Ancient Mesoamerica, **33** (2022), 148–161

doi:10.1017/S0956536120000395

WALKING RURAL IN TZACAUIL, YUCATAN, MEXICO

Chelsea Fisher
Environmental Studies Program, Washington and Lee University, 018 Tucker Hall, Lexington, Virginia 24450, USA

Abstract

How were so-called rural Maya settlements experienced by the people who lived in them? In this article, I focus on the archaeology of walking in the small site of Tzacauil, Yucatan (outlying the much larger site of Yaxuna), to explore how experiences of rurality were historically and socially contingent. Walking produces and reproduces embodied understandings of place—and, as such, can yield a more dynamic conceptualization of rurality. In Formative Tzacauil (ca. 300 B.C.–A.D. 250), grounded walking, incorporated with and sensitive to terrain, coexisted alongside groundless walking on artificial surfaces (i.e., sacbes and built walkways) imposed onto terrain. I argue that an understanding of everyday walking in Formative Tzacauil was not unlike that of urbanizing Yaxuna. I propose that only in Classic Tzacauil (ca. A.D. 550–1100) did walking become categorically different from Yaxuna, and I discuss how that shift opens new avenues for inquiry into rurality as an embodied experience of place that was always subject to change.

INTRODUCTION

Near the center of Mexico's Yucatan Peninsula, a few kilometers east of the ancient Maya city of Yaxuna and in the collective agricultural landholding of the community of Yaxunah, there is a small archaeological site called Tzacauil. If you were to view Tzacauil from above, your eye might be drawn to three lines crossing east to west (Figure 1). Each line brought (or brings) people on foot through the forest closer to Tzacauil. Together, these lines inscribe in the landscape a history of walking and, with that history, a sense of how embodied understanding of Tzacauil as "rural" changed and continues to change.

The first line built of the three dates to the Late Formative (ca. 300 B.C.–A.D. 1) to the Terminal Formative (ca. A.D. 1–250) and is known as the Tzacauil Sacbe. It blazes through the forest straight to the base of a large triadic group complex, the Tzacauil Acropolis, passing a scatter of some half-dozen low-lying stone platforms before reaching its destination.

The second line, built centuries later, slashes through the forest in a clear and confident stroke. Sacbe 1, the longest known causeway in the Classic Maya world, streaks south of Tzacauil (Figure 2). It pays seemingly little regard to the small cluster of house foundations built and occupied around the same time period, the Late Classic (ca. A.D. 550–700) to Terminal Classic (ca. A.D. 700–1100).

The third line passes to the north. It winds and undulates as it bends to avoid bedrock bumps and dips. This line is a road and its builders improvised, as best they could, smooth passage for pedestrians, bicyclists, and the occasional truck traveling through the forest. For the past few decades, this road has connected Yaxunah community members to the eastern lands of their agricultural landholding. Outsiders, among them archaeologists like me, also use the road.

E-mail correspondence to: cfisher@wlu.edu

These lines express through their materials and trajectories three different ways of engaging Tzacauil on foot; the many other ways Tzacauil has been walked in the past two millennia are quieter in the landscape. Tzacauil is fairly small and only a short distance away from the much larger site of Yaxuna—for these reasons alone, can we consider Tzacauil to be rural? In this article, I push back against this kind of categorization, which tends to cast small outlying settlements as ahistorical. I focus on an anthropological framework of walking to explore how embodied understandings of small Maya settlements, like Tzacauil, as "rural" were social constructs sensitive to local historical change.

WALKING URBAN, WALKING RURAL

Walking intimately connects people and place through the production and reproduction of embodied, localized knowledge (Ingold and Vergunst 2008; Snead et al. 2009). "As people, in the course of their everyday lives, make their way by foot around a familiar terrain," writes anthropologist Ingold (2004:333), "so its paths, textures, and contours, variable through the seasons, are incorporated into their own embodied capacities of movement, awareness, and response." Walking is a lived, embodied understanding of place (Carolan 2008), one that threads together landscapes and lives in a continuously unfolding historical process (Tilley 1994:29–30). As posed by human geographer Edensor (2000:82), walking is "geographically and historically located practical knowledge… walking articulates a relationship between pedestrian and place, a relationship which is a complex imbrication of the material organization and shape of the landscape, its symbolic meaning, and the ongoing sensual perception and experience of moving through space." Walking, then, is one way that people—now and in the past—experience and make embodied sense of urban and rural places.

