

On the Origins of the Hohokam and O’odham Peoples
Information for Interpreters, Docents, and Educators

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INTRODUCTION

In 1990, the US Congress passed the North American Graves Protection and Repatriation Act (NAGPRA, the so-called “Graves Act”). The Act significantly empowered Native American tribes, requiring federal agencies and institutions that receive federal funding to return Native American cultural items to *lineal descendants and culturally affiliated* American Indian tribes. Around the same time, Akimel O’odham (called Pimas by Europeans) and Tohono O’odham (called Papagos by Europeans) leaders began to claim their people were direct lineal descendants of the Hohokam—the so-called “continuum hypothesis.” These claims explicitly assert a direct and uninterrupted historical, cultural, and biological descent from the Hohokam (Loendorf and Lewis 2017). The “Official Web Site of the Tohono O’odham Nation”—<http://www.tonation-nsn.gov/>—states (7 August 2024):

“Thousands of years ago, our predecessors, the Hohokam, settled along the Salt, Gila, and Santa Cruz Rivers.”

This is an old idea that was probably first codified by Adolph Francis Alphonse Bandelier and Emil Haury (excavator of Snaketown), but until recently few O’odham believed in it. In fact, O’odham traditions (creation stories and legends), as well as historical records going back to the earliest contact with Europeans, indicate just the opposite—that the O’odham People significantly predated the Hohokam and, in fact, the two groups were enemies who often fought. The Official Web Site of the Tohono O’odham Nation also states:

“Historically, the O’odham inhabited an enormous area of land in the southwest, extending South to Sonora, Mexico, north to Central Arizona (just north of

Phoenix, Arizona), west to the Gulf of California, and east to the San Pedro River. This land base was known as the Papagueria and it had been home to the O’odham for thousands of years.”

This would seem to contradict the claim that the O’odham are the direct descendants of the Hohokam, because the end of recognizable Hohokam culture, based on archaeological evidence, was 1350 to 1450, which is only 575 to 675 years ago (not “thousands of years” ago). There seems to be no solid scientific evidence in favor of the continuum hypothesis and a good deal of evidence opposing it, which is briefly described below.

In this essay references and descriptions of Hohokam culture refer to the archaeological concept of Hohokam, as recognized by scientists working in the Southwest. Specifically, the archaeological culture that was in south-central Arizona from roughly 450 to 1450 CE, as represented by the material cultural remains from that ca. 1000-year-long-period. It specifically does not deal with the concept of *huhugam*, an O’odham word often referring to any O’odham person who is no longer living, over the entire history of the O’odham people. *Huhugam* means “that which once was, but is no longer.” Thus, in the broadest context the Ancestral Pueblos and ancient Egyptians are also *huhugam* and, in fact, many things can be *huhugam* (water, cooked food, money, etc.). When used as *Huhugam O’odham* it refers to the “finished persons,” who modern O’odham believe were their predecessors going back to the first O’odham that ever lived. The word Hohokam was a transliteration made by Frank Russell (1908), who took it from the Pima word *huhugam*; a poor choice that has bedeviled Southwestern archaeology ever since. However, the *huhugam* concept is not the subject of this essay, which instead focuses on a specific archaeological culture called Hohokam as represented by material cultural remains.

THE ARCHAEOLOGICAL EVIDENCE

Abundant archaeological evidence of a probable proto-Hiach’ed O’odham (Sand Papago or Areneño O’odham) culture is seen today all along the northern Sonora coastline, dating to at least the Middle Archaic 4000 BCE. This is described in Mitchell et al. (2020) and is fully documented in Mitchell et al. (2024b). The record could be much older than this, but earlier

archaeological evidence would be submerged off the current coastline, which represents sea level rise stabilization at ~6000 years ago (subsequent to a 100-150 m rise since the Late Glacial Maximum ~20,000 years ago). These likely ancestral O’odham lived as hunter-gatherers in northwestern Sonora over 4000 years before the Hohokam culture first appeared. In fact, the ancestral Areneños were likely the earliest Southern Uto-Aztecans present in the Sonoran Desert and they apparently represent the oldest populational, cultural, and linguistic root of the O’odham People, long preceding the appearance of a Hohokam culture (see maps).

