**Supplemental text 1**

Previous archaeological research in the Mixteca Alta and its ceramic chronology

Archaeological research in the Mixteca Alta dates back to the 1930s to 1960s with the work of Acosta and Romero (1992), Bernal (1948-49), Caso (1938), and Paddock (1953) at the sites of Yucuñudahui, Tilantongo, Monte Negro, Iglesia Vieja, Nochixtlán, Tamazulapam-Tejupan, Xatachío, and Las Pilitas, respectively. Since some of these excavations occurred prior to the development of radiocarbon dating, the archaeological deposits excavated in the Mixteca Alta including the ceramics were relatively dated based on the presence of ceramic materials similar to those found at Monte Albán, which had been placed in the Caso et al. (1967) Monte Albán ceramic sequence by then. Once radiocarbon dating became available, researchers began to incorporate absolute dating results into the Valley of Oaxaca chronology and later on in the Mixteca Alta.

Ronald Spores (1972: 22, 172) conducted stratigraphic excavations in the Nochixtlán Valley that produced ceramic collections whose descriptions and associated chronological information marked the establishment of the Mixteca Alta ceramic chronology.

Since then, there have been further chronological refinements. Marcus Winter (2006) subdivided the Early to Middle Formative period—Cruz phase—into Cruz A, B, C, and D based on Zárate’s (1987) work at Etlatongo and also defined the Yucuita phase to 400-300 BC (Winter and Cruz 2000, see also Blomster 2004: 68-69). Explorations at Yucuita and Huamelulpan further refined the ceramic chronology of the Late and Terminal Formative or Ramos phase (Gaxiola 1984: 44-45; Plunket 1983:24about Ramos phase to Early Classic on n ste is found at Cerro Jazm'der the es, slipped and non-slipped that we believe had been ) and the excavations at Yucuñudahui defined the ceramic markers for the Classic period (Spores 1972:172). Postclassic (Natividad) and Colonial (Convento) period ceramics in the Nochixtlán Valley were defined by Lind’s (1967, 1979, 1987, 2015) and Spores’ (1972) work at Yucuita and Chachoapan.

Additional ceramic descriptions

Nochixtlán gray wares

Of particular interest for our discussion of Late and Terminal Formative period ceramics are the G12, G17, and G21-type bowls described in Caso et al. (1967:25-35, 62, 67). We also refer our readers to Pérez Rodríguez et al. (2017) for a more in depth discussion of decorated gray wares and fine brown wares found at Cerro Jazmín. G12 bowls are gray paste vessels, with smoothed or even polished interiors that are characterized by two or more incised line decorations along the inside lip of the vessel. Another key feature is a decorated bowl bottom marked by incised decorations, points and most often wavy lines that appear to have been made with a comb-like instrument. G17 bowls are less common and often have very polished surfaces. These bowls are distinct in that they are not oval or round in shape and instead have an irregular rim in the shape of a fish or a bird. Along the broader and thicker rim interior there are often incised-line decorations that are often more intricate than those found on G12 bowls. Finally, G21 bowls as defined in the Valley of Oaxaca sequence as gray paste conical bowls with incised line decoration at the bottom, but unlike G12 bowls, the lines are made with single instruments and are often done rather carelessly. Common line decorations were somewhat concentric circles or half circles, wavy parallel lines, and at times, impressions made with the nail or a single reed.

Yucuita tan wares and previous references to Tiltepec yellow wares

The most common ceramics during the Ramos period in the Mixteca Alta and in Cerro Jazmín were the Yucuita tan and red-on-tan wares, which, as defined by Spores (1972: 52-56), come in a wide array of forms and colors. Most Yucuita red-on-tan wares are predominantly cooking vessels, jars, and comals, and to a lesser degree, open serving vessels, which Spores mostly assigned to the Mariana and Alicia varieties (Spores 1972:52-56). Mariana and Alicia variety tans were almost entirely bowls with flaring sides and flat bottoms that were often decorated with incised lines, either straight or wavy. Mariana variety tan wares are primarily found in civic-ceremonial contexts and often have visible coil marks, while Alicia varieties are better finished (having no visible coils) and are found in residential contexts. Spores’ (1972:54) definition of Yucuita tan wares of the Alicia variety, however, includes orange varieties that “become much more frequent in Las Flores than in Ramos times.” This quote suggests that orange-colored Yucuita tans occur in Ramos-period contexts as well, but Spores provided no more details. In Spores’ (1972:64) description of Chachoapan orange wares of the Anita fine variety he describes the clay body as “very fine in texture, often powdery, almost identical to the finest Alicia Variety of the Tan Ware or the finer varieties of Yanhuitlan Fine Cream Ware or Fine Gray.”