Walking in cities produces and reproduces its own sort of "ambulatory knowing" (Ingold 2010:S129). In the words of urban theorist Lefebvre (1996:102): "The city *writes* and *assigns*…it

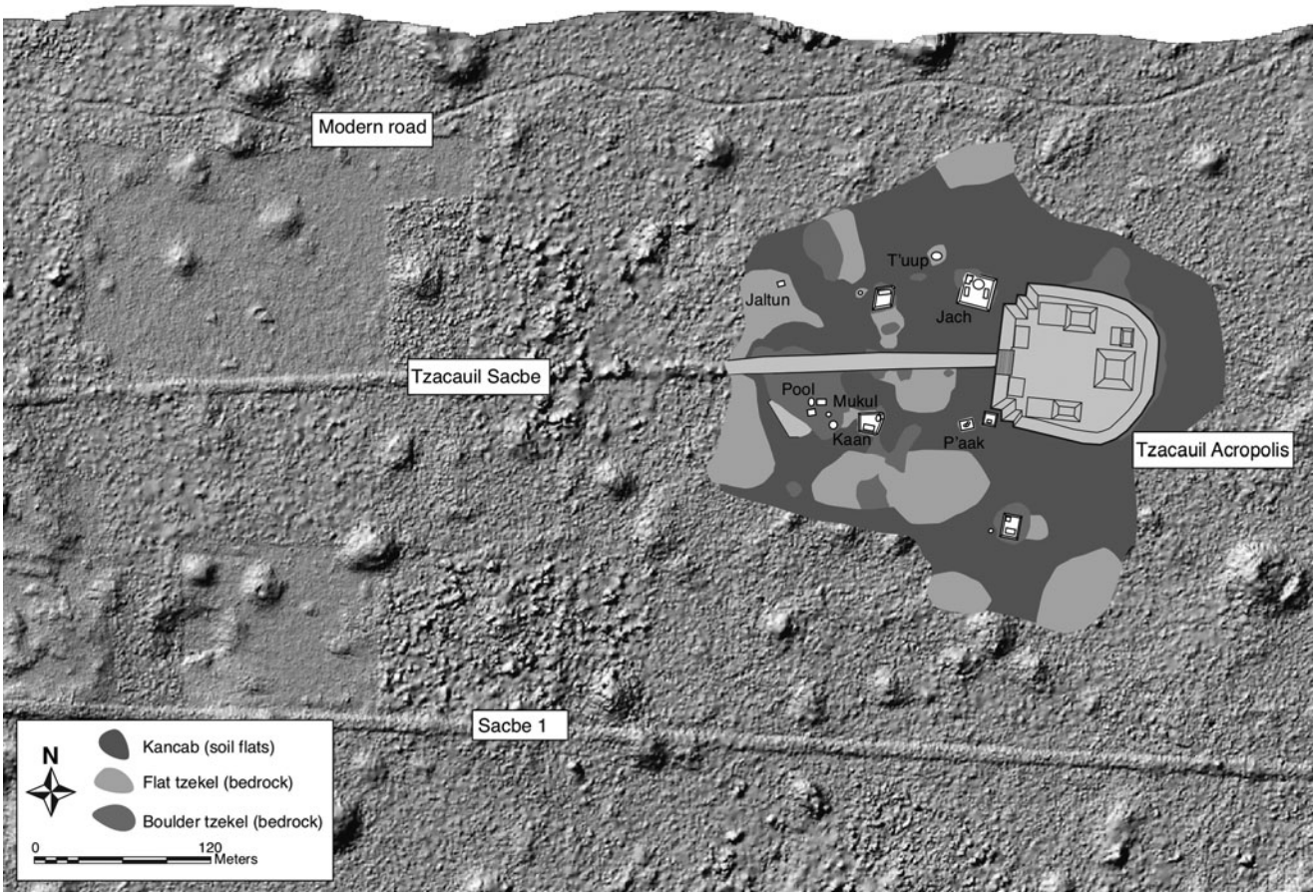

Figure 1. Map of the Tzacauil site and surroundings, showing site architecture and terrain mosaic superimposed over LiDAR imagery. The modern access road is visible to the north, the Tzacauil Sacbe crosses the center to reach the Tzacauil Acropolis, and Sacbe 1 crosses to the south, connecting Yaxuna to the west and Coba to the east. Tzacauil house groups mentioned in the text are labeled. Adapted from Fisher (2019:270). Malerized architecture for some structures has been redrawn from a map previously published by Hutson and colleagues (2012).