Mitchell et al. (2024b) state, “The varied lines of evidence from our explorations along the coast lead us to conclude that, beginning 6000 years ago, the Puerto Peñasco-Bahía Adair middens were mainly created by the desert dwelling ancestors of the Areneños (Sand Papago or Hiach’ed O’odham) who lived in the western Papaguería during historical times, and whose exploitation of marine resources along this northeastern stretch of the Gulf coast is recorded by both first-hand accounts and oral traditions (e.g., Lumholtz 1912; Childs 1954; Hayden 1988a,b,c, 1998). This scenario would imply that the prehistoric coastal foragers who created the middens in our project areas were the ancestral Areneños, and that the Hiach’ed O’odham of the western Papaguería represent one of the oldest Tepiman-speaking* groups and lifeways in the Sonoran Desert. It would also support culture history models that infer a long-present O’odham population and culture that originated in the Sonoran Desert during the Archaic era and interacted with the neighboring Hohokam, Patayan, Comcaac and Trincheras cultures during later prehistory (Di Peso 1956, 1979; Hayden 1970).” Amadeo Rea, Charles Di Peso, Julian Hayden, Randy McGuire, C.G. Turner II, Malhi et al., and others have also argued that the O’odham are likely descendants of archaic hunter-gatherer populations in the Sonoran Desert or areas just south of the Sonoran Desert.

* The O’odham language is the northernmost within the ancient southern Tepiman group of languages (within the large Uto-Aztecan language family), which is divided into northern and southern branches (Wilcox 1986a). With an estimated origin of at least 9000 years ago (and probably even earlier), Uto-Aztecan is one of the oldest languages in North America, but its place of origin is still debated. Recent work (Merrill et al. 2009) proposes that the Uto-Aztecan language developed in the western Great Basin during the early Holocene, more than 9000 years ago. Uto-Aztecan is also one of the most geographically widespread families in the America, ranging from Shoshone in Idaho to Pipil in Costa Rica. The largest group of Uto-Aztecan speakers today are Nahua, with over 1.3 million speakers

in Mexico alone (Vidal and Brusca 2020). (see maps)

ORAL TRADITIONS AMONG THE O'ODHAM

The oldest O'odham creation stories put them in southern Arizona prior to the Hohokam, typically consider the O'odham and Hohokam to have been enemies, and claim the O'odham won their battles against the Hohokam. There are many ancient O'odham stories about this. Father Kino, speaking with O'odham at the site of Casa Grande (in Arizona) was told their ancestors did not build that village and were, in fact, enemies of those who did (i.e., the Hohokam, whom they called “Jackrabbit Eaters”) (Bolton 1936). During Amadeo Rea's work with the River Pima (Akimel O'odham), over many decades, they told him emphatically that they were not the descendants of the Hohokam and Rea's linguistic research supports this view (Rea 1983, 1997, 1998, 2007). Ethnographer/linguist Amadeo Rea has been studying the Akimel O'odham for over 60 years, and he writes (1983: 10), “Some scholars see a connection between the Hohokam and the modern Pima, but there is scant support for such an idea. Riverine Pima ties—linguistically, esthetically, mythologically, ethnohistorically—are interconnected to the other Piman groups to the south, of which they are just the northernmost extension. The Piman response to both Hispanic and Anglo explorers was the same when asked about the great ruins found in the Salt-Gila Valley: they disassociated themselves completely from them.” Rea also notes (2007: 137), “Revisionist historians, promulgating the Hohokam-Piman continuum hypothesis, would do well to consider what O'odham themselves have maintained for generations about their relationship with the earlier inhabitants of the country.” Rea's linguistic work suggests the Piman (O'odham) language did not evolve in the Sonoran Desert, but south of it, perhaps in tropical deciduous forest and/or pine-oak grassland ecosystems of lower-most Sonora or northern Sinaloa, in the foothills of the Sierra Madre Occidental.