Acosta and Romero’s (1992:75) analysis of Late Formative Monte Negro ceramics was based on 224 complete and semi-complete vessels from mortuary contexts. Of these 224 vessels, 59% were described as having an ochre or yellow-pinkish paste. When compared to non-mortuary Ramos-period collections, the Monte Negro sample stands out for its large quantity of funerary and serving vessels and the underrepresentation of utilitarian wares, mainly tan wares. Nevertheless, the Monte Negro data suggest that these ochre-colored wares were an important category among serving vessels.

Scholars working at Yucuita also noted the presence of what they called yellow-orange paste materials in Late and Terminal Formative ceramic assemblages (Winter 2006:97, 99). Patricia Plunket defined La Nopalera orange wares for the Late Cruz period (Plunket 1983: 22), and reported tannish to orange-colored Yucuita tan wares of the T-1 variety, a variety she created specifically to encompass these orange materials. Although Plunket (1983: 412) identified T-1 tan wares as belonging to the Early Classic (150-350 AD), the date ranges she used now correspond with the Terminal Formative or Late Ramos period (Plunket 1983:32).

Margarita Gaxiola (1984:38), working at the contemporaneous site of Huamelulpan, identified three periods of occupation. Based on two radiocarbon dates, ceramic seriation, and the documented stratigraphy, Gaxiola identified the Huamelulpan I occupation, which she dated between 400 and 100 BC (Early Ramos); the Huamelulpan II occupation, dated between 100 BC and 200 AD (Late Ramos); and Huamelulpan III, which corresponds with the Las Flores period (200-600 AD). Aside from the Ramos phase tan, red-on-tan, and gray wares that Spores had previously described, Gaxiola (1984: 33-37) identified yellow, cream, and orange paste wares, as well as *azucarado* (sugar-tempered) wares. According to Gaxiola, yellow and cream pastes corresponded with the Huamelulpan II occupations, while the sugar-tempered wares came from both Huamelulpan I to II contexts. Gaxiola dated orange pastes to Huamelulpan III and 350 C.E. or of what we have terted to the Huamelupan I period. d nder the es, slipped and non-slipped that we believe had been described them as coarse-to-medium paste conical and semi-hemispherical bowls and jars.

The differences among the ceramic types recorded at Monte Negro, Yucuita, and Huamelulpan seem confusing, but a broad pattern can be identified: each site features a salient third ceramic ware, an orange-yellow ware that is more frequent than gray wares in the serving vessel category. This third ware has been placed sometimes in its own indeterminate category and other times in Spores’ classification system as Yucuita tan wares of the Mariana or T-1 varieties.

This article presents chronological and descriptive data on a class of ceramics that we call Tiltepec yellow wares. Chronologically, based on 27 associated radiocarbon dates, we show that Tiltepec yellow wares are found in our ceramic collections starting in the initial occupation of Cerro Jazmín at cal. 261 + 75 BC (the Early Ramos period) and continuing until cal. 273 + 45 AD, the transition into the Classic period. We believe that these materials correspond with the yellow wares and some of the tan wares (Alicia and T-1 varieties) documented at Monte Negro, Yucuita, and Huamelulpan by our colleagues (Acosta and Romero 1992: 75; Gaxiola 1984: 33-37; Plunket 1983: 22, 212; Winter 2006: 97, 99). However, we argue that they should not be included in the tan ware category because they have a distinct, finer clay body and are used for different types of vessels, serving and water storage vessels. These yellow wares have consistently different color than the wide array of colors proposed for tan wares—an observation that has prompted some scholars before us to place these materials in a separate category, often noted for its yellowish-pinkish color.

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