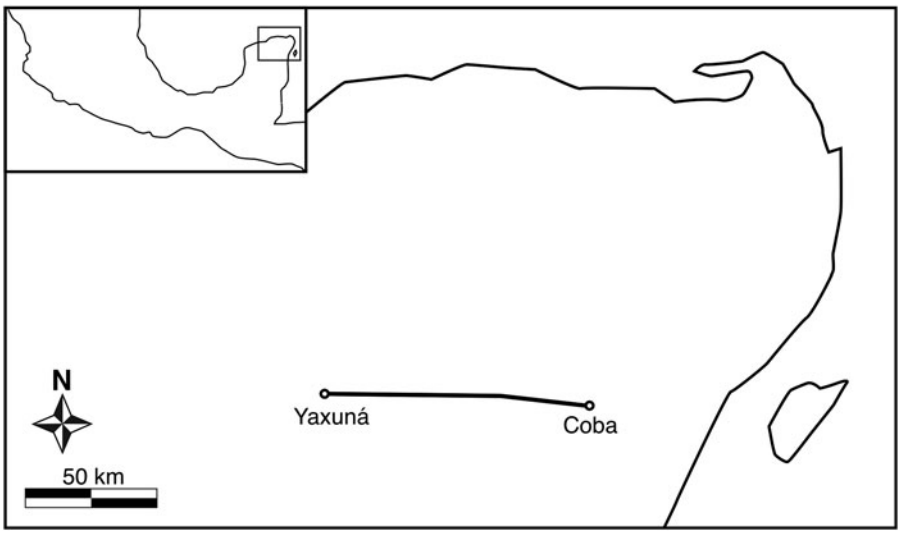

Figure 2. Map of the northern Yucatán Peninsula, indicating the locations of Yaxuna and Coba, and the trajectory of Sacbe 1 connecting them. Redrawn from Stanton et al. (2010:31).

https://doi.org/10.1017/S0956536120000395 Published online by Cambridge University Press

signifies, orders, stipulates." For those of us accustomed to the urban landscapes of the twenty-first century, we might think of the gridded streets, sidewalks, traffic cones, police tape, orange plastic construction site fences, stop lights, lighting, curbs, gutters, street grates, and actual landscaping—flowerbeds, arbors, and trees—that constrain walking in cities today. City walking may often be sanitized and regulated; to describe this, Ingold (2004) has written of the "groundlessness" of much urban walking, where walkers walking only on paved surfaces leave behind no footprints. Groundless walking divorces walkers from a fully grounded, embodied experience of the environment, sensitive to terrain, vegetation, and weather. Yet the way cities are experienced on foot is not at all universal, or predictable. Edensor (2008:127) says of walking through industrial ruins: "In contrast to the deliberate channeling of movement in the regulated city, the physical structure of ruins invites and constrains walking in a distinctive fashion," one that is improvisational, alert, playful, disruptive, and expressive.

Similar to Edensor's ambling in industrial ruins, the phenomenon of desire lines shows too the historical contingencies shaping urban walking. Human-environment geographers Foster and Newell (2019), working with aerial images of the city of Detroit, Michigan, documented 5,680 unofficial footpaths (called desire lines), together measuring 157 linear miles, sinuating across the city's sprawling urban landscape. Desire lines form, grow, and fade as people's walking patterns respond to changes in Detroit's landscape, most notably to its rapid population declines. These ephemeral footpaths through vacant city lots are ad hoc solutions for the people who continue to make a home in this evolving landscape. That evolution can occur in bursts: within a single six-year period, Detroit lost 758 footpaths and gained 99 new ones. Walking is changing alongside changes in land ownership, changes in the development and abandonment of spaces within the urban landscape. Desire lines, in the framing of feminist writer Ahmed (2006), queer walkers' on-the-ground experience of cities by moving them away from predictable pathways prescribed by streets and sidewalks. When these pathways start to show up, they suggest a return to grounded walking, that certain regimented ways of walking have already been rejected—that the neglected sidewalk perhaps once made sense but now no longer does.