Some Tohono O'odham today claim their ancestors were the farmers who lived at the Las Capas site (3690 years ago), which is likely the case. Yet their official claim today (<http://www.tonation-nsn.gov/>), in contrast, is that they are descendants of the Hohokam (just ~1023 years ago). O'odham legends also speak of trading with visitors from the Gulf of California ~800 BCE, well before the first appearance of the Hohokam culture.

The Gila Pima unequivocally disassociated themselves from the Classic period Hohokam (the “builders of the great ruins”) and made this clear to both the Hispanic missionaries and the earliest Anglos who inquired (Manje, in Bolton 1936: 370; Velarde 1931; Sedelmayr 1955; Whittemore 1893; Bartlett 1854). And, at the time of European contact, over 90% of the area O’odham occupied lay entirely outside the Hohokam region.

Bahr, et al.’s (1994) *Hohokam Chronicles* (aka *The Short, Swift Time of Gods on Earth*) presents the most comprehensive compilation of traditional (pre-European) Pima Indian (Akimel O’odham) oral historical traditions ever compiled. They are verbatim records of Pima elders recorded over several nights in spring 1935 at Snaketown, Arizona. Although they are stories about the Pima People, most of the stories take place during the era of the Hohokam, and fully three-fourths of them deal to some extent with the Hohokam (hence the book’s title, *The Hohokam Chronicles*). These myth-stories and songs unanimously indicate that the Pima long preceded the Hohokam in time.

Resemblances between O’odham cultural material artifacts and those of Hohokam are almost nonexistent. Nothing analogous, nor even faintly similar to the distinct Hohokam snake-eating-toad and bird-eating-snake themes appears in published accounts of O’odham creation stories, traditional stories, or songs (Wright 2022).

Harry J. Winters, Jr. is a geological engineer who began learning the O’odham language at age 17 (in 1957) and over many years became close friends with families in several districts of the Tohono ‘O’odham Nation (Winters 2020a). Over many decades he heard O’odham traditions from elders in numerous districts of the Nation. He visited the Casa Grande Ruins with those elders and, while there, he listened to their tradition stories about the battle between O’odham and Casa Grande dwellers, who are thought to have been Late Classic period Hohokam and who the O’odham called “Jackrabbit Eaters” (*Chuvv Ko’adam*). However, the O’odham elders never used language that suggested a massive invasion or conquest of the whole middle Gila River and lower Salt River Region by the ‘O’odham. In Winters’ opinion, the attacks on the *vapaki* (houses built on platform mounds) like the Casa Grande ruins were targeted at specific

individuals at a limited number of locations. The objective was to remove those persons who the O’odham living in the area believed to be practicing malevolent witchcraft aimed at harming them. Those O’odham brought in reinforcements from outside to assist them. They drove the *vapaki* people away from Casa Grande and they never returned. Winters (2024a) noted that once the O’odham defeated the people at Casa Grande in the fifteenth century they began to occupy the land that had previously occupied by the Hohokam. Winters never heard any details about the ancestors of the *vapaki* people, only that they came from “the north.” The O’odham made it clear to Winters that these people were not O’odham and they did not even know what language the people spoke (Winters 2021).

ARCHITECTURAL & CERAMIC EVIDENCE

Ethnographer Frank Russell (1908) found no resemblance between Pima/Akimel O’odham houses and the “pueblo style” architecture of the Hohokam, and the Pima’s refusal to adopt adobe-walled houses argues against their relationship to the Hohokam. Russell also found Pima pottery inferior to Hohokam ceramics (Russell 1908, 1975; Russell and Lewis 1975). Nor did Pima ceramics emulate the Mesoamerican/West Mexico attributes so distinctive in Hohokam ceramics, such as incising, the triangular motif, interlocking spirals, contrasting positive and negative symbols, and use of shiny natural materials such as abalone (*Haliotis*) and freshwater mussel (*Anodonta*) nacre, mica, and ground shist.

