How the archaeology of TEK can counter "unused land" narratives and support Indigenous Maya food sovereignty

Chelsea Fisher
cfisher@wlu.edu

A paper submitted to the session:

Decolonizing Diet: Supporting Indigenous Food Sovereignty through Archaeology
An Electronic Symposium to be presented at the Society for American Archaeology 87th Annual Meeting, March 30 – April 3, 2022, Chicago, Illinois
Organized by Anna S. Antoniou and Elspeth Geiger

This paper explores methods for engaging deep histories of traditional ecological knowledge (TEK) and food sovereignty in the community of Yaxunah, Yucatán, Mexico. I've been involved in archaeological research in Yaxunah from 2013-2017, with a long pause first to write my dissertation and then because of the pandemic. I'm eager to return to Yaxunah and to re-establish relationships with community members this upcoming summer. I plan to bring a few ideas for possible collaborative projects, to use as a starting point for discussing directions for future fieldwork with members of the Yaxunah community.

Here, I give some background on Yaxunah and explain my past involvement documenting deep histories of TEK through archaeology in the Yaxunah landholding. Then I describe a participatory video-based methodology that was developed by civil organizations involved in food sovereignty initiatives in Yucatán and Chiapas. I conclude by envisioning how this methodology might be adapted and integrated into engaged archaeological projects in the Yaxunah landholding. I'm looking forward to the feedback of other session participants about the viability of this video-based approach, and I hope others might be encouraged to adapt it for other archaeological projects.

The Yaxunah ejido and the useless land narrative

Yaxunah is a small town of 600 people in the central interior of Mexico's Yucatán Peninsula. Many Yaxuneros speak Yucatec and many identify as Maya. The town is

surrounded by its ejido, or collective agricultural landholding, a sprawling 4066 hectares of mostly forested land. Yaxuneros engage with their landholding to farm, gather firewood, hunt, graze livestock, keep honeybee hives, harvest building materials, and forage wild food plants and medicines. The ejido also includes the remains of archaeological sites, among them Yaxuná, a large precolonial capital city, and Hacienda Cetelac, a colonial cattle ranching estate. Archaeological research in the ejido has been ongoing since the 1980s, with projects from the United States and Mexico typically employing Yaxuneros in excavations, survey, and camp logistics (e.g., Stanton et al. 2010).

Today many ejido lands, like Yaxunah's, are vulnerable to dispossession. Back in the early 1990s, Mexico legalized the sale of ejido lands as part of a wave of neoliberal agrarian reforms (Gálvez 2018). While in theory the right to privatize land could empower Mexican farming communities, on the ground and in practice the policy change has opened the door to corrupt land deals and illegal land grabbing.

One way that landholdings become vulnerable to dispossession is when communities rely less on them for farming. Climate change has decreased subsistence agriculture, as sudden and unexpected shifts in rain and temperature destroy harvests and render millennia-old farming practices unreliable. To cope with this risk, many Maya people from traditional farming communities seek cash-earning alternatives. In Yaxunah, this means migrating to Cancún or Mérida to find work in construction or tourism, or carving wooden souvenirs for sale at tourist destinations like Chichén Itzá. Earning cash buffers against the risks of subsistence agriculture, but relying more on store-bought ultra-processed foods weakens food sovereignty and contributes to public health problems (Gálvez 2018). Furthermore, the interventions of celebrity chefs and sustainable development projects in Yaxunah have brought culinary tourists into the community (Figure 1; Fisher and Ardren 2020). Many Yaxuneros who do continue to farm are pivoting away from subsistence farming and instead cultivating small amounts of certified organic, heirloom maize that can be marketed to these tourists.

All these entangled trends bolster a narrative that ejido lands are no longer being used and that they are economically useless. I've argued that this useless land narrative creates an opening for land dispossession, and as such potentially disenfranchises current and future generations from the land security required for long-term agricultural resilience and food sovereignty (Fisher 2019).