Rural walking, too, creates and recreates its own ambulatory, embodied knowing (Woods 2010). I have described how urban walking holds tension between ordered movements and transgression of that order; rural walking, similarly, has its own contradictions. Rural walking is more improvisational, more grounded (Ingold 2004) to the land and its contours: dirt roads, trails cleaving to hilly undulations, and cross-stream stepping stones. Grounded walking is conversation between walker and environment. Yet, while the substrate of rural walking is closely incorporated with the land itself and the paths more ephemeral than city sidewalks, when rural walking is habitual it, too, shapes the landscape. "The countryside is partly produced by the regular routes which walkers follow," writes Edensor (2000:82). Footpaths may be used for generations, as permanent in practice as the slabs of concrete prescribing pathways in cities. Because rural walking's footpaths and trails tend more towards "groundedness" (Ingold 2004), accumulations of footprints on the earth become archives of pedestrian history. A walker "leaves footprints in the ground as clues to (their) whereabouts and intentions, and for others to follow…One cannot, then, read individual movements from a path, but only those commonly or collectively made" (Ingold 2010:S129). This recalls the urban desire lines described earlier, which defy—or simply ignore—the groundless prescriptive paths of sidewalks and paved walkways.

The coexistence of and potential tension between grounded walking and groundless walking becomes especially important when considering the biases inherent in archaeological research. Ingold's (2004) conception of groundless walking—that is, walking on pavement and artificial surfaces more generally—is more closely associated with cities and construction. Groundless walking is more detectible in the archaeological record. Archaeological explorations of past Maya walking have focused, unsurprisingly, on the kinds of ordered walking associated with the so-called built environment of urban landscapes. The boundary walls and constructed walkways documented at Classic period Maya cities offer clear avenues into discussion of pedestrian movements (Benavides Castillo 1981; Benavides Castillo and Manzanilla 1987; Goñi Motilla 1993; Kurjack 1974; Magnoni et al. 2012; Shaw 2008; Vargas et al. 1985).

Along with boundary walls, roads have structured archaeologists' studies of walking in the Maya world—particularly in Maya cities. In Classic and earlier Formative Maya centers, raised limestone causeways—called "sacbes" by archaeologists after the Yucatec Mayan term for "white road"—connected and channeled walking within and between nodes of settlement. Extensive sacbe networks have been documented at large urban centers throughout the Maya area, including Caracol (Chase and Chase 2014), Calakmul (Folan et al. 2001), El Mirador (Sharer 1992), and Tikal (Haviland 1970), as well as in village settings as at Ceren (Sheets et al. 2015). In the northern Maya lowlands of the Yucatan Peninsula, where Tzacauil is located, Maya people built sacbes of varying length—ranging from less than one kilometer to 100 km (Shaw 2008)—across their landscapes, spanning within and between urban and urbanizing settlements (Anderson 2011; Hutson and Welch 2014; Hutson et al. 2012; Stanton and Freidel 2005). Archaeologists have been wondering how past northern Maya people actually used all these roads for nearly a century (Villa Rojas 1934), and through the decades have generated convincing cases for the roads' roles in pilgrimage, economic exchange, administration, and political integration (Chase and Chase 2001; Folan 1991; Hutson 2010; Keller 2010; Rohrer and Stanton 2019; Shaw 2008, 2012; Stanton et al. 2020). Sacbes helped form the landscape and lived experience of Maya cities; they made groundless walking possible.

Sacbes' particular kind of groundless walking may diverge from the sterile pavement-pounding envisioned by Ingold (2004), but I reckon still that walking a sacbe would have produced an embodied experience of landscape fundamentally different from (but not the opposite of) traversing grounded trails. While Ingold's groundlessness conjures a kind of walking that is totally neutral, Hutson and colleagues (2020) have pointed out that sacbe walking would have been extraordinarily sensuous (see also Kurnick and Rogoff [2020] for recent discussion of sensuous walking in Maya landscapes). Sacbes' plaster surfaces were capable of manipulating temperature, light, smell, and sight—all of which would have affected the bodies of walkers, as would have the time of day, night, season, or year in which they were walked. When I say that sacbe walking tends towards groundless, then, it is not to suggest that sacbe pedestrians were automatons or that sacbe walking lacked the sensuous richness of trail walking—it was just a different sort of sensuousness. And one of the major ways it was different was that sacbes, unlike footpaths or trails, imposed onto the landscape

https://doi.org/10.1017/S0956536120000395 Published online by Cambridge University Press

the possibility for more ordered, regimented forms of walking by placing physical barriers between the walker's feet and the grounded terrain.