At the time of his studies in 1901-1902, Russell said, “[The Pima] now frankly admit that they do not know anything about the matter” of the prehistoric ruins in the vicinity. And, as Doyel (1991) notes, the Pima did not build hundreds of miles of canals, over 225 ballcourts, and over 45 platform mounds, did not have an economic system encompassing over 65,000 sq km, and did not possess the complex settlement hierarchies recorded for the Hohokam.

GENETIC EVIDENCE

Several studies have assessed genetic affinity between the Hohokam, the O’odham, and other Southwestern tribes through analyses of genetically-based dental morphological traits,

concluding that the Hohokam and Pima are not biologically close (e.g., Scott and Dahlberg 1982; Turner 1987; 1993; Turner & Irish 1989). Instead, these studies found that the Hohokam are most close to northern Mexico cultures. The Pima/Akimel O’odham, in contrast, show closest ties to other Arizona Indian groups. Turner’s 1993 study analyzed 4,619 individuals.

ON THE ORIGIN OF THE HOHOKAM

In the broadest sense, there are two general theories on the origin of Hohokam culture. One views them having arisen out of a band of Mesoamericans who migrated north from central-west Mexico, carrying with them Mesoamerican cultural icons. The other sees them as having arisen in situ, a group of semi-sedentary peoples who, through trade connections with people from central-west Mexico, gradually adopted many Mesoamerican material and cultural traits (perhaps by way of merchants traveling up from central-west Mexico, or perhaps by Hohokam explorations to the south). Regardless of which view might be correct, there seems no question that the “Hohokam millennium” was contemporaneous with only a portion of the deep history of the O’odham and did not predate the O’odham. Despite a thousand years of Hohokam-O’odham coexistence and material and cultural exchanges, there is no evidence that the Mesoamerican cultural traits of the Hohokam “traveled forward” into O’odham culture.

Linguistic evidence (Shaul and Hill 1998) and evidence from burial practices (Shaul and Anderson 1989) suggest that Hohokam encompassed a multiethnic community that consisted of both Yumans and Pimans (thus sharing Tepiman/Uto-Aztecan and Yuman languages), and perhaps also the Zuni later in time (Schroeder 1963). Results of a large genetic study by Malhi et al. (2003) are in accord with this idea. The latter study examined mtDNA diversity of New World Native Americans with the specific goal of understanding origins of Southwestern Indian groups. Although Zuni is a language isolate, the Zuni People have incorporated a number of words from Hopi and O’odham, especially pertaining to religion.

The earliest recognized Hohokam culture included small pithouse villages, grooved and decorated pottery, agriculture, and cremation of the dead. By the early Colonial Period (550-900 CE), a Hohokam presence can be identified in more geographically diverse areas, and by the

Sedentary Period (900-1050 CE) they were at their maximum at roughly 65,000-73,000 sq km (Snaketown was abandoned around 1050 CE). The Bureau of Reclamation alone has surveyed 3,900 Hohokam sites, and excavated over 10% of them. Floodwater farming was the primary agricultural strategy prior to the Snaketown Phase (Gladwin et al. 1937; Wilcox 1979; Cable and Doyel 1985a,b, 1987), but even after the advent of river canal farming, upland agriculture continued to exist (Doyel 1991). In addition to farming, hunting and resource gathering were also utilized to various degrees.

Haury first advocated that the Hohokam evolved in place, based on similarities between preceramic Cochise and Hohokam points, cremation, and incipient agriculture. However, after his second excavation at Snaketown he reversed himself and argued that the Hohokam migrated from Mesoamerica around 300 BCE (Haury 1976). Others supporting the migration hypothesis include Gladwin (1948), Di Peso (1956), and Schroeder (1966). Since then, many others have argued against the migration hypothesis (Dean 1987; Cable and Doyel 1987; Doelle 1985; Doyel 1980, 1981, 1987a,b, 1988, 1991; Fish 1987; Plog 1980; Wilcox 1979; Schroeder 1966, 1981; Kelley 1980; Di Peso 1974), and the majority opinion today seems to be that the Hohokam developed in situ out of an Archaic culture base as suggested by Malhi et al. (2003) and noted above.