TEK-based survey in the Yaxunah ejido in 2017

I began to think of archaeology as a tool for countering the useless land narrative during my dissertation fieldwork in 2017. I was working at Tzacauil, the site of a precolonial farming village at the eastern edge of the Yaxunah landholding; these forested edge lands, far from town and rarely farmed anymore, are precisely the kinds of places at risk of privatization. Before excavations began, I worked with a team of six Yaxuneros - four men, two women - to conduct a week-long TEK survey of the Tzacauil site and its surroundings (Figure 2; Fisher in press).

We visited each of the nine house mounds in the site and fanned out to cover a radius of about 30-50 meters, the ground that likely served as each house's garden area. As we walked, I asked the Yaxuneros to imagine why an early farming household would have been drawn to each homesite in the Tzacauil landscape. After a slow start our conversation picked up a steady rhythm.

Over rambling walks and rambling conversations, the team of Yaxuneros taught me to recognize the many ways TEK is interwoven with the forest landscape. They pointed out subtle shifts in soil color and texture, explaining how various cultigens would fare in different patches. They helped me recognize the diversity of plant communities in the terrain's mosaic of soil and bedrock (Figure 3). We examined bedrock expanses and the many kinds of natural - and modified - depressions they held, discussing their possible uses for rainwater storage and container gardening.

I recorded these TEK insights onto a map, loaded with lidar imagery, on an iPad running the geological survey app FieldMove. I also took photos and videos to document our conversations around key landscape features. These insights, generously

shared, became an essential component in reconstructing ancient Maya land-use and the origins of agricultural TEK at Tzacauil.

One day on the TEK survey we came across a collapsed stone structure that appeared nowhere on my site map. We stood around staring at it for a few minutes, the Yaxuneros with mild curiosity and me with slight panic for my excavation plans, when one of the men, Don Carlos, abruptly asked another, Don Ricardo, if this wasn't his old corncrib? Surprised recognition dawned on Don Ricardo's face as he looked again at the rock pile and confirmed Don Carlos' guess - this was not an ancient structure, it was all that remained from a temporary corncrib he had built fifteen years earlier. He had been the last person to make milpa this far out in the ejido.

This ignited a conversation: why didn't anyone want to farm out here anymore? Because it's too far from town, because the soil is no good, because there are too many coatimundi, because pesticides are too expensive now, because it's better to carve masks than to farm - the answers were many, and looking back at the responses I see how they were entangled with the larger dynamics of the useless land narrative.

When I completed my fieldwork and began interpreting what we found, it became clear that these "useless" lands had been vitally important in the deep and recent past, a partner in the multigenerational resilience of farming communities (Fisher 2019). I recognized, too, that fieldwork itself provided paid opportunities for community members to (re)connect with ejido lands not only in conversation, but also in practice: hunting, beekeeping, foraging, and gathering forest materials were all activities that became tacked onto fieldwork at the ejido edges each day.

Reflecting on this project and the development of our TEK survey, I recognized plenty I'd do differently. I was making the calls, and I was the one recording, filming, and interpreting. Participants signed releases, but I see now that this important part of the process was rushed and largely one-sided. The use-life of the raw footage and the TEK insights shared with me have been limited to inaccessible archaeological publications. As I began to look ahead to future field seasons, I started reflecting on how the process of TEK survey could be more participatory and inclusive from start to

finish. I also began searching for resources published by non-archaeological projects working on food sovereignty in the region.

Documenting local knowledge: Practices from the *Toolkit for Food Security and Food Sovereignty*

While researching food sovereignty organizations based in Yucatán, I found a report titled, *Morral de experiencias para la seguridad y soberanía alimentarias: aprendizajes de organizaciones civiles en el sureste mexicano* / *Toolkit for Food Security and Food Sovereignty: Lessons from civil organizations in southeastern Mexico* (Figure 4). The toolkit, created by Linda Lönnqvist, Mateo Mier y Terán Giménez Cacho, Nora Tzec Caamal, and Yolotzín Bravo Espinosa (2018) and with the contributions of several other co-authors aggregates years of practical experience from food sovereignty initiatives in Chiapas and the Yucatán Peninsula.