Yet it is important to remember that while these groundless ways of walking in Maya cities would have created the *possibility* for regimented walking, their construction also called into being a range of possibilities for walkers to flout, transgress, and ignore that regimen. "Whereas occupants march along roads, inhabitants more usually step across them," write Ingold and Vergunst (2008:6). Maya archaeologists still lack a clear sense of precisely how sacbes were used—and who got to walk on them—but the sprawling, low-density layout of many Classic Maya cities (Fisher 2014; Isendahl 2012; Lucero et al. 2015) suggests that for most walkers on most days, urban walking was grounded to footpaths and trails.

Subtle are archaeological traces of grounded walking, the sort of walking that shaped most Maya people's everyday embodied understanding of land whether they lived in cities or in rural hamlets. At the rural Classic farming community of Chan Noohol, Robin (2002, 2012) found that the areas immediately surrounding houses and the areas connecting houses to patios had packed surfaces. She interpreted this as a sign of frequent, habitual walking—returning to and leaving home. As walkers moved further away from their houses and patios, their paths scattered out depending on the day's plan; the remnants of their footsteps fan out and fade away. Likely Chan's walkers had other paths, but given the nature of archaeological preservation, only the areas where walking was most habitual and most condensed remain detectable.

The paths of grounded walking may be ephemeral in the archaeological record, but ethnographic and Colonial-era documentary accounts suggest that some rural Maya communities maintained webs of trails for generations. Among twentieth-century Tzotzil Maya people living in the highlands of Chiapas, during certain holidays every year leaders and ritual participants would walk a circuit visiting and performing ceremonies at important places in the community landholding (Vogt 1961, 1983). These walkers would visit in an ordered sequence the wells, caves, and other key locales in the landscape as a way of reaffirming the community's boundaries and its multigenerational connections to sacred places. Walking as a practice for affirming relationships between people and land is suggested also in Colonial Yucatec Maya documents, which refer to places through the listing of landmarks that give boundaries to a community lands (Marcus 1993; Roys 1957; Tozzer 1941). These sources glimpse the social memory that could keep footpaths and trails alive for generations in landscapes. Through collective remembering and repeated walking, grounded pathways could be maintained for centuries—but once forgotten, could melt back into the forest in a single generation, year, or even season.

There are a few key points to distill from this before I move to focus on Tzacauil more specifically: the first is that, probably through most of Maya history before the Colonial era, most walkers in most places and on most days walked not the groundless routes of paved sacbes, but rather a grounded network of relatively ephemeral footpaths and trails that could be maintained, adjusted, and abandoned as individual and collective walking changed. The second key point is that when sacbes and other paved surface walkways were constructed—most prevalently, in urban centers—they created an added possibility for more regimented, visible kinds of walking. The relationship between regimented walking and improvisational walking, this coexistence and potential tension between groundless and grounded ways of walking, then, formed part of walkers' embodied understanding of urban spaces in the Maya area, prior to Colonialism. Walking in places where this contrast was unmarked or unpronounced reproduced a different sort of understanding of space, one that I propose is useful for considering how Maya settlements could have been experienced as rural. The third key point is that these embodied understandings of rural and urban spaces were historically contingent and subject to change. Documenting histories of walking can help archaeologists reckon our definitions of "rural" by moving beyond ahistorical markers, like site size, and by attending to the dynamic ways in which places were understood in embodied, experiential ways.

TZACAUIL AND YAXUNA

Maya archaeologists have tended to label small sites outlying larger sites as "rural" by virtue of their being small and outlying; such treatment tacitly casts these smaller sites as ahistorical and static, their inhabitants passive onlookers to the actions and agency of city-dwellers. A focus on walking shifts attention to how past Maya people experienced these so-called rural places on the ground. How did walking, as a form of embodied knowledge of place, inform how these small, outlying settlements were understood on the ground? And how can attention to walking enhance and historicize anthropological frameworks of so-called rural life over long periods of time?

