Tejate through time and space

A traditional Mesoamerican maize and cacao beverage moves from Oaxaca to Oaxacalifornia (2022)

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Abstract. The ancient family of Mesoamerican maize and cacao beverages includes tejate, an iconic element of Zapotec life and culture in the Central Valley of Oaxaca. Tejate demonstrates both persistence in the Central Valley, and expansion in Oaxacalifornia where a growing Central Valley Zapotec diaspora continues to make and enjoy the beverage. Using archaeological, nutritional and ethnographic data, we demonstrate the significance of tejate, and how tejate makers and drinkers on both sides of the international border are defying conventional expectations of modernization.

Cántame Tacha una rancherita porque el recuerdo me va a matar cántame Tacha de esas bonitas de esas que a un hombre lo hacen llorar Lila Downs. 2006. El corrido de Tacha "La Teibolera", in *La Cantina*, Narada. [Sing to me Tacha a rancherita Because the memory is going to kill me Sing to me Tacha of these beautiful things Of these things that make a man cry]

Introduction

Lila Downs's song "*El corrido de Tacha 'La Teibolera*," tells of fourteen-year-old Tacha who goes to the city to escape an unpleasant part of the culture of her pueblo, an arranged marriage to an older man. The man speaking, also an escapee from *el campo*, becomes tearful with the memory of the beautiful things Tacha sings of, things he too has left behind. This song captures the core challenge for people in the midst of social change—to create a better life by leaving behind the bad, without losing the good. More often, modernization is a process of "creative destruction," wiping away both the good and the bad, replacing them with both better, and worse. The story of tejate is an example of an alternative possibility.

"Le gustaría endulzada, o simple?" In the back room of a small Oaxacan store in Los Angeles (LA), CA a woman dips a creamy beige liquid from an aluminum bowl and pours it back into the same bowl from a height of about 30 cm. As the liquid plunges down it aerates the liquid and a foam appears, piling into small cumulus islands on the surface, among the few scattered ice cubes already there. The question is directed to a couple, who, like the woman serving, are originally from the Tlacolula branch of the Central Valley of Oaxaca, MX. Their requests for one order sweetened with the addition of sugar syrup, and another unsweetened are poured into plastic cups, with foam delicately added to the surface. This is tejate, an iconic beverage of Zapotec communities in the Central Valley where instead of plastic cups, it is typically served in semi-spherical jícaras (*Crescentia cujete* or *C. alata*), often adorned with images of flowers and birds on a bright red background. However it is served, properly prepared tejate is refreshing and fortifying, with an utterly unique, delicately floral flavor. Tejate is relatively new to the greater LA area, although it has been present in the Central Valley for centuries or perhaps much longer. Tejate belongs to an ancient family of beverages found throughout Mesoamerica made with cacao, and often maize, that are frequently topped with foam. Below we tell the story of tejate, its origins, its persistence, and its relatively recent migration.

Recipe

To understand tejate's past and present let's start with the basic tejate recipe which has four core ingredients: maize (*Zea mays* ssp. *mays*), cacao seeds (*Theobroma cacao*), pixtle (seed of mamey, *Pouteria sapota*), and rosita de cacao - blossoms of the tree *Quararibea funebris*, unrelated to cacao. Tejate sometimes includes fresh coconut, cocoyul (*Acrocomia aculeata*), pataxte (*Theobroma bicolor*), peanuts, or walnuts. Aside from maize, which is grown by many rural households, other tejate ingredients are purchased in regional markets from patlaxtleras, women who sell patlaxte or pataxte, as well as other tejate ingredients.

The maize is nixtamalized using wood ashes, usually from oak, resulting in cuanextle, which is ground on the metate into a fine masa (Fig. 1). The rosita, cacao, and peeled split pixtle are toasted separately on the comal. After roasting, the cacao is peeled, then together these are ground into a fine masa de pixtle (for other Mesoamerican beverages including maize, cacao and pixtle see Trabinino et al., *Arqueología Mexicana*, núm. 168, 2021) (Fig. 2). In a final pass on the metate, both masas are ground together to combine them thoroughly. The combined masa is placed in a large vessel, and water slowly added, mixing by hand. The final amount of water is poured from a height which together with the hand whipping raises the characteristic foam to the surface (Fig. 3).