The toolkit is the outcome of collaborative efforts among twenty-three civil organizations, all involved in food sovereignty initiatives; their alliance is known by the acronym CASSA, which in English translates to the Food Sovereignty and Food Security Learning Community. CASSA assembled over several multi-day meetings between 2016 and 2018 to exchange information, share successes and setbacks, to pilot new programs and to reflect collectively on results. Participants included Indigenous Maya, Mexican, and foreign stakeholders. The toolkit is written so that other folks working in food sovereignty in these regions can have a starting point for possible ideas and templates, which they can adapt according to local needs.

Within CASSA, a working group on local knowledges (saberes locales) piloted a video-based methodology in several Indigenous Maya communities (Lönnqvist et al. 2018:124-141). The goal was to enhance food sovereignty through participatory production of short films showing community members engaging in culinary and agricultural practices. The working group participants noted that when footage is compiled and edited into short films - a process steered by community members from start to finish - the resulting videos make local knowledge accessible and engaging. The

working group members advocate for a participatory approach by which community members tell their own stories, from scriptwriting to filming to editing. Engaging younger community members, especially on the production side, opens channels of conversation and knowledge transfer across generations. When the videos were finished, they were screened at community film festivals, where to sparked even more productive discussion, and eventually posted online.*

At the end of the pilot project, the participating communities were given the finished films as well as all the raw footage. By making the video widely available (online and in file formats), communities can use the video to instruct and/or remind community members how to practice key culinary and agricultural techniques, like how to build an effective firebreak around fields or how to prepare traditional dishes.

I was interested particularly in comments from Margarita Noh Poot, a Yucatec Maya woman involved in the working group who outlines suggestions for future local knowledge video projects (Lönnqvist et al. 2018:138). Among her advice: experiment with the use of cell phones for filming, to show that video is for everyone; prioritize the practices the protagonists want to show you, even if it's not what you would have prioritized; walk about the land with elders; ask people how los abuelos - grandparents - did certain things, and why; ask people questions based in their expertise (e.g., why do you use that kind of leaf?); and find folks from the community to film, edit, and translate rather than relying on outsiders.

Potential applications for archaeological fieldwork and food sovereignty in the Yaxunah ejido

Though archaeologists are not the intended audience for this toolkit, I see opportunities for archaeological projects to adapt the participatory video-based methodology, developed by the CASSA local knowledges working group, to engage

* The CASSA local knowledges video channel is available on YouTube at: https://www.youtube.com/channel/UCQRD-VTaS280t9pae6aozLw

communities like Yaxunah in constructing deep and ongoing histories of food sovereignty.

To give a sense of what this might look like, several Yaxunah community members have expressed interest in archaeological investigations of the colonial-era cattle estate, Hacienda Cetelac (Figure 5). Some community members have memories of their grandparents using Cetelac's infrastructure, like watering troughs, to care for cattle in the mid-twentieth century, and some ejidatarios today still pasture cows in the grasses growing near the hacienda ruins. Collecting oral environmental histories of these multispecies relationships, using video walk-throughs on-site at the hacienda, could be a powerful way to engage community members in discussions about changing agricultural practices. Likewise, Hacienda Cetelac includes the remains of Colonial-era houselots where families of Maya laborers bound to the estate kept gardens and livestock. Today homegardens continue to hold an important place for Yaxuneros, and I imagine productive conversations about food sovereignty could emerge by inviting Yaxunah gardeners to share their knowledge on video, both while walking the Colonial houselots under archaeological investigation as well as their own homegardens. I believe there's strong potential to engage multiple generations in discussions of historical food sovereignty through video production and viewing, as well as to spark critical conversations about traditional ecological knowledge and the long-term "usefulness" or "uselessness" of holding onto ejido lands.