I approach these questions through my ongoing research in the ejido (collective agricultural landholding) of Yaxunah. The Yaxunah ejido is located in the northern Maya lowlands, in the central part of the Mexican state of Yucatán. Yaxunah itself is a town of about 600 people, many of whom are Yucatec Mayan speakers (Alcocer Puerto 2010; Hernández Álvarez 2014). Yaxunah's ejido lands include several pre-hispanic and Colonial-era archaeological sites, the most well-documented of which is Yaxuna (Figure 3), which was the political center of the central Yucatan region from the Middle Formative through much of the Classic period (Stanton et al. 2010; Tiesler et al. 2017). Archaeological research at Yaxuna has been ongoing for decades, most recently under the regional project Proyecto de Interacción Política del Centro de Yucatán (codirectors from 2007 to 2017 have included Stanton, Hutson, Magnoni, and Ardren).

Tzacauil is an archaeological site located near the eastern edge of Yaxunah's ejido lands and just under an hour's walk from Yaxuna's central core; Tzacauil is a small settlement outlying a much larger settlement and thus checks the boxes by which many Maya settlements have been labeled as "rural." Mapping conducted by Hutson and colleagues (2012) recorded information about the dimensions and spatial organization of the site's architecture. I later carried out a three-season program of survey, excavation, and intrasettlement investigation to understand household and community dynamics during Tzacauil's two major occupations, first in the Late to Terminal Formative (ca. 300 B.C.–A.D. 250) and later in the Late to Terminal Classic (ca. A.D. 550–1100; described in Fisher [2019]).

The site centers around a pyramid, the Tzacauil Acropolis. The acropolis' basal platform measures 80 × 70 m at its top, 110 × 105 m at its base, and is 8 m tall. On top of the basal platform are eight superstructures, the tallest of which reaches an additional 6.5 m above the basal platform surface. West of the acropolis is scattered a settlement of two-dozen structures that, based on my excavations, I have organized into nine house groups. The settlement is cut in half by a raised limestone causeway, the Tzacauil Sacbe, which emerges from the base of the acropolis and runs west before ending about

https://doi.org/10.1017/S0956536120000395 Published online by Cambridge University Press

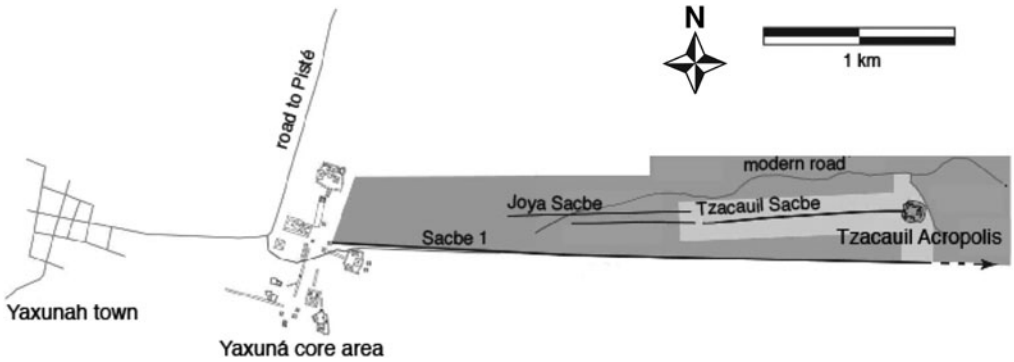

Figure 3. Map showing Tzacauil in relation to the archaeological site of Yaxuna and the modern town of Yaxunah. Modern and ancient roads are indicated, including the Tzacauil Sacbe, the Joya Sacbe (not described here, but see Hutson et al. [2012]), Sacbe 1, and the modern access road for the eastern part of the Yaxunah ejido. Map adapted from Hutson and colleagues (2012:298).

halfway between Tzacauil and Yaxuna (Hutson et al. 2012). The Tzacauil Sacbe appears to have been built in the Late Formative and abandoned to disrepair when the rest of the Tzacauil settlement was initially abandoned at the end of the Terminal Formative period.

Yaxuna is less than an hour's walk away (3.2 km) from Tzacauil and is much larger (Figure 3). Yaxuna emerged as a major center in the Late Formative period. Much of its monumental architecture and boulder-lined residential platforms were built at that time, though there is plenty of evidence to suggest that Yaxuna's role as a gathering place began much earlier (Collins 2018; Stanton and Ardren 2005; Stanton and Collins 2017; Stanton et al. 2010). As at Tzacauil, the construction of paved walkways—sacbes—articulated and ordered Late Formative Yaxuna's landscape. Around the same time that Tzacauil was abandoned, Yaxuna experienced a brief lull in activity, but the center's population recovered and reached record highs in the Terminal Classic period. Classic Yaxuna was heavily involved in regional politics, as evidenced by the construction of Sacbe 1, a raised limestone causeway that spans 100 km to connect Yaxuna with the center of Coba (Cobos 2001; Shaw 2008; Stanton et al. 2020; Villa Rojas 1934), passing south of Tzacauil as it shoots east across the peninsula.