Fig. 1. a. Stirring maize being cooked with ashes to produce cuanextle.

b. Maize being cooked with ashes to produce cuanextle. Photos © D Soleri

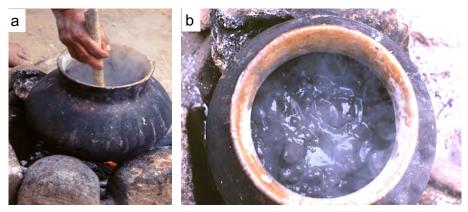


Fig. 2. a. Masa de pixtle ingredients, including pataxte, ready to be ground on the metate.

b. Masa de pixtle ingredients while being roasted separately on the comal.

c. Grinding the two masas together.

d. Tejate, with two masas for freshly preparing more. Photos © D Soleri

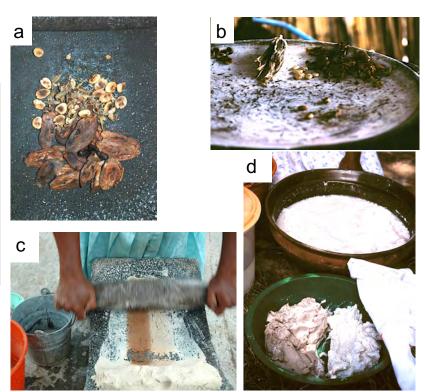




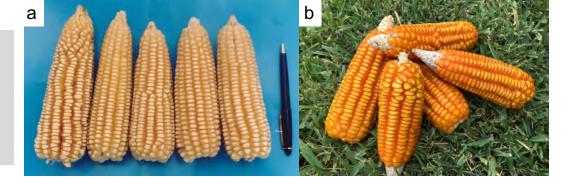
Fig. 3. Lucilia Martínez mixes and then froths an individual serving of tejate in SBQ, Oaxaca. Photo used with permission of subject and photographer, © D Soleri.

Part of an ancient family of Mesoamerican beverages

Tejate is a product of globalization that started thousands of years ago. Three of the core ingredients originated and were domesticated in the region that is now southern Mexico and parts of Guatemala. Genetic studies and microbotanical indicators establish that maize was domesticated from teosintle (*Zea mays* ssp. *parviglumis*) starting about 9000 years ago in the Rio Balsas Valley, Guerrero, spreading early to what is now Oaxaca. Since then, the crop has diversified and spread globally. There are 59 maize races native to Mexico, 35 of them present in Oaxaca, including Bolita that dominates the Central Valley and is preferred for important foods like tlayudas (the large crisp Central Valley tortillas), and tejate (Fig. 4).

Fig. 4. a. White maiz (maíz blanco criollo, raza Bolita).

b. Yellow maíz (maiz amarillo criollo, raza Bolita). Photos © F Aragón Cuevas.



Mamey originated in southeastern Mexico and the adjacent area of Central America where its fruit is collected in the wild, cultivated in home gardens, and grown commercially for example in Tabasco, as is often the case for the pixtle used in tejate. Rosita de cacao, the Spanish translation of the Nahuatl cacahuaxochitl, is a tree native to the low tropics of southern Mexico (Cervantes Servin 1999). In Oaxaca it has long been associated with the Central Valley community of San Andrés Huayapam near Oaxaca City, where many residents have a large tree in their home compounds and harvest the flowers for their own use, and to sell to others for making tejate (Fig. 5).

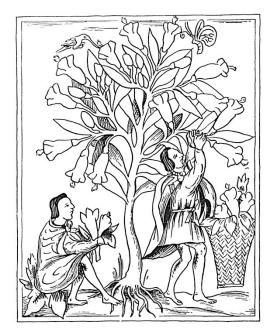


Fig. 5. Harvesting blossoms of "cacahuaxochitl" (*Quararibea funebris*) from the Florentine Codex, or "La historia general de cosas de Nueva España," Fray Bernardino de Sahagún, 16th century. Reproduction from "An unusual spice from Oaxaca: the flowers of *Quararibea funebris*," Rosegarten, 1977.

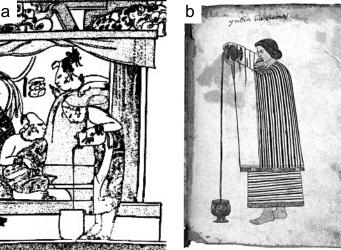
Unlike other core ingredients of tejate, cacao was carried thousands of kilometers to Mesoamerica. *Theobroma* species originated in the upper Amazon region, and through maritime trade or overland migration, cacao traveled north to Mesoamerica. People started using *T* cacao very long ago in both northwestern South America (~5300 years ago), and Mesoamerica (~3800 years ago) (Fig. 6).