The CASSA toolkit makes clear that participatory, process-focused frameworks are critical to success, a point in harmony with conversations ongoing in engaged and Indigenous archaeologies. I see potential for the blending of video-based local knowledge documentation with archaeology in the Yaxunah ejido, but much will depend on community desires and needs; my interest in using archaeology and film to interrogate useless land narratives may not be shared by Yaxuneros. With that in mind, I plan to present the approach developed in the CASSA toolkit - and example videos - to local Yaxunah authorities in the upcoming field season and discuss the possibility of implementing something similar in their ejido. For now, I look forward to hearing what

other participants in this electronic symposium think about this potential application of video-based methodologies to the archaeology of food sovereignty, both generally and in their own projects.

Figures

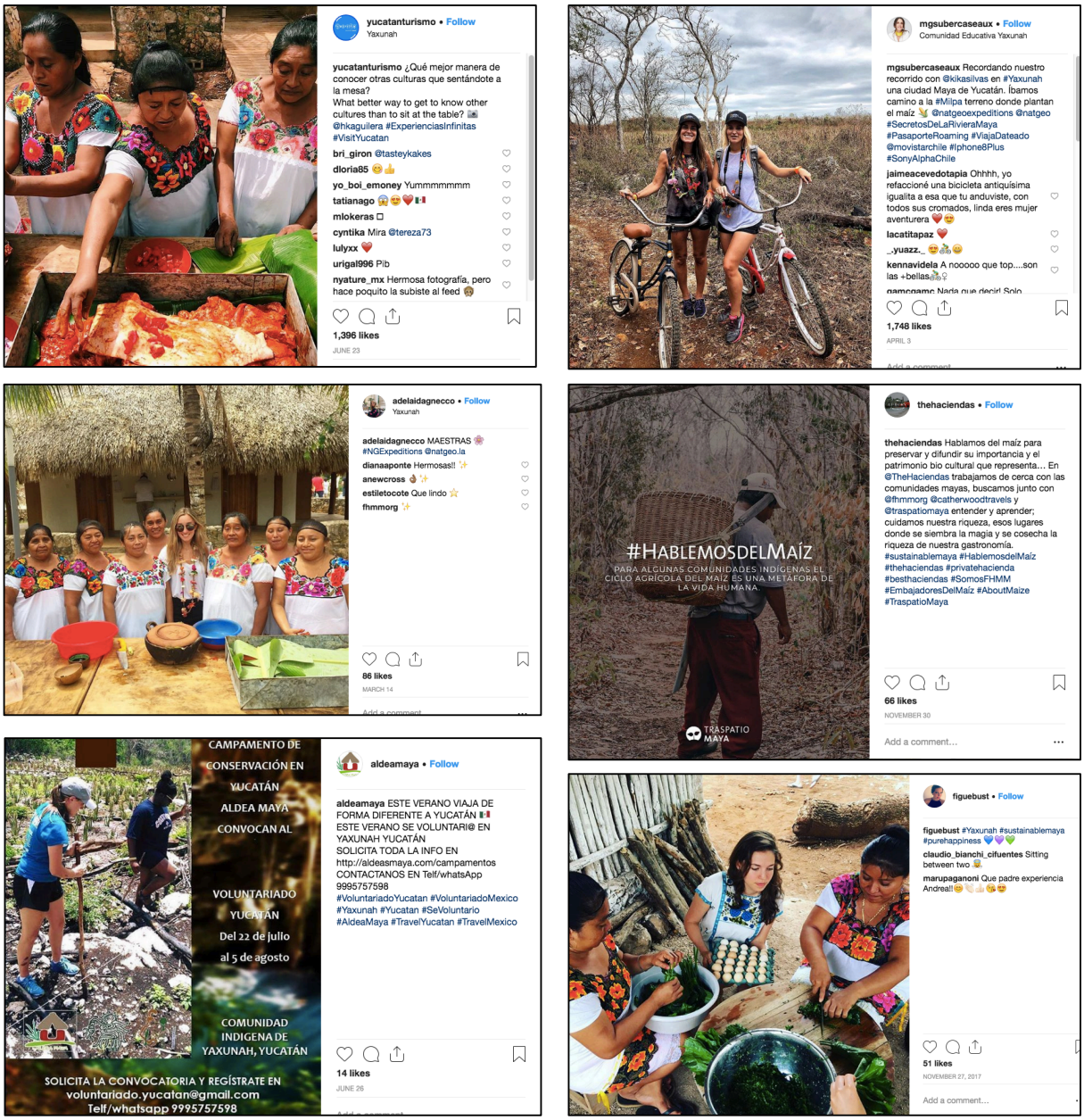

Figure 1: Instagram posts from culinary tourists in Yaxunah

Figure 2: The Yaxunah TEK survey team in 2017

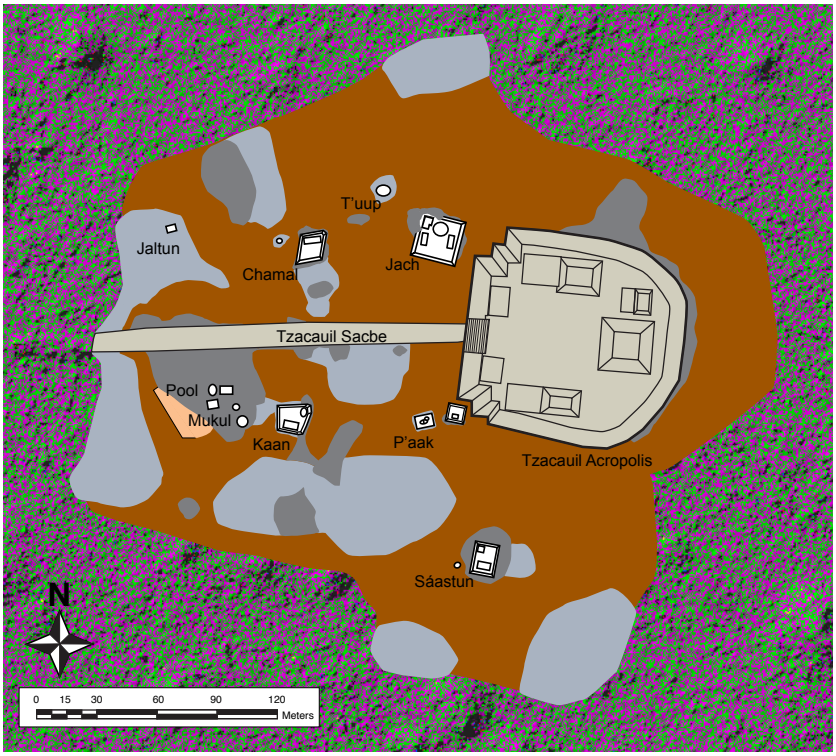

Figure 3: Terrain mosaic of soil and bedrock, created by the TEK survey and overlaid on lidar imagery and map of Tzacauil

