terminal Pleistocene: Clovis in Northern Mexico and the First Mesoamericans. In *Preceramic Mesoamerica*, edited by Jon C. Lohse, Aleksander Borejsza, and Arthur A. Joyce, pp. 117–141. Routledge, London.

Sanchez, G., V. T. Holliday, E. P. Gaines, J. Arroyo-Cabrales, N. Martínez-Tagüenia, A. Kowler, T. Lange, G. W. Hodgins, S. M. Mentzer, and I. Sanchez-Morales

- 2014 Human (Clovis)–Gomphothere (*Cuvieronius* sp.) Association ~ 13,390 Calibrated yBP in Sonora, Mexico. *Proceedings of the National Academy of Sciences* 111(30):10972–10977.

Santos, Victor Joel

- 2004 *Informe del rescate arqueológico realizado en el sitio de “El Opóchi,” Sinaloa*. Report in the Technical Archive, Coordinación Nacional de Arqueología, INAH, Mexico City.

Sauer, Carl, and Donald Brand

- 1932 *Aztatlán, Prehistoric Mexican Frontier on the Pacific Coast*. Ibero-Americana:1.

Sayles, E. B.

- 1983 *The Cochise Cultural Sequence in Southeastern Arizona*. Anthropological Papers of the University of Arizona 42. University of Arizona Press, Tucson.

Sayles, E. B., and Ernst Antevs

- 1941 *The Cochise Culture*. Medallion Papers 29. Gila Pueblo, Globe, Arizona.

Spence, Michael W.

- 1978 A Cultural Sequence from the Sierra Madre of Durango, Mexico. In *Across the Chichimec Sea: Papers in Honor of J. Charles Kelley*, edited by Carroll L. Riley and Basil C. Hedrick, pp. 165–189. Southern Illinois University Press, Carbondale.

Spicer, Eduard H.

- 1980 *The Yaquis: A Cultural History*. University of Arizona Press, Tucson.

Talavera, Jorge Arturo

- 2005 Usos y Costumbres Funerarias, apéndice 1. In *Historia General de Sinaloa, Época prehispánica*, edited by José Gaxiola and Carlos Zazueta, pp. 91–115. Colegio de Sinaloa, Culiacán.

Talavera, Jorge Arturo, and Ruben Manzanilla Lopez

- 1991 Proyecto de Investigación y Salvamento Arqueológico en Mochicahui, Sinaloa. *Antropología* 34:22–27.

Vaillant, George C.

- 1940 Patterns in Middle American Archaeology. In *The Maya and Their Neighbors*, edited by Ray, Clarence I, Ralph L. Linton, Samuel K. Lothrop, Harry L. Shapiro and George C. Valiant, pp. 295–305. D. Appleton-Century Company, New York.

Watson, Jim

- 2011 *Documentation of Human Remains from Borboa de Mochicahui*. Archive in the Bioarchaeology Laboratory, Centro INAH Sonora, Hermosillo.

Watson, J. T., and C. García

- 2016 Postclassic Expansion of Mesoamerican Biocultural Characteristics into Sonora, Mexico. *Journal of Field Archaeology* 41(2):222–235.

Wilcox, David R.

- 1986 The Tepiman Connection: A Model of Mesoamerican-Southwestern Interaction. In *Ripples in the Chichimec Sea: New Considerations of Southwestern-Mesoamerican Interactions*, edited by Frances J. Mathien and Randall H. McGuire, pp. 135–153. Southern Illinois University Press, Carbondale.