Fig. 6. 14th century Tonindeye (Nuttall) Mixtecan codex, Oaxaca, Mexico. Chocolate beverage offered for a marriage ceremony, note the brown foam emerging from the tripod vessel.

From historical documents we know that people in Mesoamerica have been using ground cacao seeds to make beverages for a long time, often including additional ingredients for flavor, color or consistency. Pre-invasion indigenous codices, images on ceramics, and later Spanish colonial documents describe the preparation and consumption of those frothed beverages. Well known images of cacao beverage preparation depict pouring the liquid from a height into itself to froth it (Fig. 7), just as was being done to the tejate in LA.

Fig. 7. Foaming cacao beverage preparation. a. The "Princeton pot," Maya (ca 1250 years before present). Original image K0511, by Justin Kerr, drawing by Diane Griffiths Peck, published in Michael Coe's The Maya Scribe and His World. b. 16th century Tudela Codex.





It has been proposed that the preparation of frothed beverages in early Mesoamerica had an important role as a visible performance that could incur social debt in those for whom the beverage was being prepared (Henderson and Joyce 2006) (Fig. 8). Based on comments of people drinking

tejate today, the surface foam is also appreciated because it expands the sensorial experience of the beverage beyond the gustatory to include the visual and olfactory, as the foam releases trapped floral aromas. Indeed, Zapotec speakers refer to this foam as *ghilo* or *gyììa cu'uhb* – the flower of tejate.

Fig. 8. Possibly representations of foaming cacao beverages with blossoms. 14th century Tonindeye (Nuttall) Mixtecan codex, Oaxaca, Mexico.

Archaeological evidence for tejate requires the simultaneous presence of cacao and maize. Methylxanthine compounds like theobromine and caffeine are botanical stimulants; theobromine is the predominant one in *Theobroma* species, and provides evidence of cacao beverages in residues from vessels of known age. Recently, starch grains diagnostic of *Theobroma* spp seeds have been identified (Zarrillo et al. 2018), and help archeologists distinguish *Theobroma* fruit pulp and seeds. This is valuable for understanding the history of cacao, and the cuisines that use it. For example, identification of *Theobroma* seed starch grains in



Amazonian vessels from approximately 5300 years ago rejects the hypothesis that in South America early consumption was primarily of cacao pulp.

As with cacao, there are accepted indicators of the presence of maize in the archeological record: leaf and cob phytoliths –diagnostic microscopic silica deposits inside plant tissues. We found both maize phytoliths and theobromine in residues of two out of eight Post Classic ceramic vessels from the Central Valley (Soleri et al. 2013), a first step in investigating the history of tejate. However, evidence that tejate was present also requires indicators for pixtle and

rosita de cacao, but no indicators have yet been identified.

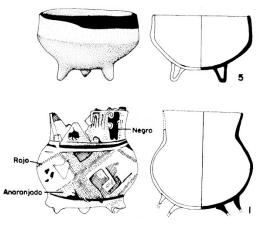
Fig. 9. The two out of eight Post Classic vessels from the Oaxaca Valley found to contain evidence of both maize and Theobroma spp. Both vessels were from the Tlacolula branch of the Valley, the upper from Xaagá area, lower from Macuilxóchitl. Drawing by Juan Cruz Pascual, INAH Oaxaca. Source: Soleri et al 2013.

Despite a lack of robust evidence for ancient tejate preparation thus far, its importance for Zapotecs today in the Central Valley and beyond demonstrates the persistence of ancient foam topped maize and cacao beverages.

Tejate today in Oaxaca

It is easy to see the continuity between ancient foam-topped beverages and tejate in 21st century Central Valley communities. To have a better understanding of contemporary tejate preparation and consumption, and the relationship between tejate preparation and maize diversity, in 2007 we interviewed a random sample of 25 households in San Bartolomé Quialana (SBQ), a Central Valley farming community near Tlacolula.

Our interviews confirmed that tejate is valued culturally and socially. The beverage is prepared for agricultural work, especially the strenuous labor of maize field preparation and harvest, and is an expected part of payment for hired field labor. Tejate is also prepared for celebrations and Christian



religious festivities such as quinceañeras, baptisms and Easter. Still, the households we interviewed described tejate as a normal part of their diet, with 88% of them preparing tejate at home two or more times a week, a significant investment of women's time and labor. They reported an annual average consumption of home prepared and purchased tejate of 94 and 82 times, respectively. On average, 19% of household maize consumption for food was in the form of tejate, about 181 kg per household annually. Selling tejate can also be an important source of income for women working as tejateras (Cervantes Servin 1999).