Despite Haury's early view that Hohokam villages were structured much like the sprawling rancherias recorded among the historic Pima (Akimel O'odham) of the area, subsequent workers (e.g., Wilcox, et al. 1981; Howard 1982, 1985) showed they comprised clusters of houses, not rancherias. During the Pioneer Period (~300 BCE to ~550 CE), Hohokam homes were large pithouses and there was no distinct village plan, but simple humanoid clay figurines were made and macaw feathers were already being used in rituals. Later, groups of individual houses clustered around exterior courtyards, and these groupings tended to maintain their integrity over time. Courtyard groups often had communal cooking ovens (*hornos*), trash mounds, and cemeteries. Each courtyard group comprised 16-20 individuals. Howard (1982) referred to these as "village segments."

Also countering the Mesoamerican migration hypothesis is the fact that recognized

Mesoamerican cultural customs and artifacts did not appear all at once among the Hohokam, but arrived little by little over time, likely moving north from Mesoamerica along trade routes. The northward movement, over time, of Mesoamerican/West Mexican cultural artifacts (e.g., copper bells, scarlet macaws, pyrite-encrusted mirrors), and the reverse movement of millions of pieces of turquoise southward, are material manifestations of the Uto-Aztecan language chain between these two regions (Wilcox et al. 2008). One of the most profound and widespread Mesoamerican traits, human bloodletting and sacrifice, apparently never found its way into the Southwest.

The first flat-topped Hohokam mounds did not appear until the Colonial Period (550-900 CE), as did censers and ballcourts (Feinman 1991). Mosaic mirrors from Mesoamerica arrived, and ceramics and shell carving became much more elaborate. Cremation was the preferred form of burial. Humanoid figurines became more complex and were produced in greater abundance during the Colonial Period (over 1000 human figurines were recorded from Snaketown, 200-550 CE). The large court at Snaketown could have accommodated 500 people on its massive embankments and was the largest ballcourt ever constructed by the Hohokam (Doyel 1980, Wilcox and Sternberg 1983, Wilcox 1979, 1986b). Note that Huckell (1984) reported crude clay human figurines from the late Archaic, and clay figurines were made by other Southwestern populations, but the Hohokam are “unique” in the sheer numbers, styles, and variety involved and this has been interpreted as a reflection of Mesoamerican affinity or influence. Some of the Colonial Period Hohokam figurines are very similar to those from the Valley of Mexico and the Gulf Coast (McGregor 1965; Ekholm 1940, 1944). During the Sedentary (“Sacaton”) Period (900-1100 CE), village complexity and size increased, platform mounds were elaborated as specialized religious structures, both cremation and inhumation burials take place, mosaic plaque mirrors are elaborated (showing an identical developmental sequence to that of Mesoamerica), and copper bells from central-west Mexico appeared. During the Classic Period (1100-1450 CE), inhumation tended to replace cremation as Hohokam territory contracted, many settlements moved away from rivers, villages show evidence of highly centralized organization, pithouses are supplanted by above-ground, post-supported solid adobe walls, and new designs reflective of Mesoamerican styles appeared on Gila Butte Red-on-buff pottery (Kelley 1966). After 1050 CE, much of the highly ornate material culture of the Hohokam stopped being made, including the carved stone and modeled clay effigy figures and the pallete-censer complex. The culmination

of the Classic Period platform mound architectural tradition can be seen in the still-standing Casa Grande, a 4-story structure the floor of which is a platform mound. The Casa Grande Great House as built 1250 to 1325 CE (and abandoned after 1450).