INTEGRATING METHODOLOGIES

My approach to walking at Tzacauil is informed by the archaeological research I conducted at the site and in the surrounding ejido lands. Much of this work involved close engagement with Yaxunah community members, many of whom have several seasons' worth of experience working on archaeological projects. Members of the Yaxunah community have their own walking understanding of ejido lands—they are the land's living inheritors and, for many, their livelihood is tied to the land. As part of my work documenting environmental and agricultural history at Tzacauil, I spent time walking Tzacauil with six Yaxunah farmers and gardeners (Fisher and Ardren 2020). The informal name given this walking by the community members was *xíimbal k'áax*, a Yucatec Mayan term that describes the practice of walking the forest to select a parcel for milpa cultivation (Figures 4–7).

We covered the archaeological site on foot, focusing on the areas around house groups to evaluate whether and how these areas might have been used as houselots, the outdoor activity areas surrounding dwellings typical of past and present houses in Yucatan. Community members shared observations and oral histories about soil, terrain, and plant and animal life in the site. I documented this information spatially using an iPad equipped with LiDAR data, the geological fieldwork app FieldMove, a GPS, and a video camera (Fisher 2019:130–138).

As we walked Tzacauil together, the Yaxunah community members repeatedly pointed out two kinds of terrain that form a patchwork across the site: *kancabales* and *tzekeles* (Figure 1). *Kancabales* are flat, low-lying expanses of reddish-brown soil (*kancab*). *Tzekeles* are areas of exposed bedrock (*tzekel*), which forms either (1) flat expanses pockmarked with depressions and cavities that can be used seasonally to collect and store rainwater, or (2) large outcrops that jut out from the ground and crumble at the edges into boulders. Each terrain—the soil-rich *kancabales* and the bedrock *tzekeles*—is associated with particular plant communities and each, I was told, offers different advantages and drawbacks for living on it. *Kancabales* have fairly deep soils and are good places to plant, but during the rainy season they inundate and become so muddy that they are difficult to walk on. *Tzekeles* cannot be cultivated as easily (though see Fedick et al. [2008]) but they provide firm footing above the soil flats, drain well, provide building materials, and offer seasonal water storage. This patchwork of bedrock and soil played an important role in the ways people walked the site in the past, and certainly played that role during our fieldwork.

Following *xíimbal k'áax* survey with Yaxunah community members, I directed horizontal excavations of Tzacauil's house groups and several of the open areas between and around house groups (Fisher 2019:164–301). I use data collected from those excavations to interpret how walking in Tzacauil changed from its first major occupation in the Late to Terminal Formative to its second (and last) major occupation in the Late to Terminal Classic. In the sections below, I bring excavation data into conversation with what I learned from walking Tzacauil alongside Yaxunah community members.

WALKING TZACAUIL IN THE FORMATIVE PERIOD

Tzacauil's monumental architecture—the Tzacauil Acropolis and Tzacauil Sacbe—and at least five of its house groups were built in the Late Formative and Terminal Formative (dating these contexts more specifically within these periods was challenging, and here I will at times collapse the terms together and use "Formative";

https://doi.org/10.1017/S0956536120000395 Published online by Cambridge University Press

Figure 4. Yaxunah community members on the *xíimbal k'áax* survey of Tzacauil. Photograph by the author.

Fisher 2019:149). The Tzacauil Acropolis visually dominates the landscape, yet it is the sacbe that orders the surrounding settlement. The sacbe originates from and arrives at the base of the Tzacauil Acropolis, where it measures 9 m across. As it moves west towards Yaxuna, the Tzacauil Sacbe's width fluctuates between six to 10 meters and its height gently undulates between 30 and 50 centimeters above the ground surface for most of its trajectory. The Tzacauil Sacbe appears to be headed towards Yaxuna's central E-Group Plaza, but does not reach that presumed destination for reasons explored elsewhere (Fisher 2019:175–176; Hutson et al. 2012). When it was built in the Late Formative, the Tzacauil Sacbe was not the only sacbe in central Yucatan, as some of the earliest urbanizing construction projects in Yaxuna included sacbes, but it would have been among the longest such causeways in the Maya area at the time (Hutson et al. 2012; Stanton et al. 2010).