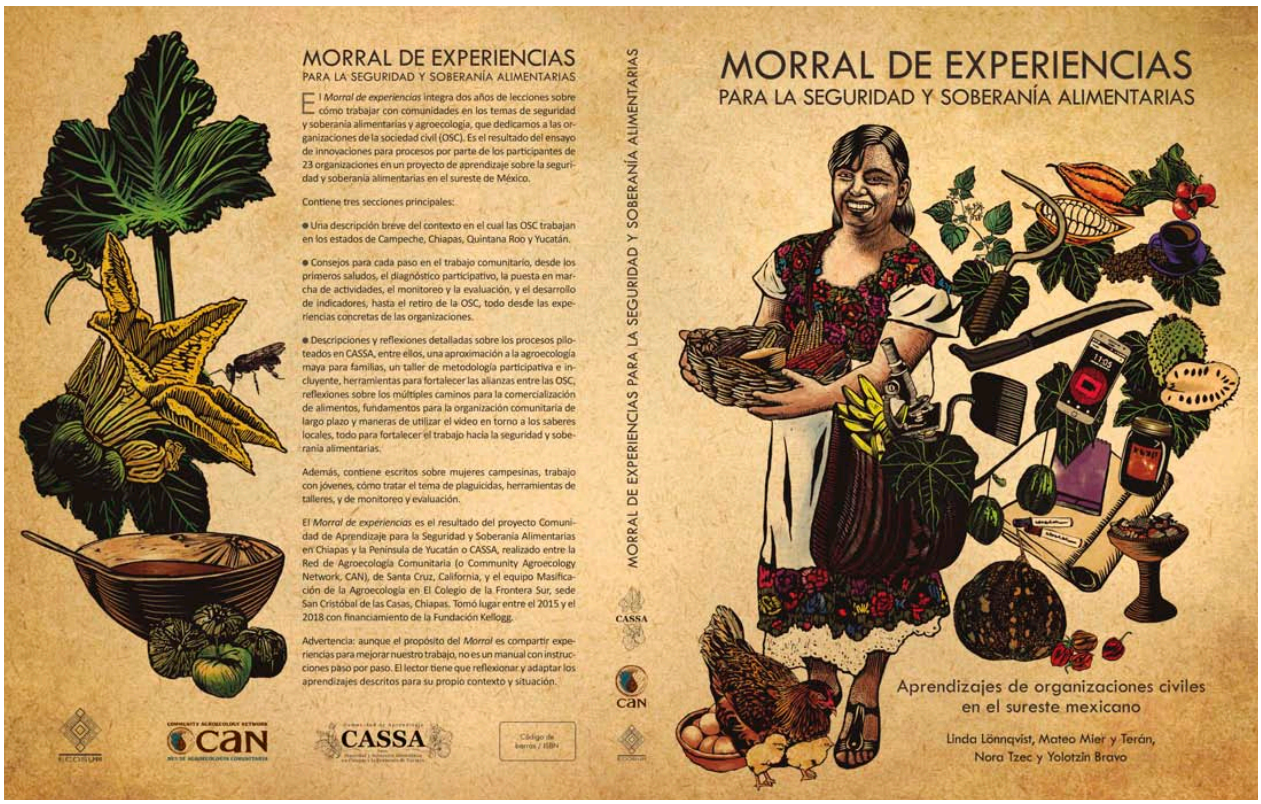

Figure 4: The cover of the CASSA toolkit


Figure 5: A preliminary visit to Hacienda Cetelac at the end of the 2017 season

Selected references

FISHER, C. 2019. Maya Farming Communities and the Long View of Sustainability at Tzacauil. Ph.D. dissertation, Ann Arbor: University of Michigan.

FISHER, C. In press. Walking rural in Tzacauil. *Ancient Mesoamerica*.

FISHER, C. & T. ARDREN. 2020. Partaking in culinary heritage at Yaxunah, Yucatán during the 2017 Noma Mexico pop-up. *Heritage* 3: 474–92.

GÁLVEZ, A. 2018. *Eating NAFTA: Trade, Food Policies, and the Destruction of Mexico*. Oakland: University of California Press.

LÖNNQVIST, L., M. MIER Y TERÁN GIMÉNEZ CACHO, N. TZEC CAAMAL, AND Y. BRAVO ESPINOSA (EDS.). 2018. *Morral de experiencias para la seguridad y soberanía alimentarias: aprendizajes de organizaciones civiles en el sureste mexicano*. San Cristóbal de las Casas, Chiapas, Mexico: El Colegio de la Frontera Sur and the Community Archaeology Network.

Linda Lönnqvist, Mateo Mier y Terán Giménez Cacho, Nora Tzec Caamal, and Yolotzín Bravo Espinosa

STANTON, T.W., D.A. FREIDEL, C.K. SUHLER, T. ARDREN, J. AMBROSINO, J.M. SHAW & S. BENNETT. 2010. *Archaeological Investigations at Yaxuná, 1986-1996: Results of the Selz Foundation Yaxuna Project* (BAR International Series 2056). Oxford, England: Archaeopress.