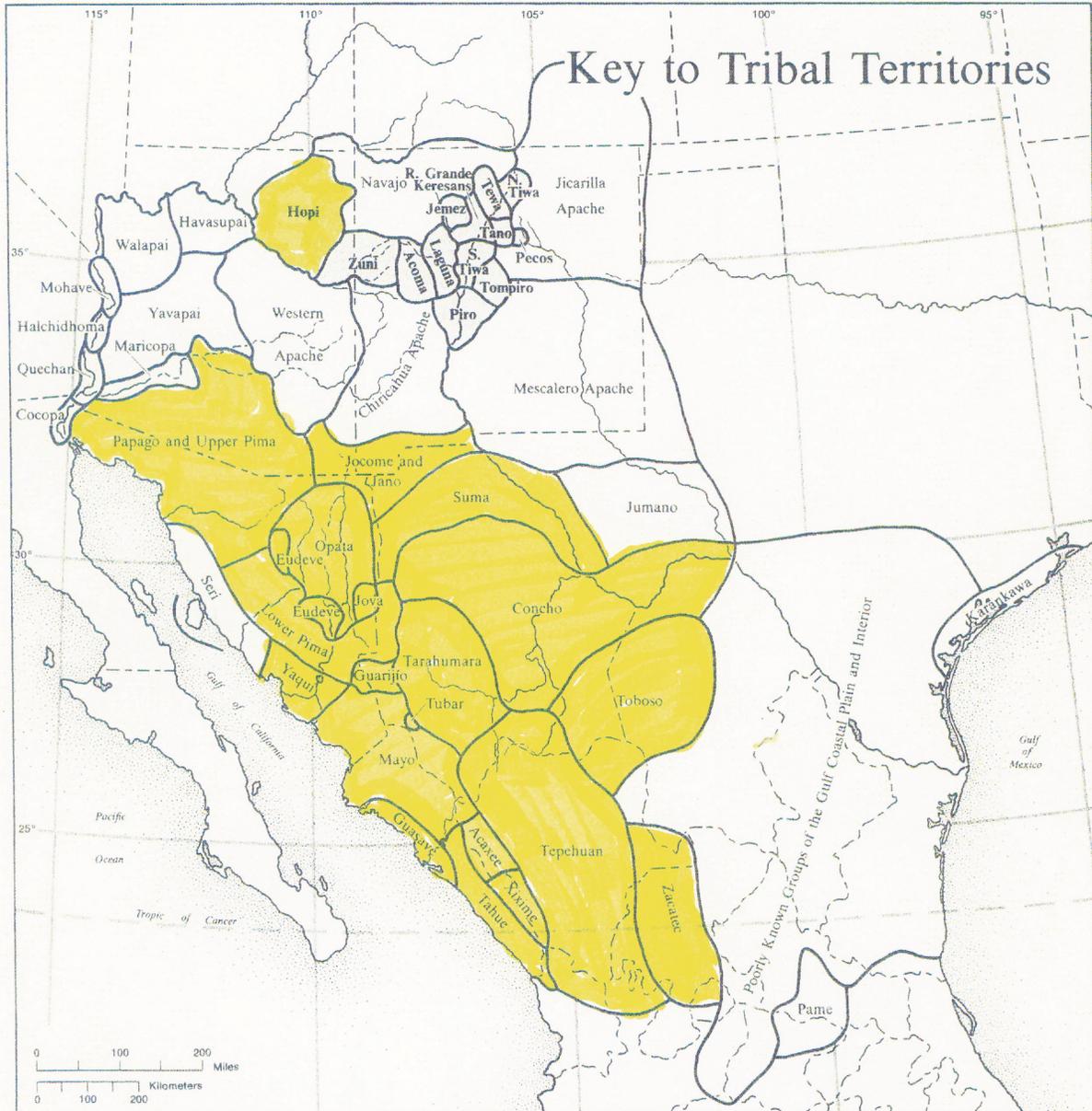
Like elsewhere in the Southwest between 1350 and 1450 CE, numerous large Hohokam villages in the Phoenix Basin were abandoned. Explanations for the abandonment of these villages include a variety of environmental (floods that destroyed irrigation canals, draught periods leading to low summer river flows, soil salinization, deteriorating climate) and sociocultural causes (overpopulation, internal warfare, cessation of trade, shifting centers of power, domination by Casas Grandes in Chihuahua, Mexico). By ~1450 CE, all archaeologically recognizable Hohokam villages in the Phoenix Basin were depopulated; having flowered spectacularly, Hohokam culture was gone. There is no reliable archaeological evidence to support the idea of introduced European disease being the culprit, as suggested by Di Peso (1956, 1974) and a few others.