The majority of households in SBQ use Bolita maíz criollo blanco for tejate, 36% also use criollo amarillo, but no one reported using other colors, even though some households grow those varieties. Many of the households also obtained white grain of industrially grown maize, which in 2007 they purchased at a CONASUPO store. While 21% of respondents said it might be possible to make tejate with CONASUPO maize, only one household did. Everyone interviewed said the productivity, quality and flavor of tejate would decline if CONASUPO maize is used, and even though a quarter said they would use the industrial maize for tortillas or tlayudas, they would not use it for tejate. This suggests that tejate may play a role in conserving the genetic diversity of farmers' maize varieties.

The nutritional impact of tejate is just starting to be understood (Sotelo et al. 2012). The consumption of tejate with added sugar is a concern because added sugar is a major cause of the epidemic of type 2 diabetes and obesity in Mexico and the US. However, a large majority of households we interviewed noted that when tejate consumption is replaced it is by sodas. Unlike soda, tejate provides important amounts of nutrients including protein, methylxanthines, and minerals such as calcium and iron. Because, unlike soda, the complex carbohydrates in tejate contribute substantially to its energy content, tejate's impact on diabetes and obesity is complex and needs further investigation to create accurate public health information regarding this and similar culturally important traditional beverages. According to households we spoke with in SBQ and elsewhere in the Central Valley, tejate is a desired form of nourishment during hard work and hot weather that provides satiety that soda does not.

Human migration brought together the key ingredients of tejate, and human migration is now expanding the geographic home of tejate, carried by the extended Central Valley community in LA.

Tejate today in Oaxacalifornia

Decades of international policies, and the increasing impact of the anthropogenic climate crisis are major factors driving Oaxacan farmers to migrate, including to southern California, part of the larger region inhabited by Zapotecs and other indigenous Oaxacans, referred to as Oaxacalifornia. We believe tejate has been in Oaxacalifornia for about two decades.

Estimates are that over 250,000 Zapotecs live in the greater LA area. Although early migrants from SBQ to California worked in agriculture, many now work in landscaping and food service. In 2007 we visited a tejatera from SBQ who sold tejate masa to community members from her home. Masa de pixtle ingredients were brought by courier from Oaxaca, and she bought whole white maize, originally intended as chicken feed, from a local feed store. She prepared tejate traditionally, including ash nixtamalization, toasting of pixtle masa ingredients, and final grindings on the metate. Since 2008 a Tlacolula cultural and folkloric group in LA has held an annual Feria del Tejate in LA with tejateras selling tejate, and attracting crowds of thousands until it was suspended in 2020 due to the COVID-19 pandemic (Fig. 10).

Fig. 10. Representatives of the Grupo Folklórico Guish-Bac announce the cancellation of the annual Fiesta del Tejate in September 2020 due to the coronavirus pandemic and thank past participants. Credit: Grupo Folklórico Guish-Bac Facebook, used with permission.

Among several stores offering Oaxacan foods, is the one described in the introduction, started by people from SBQ and Tlacolula (Fig. 11). That store offers familiar foods from the Central Valley,



including ingredients for masa de pixtle, and fresh tejate in the afternoons, delivered by a tejatera. Instead of chicken feed, commercial food grade maize is now used by tejateras, and also available

through the store. As one tejate drinker from SBQ declared, "the taste is not as good as tejate made from criollo maize…but it's better than nothing!"

Fig. 11. The Corredor Oaxaqueño Market in Los Angeles, CA. a. A mural on the wall outside. b. Fresh tejate served inside. Photo © D. Soleri.



Conclusion

Tejate is emblematic of Central Valley Zapotec identity, and all the tejate activity in Oaxacalifornia thus far has been by and for the Central Valley community (Fig. 12). This includes a new generation raised in Oaxacalifornia and interested in their Oaxacan heritage, some of whom circulate images of jícaras brimming with tejate on their social media accounts.

Fig. 12. Doña Roberta Felipe serving tejate from her street stand in Los Angeles, CA. Photo by Bill Esparza, used with permission. <u>https://la.eater.com/2017/5/3/15353854/taste-history-with-tejate-an-ancient-pre-hispanic-street-drink.</u>

Tejate's story so far demonstrates the persistence and geographic expansion of a traditional food, a story of selective resistance to the expectations of modernization and acculturation. In keeping tejate alive in their new locations, and introducing their children to it, Central Valley migrants in Oaxacalifornia are retaining part of their cultural identity. Tejate is one of the "beautiful things" like those that Tacha, and the man listening to her rancherita, are remembering and keeping, resisting modernity's expectations.



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