THE ORIGIN OF THE O'ODHAM

Historically, the O'odham inhabited an enormous area of land in the southwest, extending from Northwest Sonora, Mexico, to Central Arizona (just north of Phoenix, Arizona), west to the Gulf of California, and east to the San Pedro River. Spanish explorers named this land the Papagería and it had been home to the O'odham for thousands of years.

The earliest recognized evidence of O'odham culture is the likely proto-Hiach'ed O'odham People who lived along the coast of northern Sonora at least as early as 4000 BCE (Mitchell et al. 2023, 2024b). These earliest coastal O'odham lived and subsisted much in the same ways that historical Hiach'ed O'odham (aka Sand Papago, Areneño O'odham) did (Brusca 2024, Mitchell et al. 2024a). These proto-O'odham People likely arrived in Arizona via migration from coastal Sonora (or further south) by at least 4000 BCE as regional climates improved and became much moister after the end of the mid-Holocene Altithermal Period (6000-5000 BCE) and southern Arizona began to be repopulated. Early Agriculturists (2100 BCE to 50 CE) lived in southern Arizona long before the Hohokam appeared, growing maize by at least 3690 BCE

along the Santa Cruz River in the Tucson Basin, and using canal irrigation by around 2100 BCE (Gruner 2023). They lived in loosely arranged villages and constructed shallow pit houses. They generally buried their dead (inhumation) in a flexed position in pits located about the village (in contrast to the Hohokam, who burned their dead until the Classic Period when they added inhumation). These agriculturists were likely part of a widespread pool of indigenous peoples of the Pimería Alta region who all spoke a more-or-less common version of Piman language (the Tepiman language subgroup of the widespread Uto-Aztecan language family) out of which historical Tohono O’odham and Akimel O’odham coalesced (as also noted by Winters 2021). When the Spaniards first arrived in the Papaguería, all of the speakers they encountered spoke Piman, and the northernmost Pima/O’odham tribes along the Gila and Salt Rivers could have walked more than a thousand miles, to Jalisco, and communicated the whole way in a shared language (the “Tepiman corridor”) (Wilcox 1986a,b; Rea 1998; Wilcox et al. 2008). In 1989 it was estimated that between 1150 and 1300 individuals in Arizona continued to self-identify as Hiach’ed O’odham (Nabhan et al 1989).



Map of Native American Tribal areas from *Handbook of the North American Indians, Vol. 9, Southwest* (1979) with Uto-Aztecan Language groups (or suspected so) colored in yellow. Note that the Maricopa (Piipaash People) of southwest Arizona speak Yuman of the Yuman-Cochimi Language Family. Maricopa became friends and allies of the O’odham, and in some cases relatives by marriage, beginning hundreds of years ago. They began moving to the Middle Gila River to live among the Akimel O’odham in the eighteenth century, and by 1850 they had all moved to that area to live among the O’odham (Winters 2021, 2024b). See Vidal and Brusca (2020) for details on Uto-Aztecan biocultural diversity in Mexico.



Map of Yuman-Cochimí Languages

From Wikipedia, 23 May 2024

See Vidal and Brusca (2020) for details on Yuman-Cochimí biocultural diversity in Mexico.

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