The Tzacauil Sacbe materializes the possibility of ordered, regimented walking in the Formative settlement. The community leaders who organized the sacbe's construction and the laborers who built it altered what it meant to walk in Tzacauil. The causeway is flanked by the Formative houses and leads straight to the stairs of the Tzacauil Acropolis, creating the possibility for new kinds of ambulatory understanding of this place and the community living

Figure 5. Yaxunah community members on the *xíimbal k'áax* survey of Tzacauil. Photograph by the author.

https://doi.org/10.1017/S0956536120000395 Published online by Cambridge University Press

Figure 6. Yaxunah community members on the *xíimbal k'áax* survey of Tzacauil. Photograph by the author.

there. At select times and for certain walkers, the sacbe could have enabled an embodied experience of landscape that was potentially more formal, constrained, and public. Special processions may have occurred regularly on the sacbe, and individual and collective memories of those highly charged ways of walking may have imbued the sacbe with particular meaning for community members in between processions. At the same time, we can infer that for Formative community members—who likely walked along the sacbe's length and crossed over it often in the course of their daily lives—the sacbe was part of an everyday embodied understanding of landscape. The presence of this regimented pedestrian artery and its constructed surface created the possibility for regimented, groundless walking, and, with this possibility, created also a contrast with the ephemeral pathways and winding trails of grounded walking.

Intrasettlement areas—spaces surrounding Tzacauil's house groups—hold hints of the grounded walking happening around the sacbe. Between and around houses, walking involved an ordering of the land's terrains into pathways and corridors. There are five documented Formative house groups at Tzacauil, and all were built

Figure 7. Yaxunah community members on the *xíimbal k'áax* survey of Tzacauil. In this image, they are walking the modern road used to access the eastern part of the ejido. Photograph by the author.

https://doi.org/10.1017/S0956536120000395 Published online by Cambridge University Press

Figure 8. Ad hoc pavement around the perimeter of the P'aak Group at Tzacauil. Photograph by the author.

on bedrock outcrops surrounded by flat expanses of low-lying soil, or *kancabales* (Fisher 2019:266). When deciding where to settle, Formative householders spaced themselves out across the area surrounding the Tzacauil Acropolis and Sacbe; they sought to "plant" their homes in parcels of land with relatively high agricultural potential. These founding households gathered up the stuff of the local environment—limestone boulders, rubble, and earth—and reordered it into houses. Houses, "planted" in this way, materialized multigenerational relationships between households and soil-rich places.

But householders' choices to "plant" their houses on bedrock outcrops surrounded by soil came at a cost in walkability: the soil flats become mud traps during the months of the rainy season. This hitch was emphasized to me repeatedly by the Yaxunah community members who walked Tzacauil with me when we ran the *xíimbal k'áax* survey; their observation about the mud problem came from their own close intimacy with the land and I doubt I would have recognized it on my own. *Kancabales* would be a slippery mess to walk on for several months every year. Yet Formative households at Tzacauil seem to have been willing—and prepared—to overcome the seasonal drawbacks of living surrounded by soil.

My crew and I documented one solution to this *kancabal* walkability issue at two Late Formative house groups, the P'aak Group and the Jach Group. Our excavations uncovered stones around the perimeter of the basal platforms of these two house groups (Figure 8). These stones appeared to have been placed deliberately, but not particularly carefully; they formed a sort of rudimentary pavement along the sides of the basal platforms. Seeing these crude pavements during excavations reminded some Yaxunah community members in the field crew of how their grandparents had dealt with rainy season mud in their own houselots, back in the mid-twentieth century. Since cement was harder to get back then, people in Yaxunah arranged stones into ad hoc pavements outside their houses and in frequently visited areas of their houselots so they could walk more easily, avoiding mud and puddles. When these stone pavements would get beat up and need to be replaced, they looked, some Yaxunah community members told me, just like the ones we found around the P'aak and Jach Groups.

Another way Late Formative householders made *kancabales* more walkable was by combining natural and artificial topography to create networks of walkable corridors (Figure 9). These corridors connected house groups to each other and to intrasettlement areas used for cultivation, water collection, and other household activities. One Late Formative house group, the Kaan Group, was built on a strategic site that would have facilitated householders' access to low-lying soil flats and to natural bedrock walkways. The Kaan Group incorporates a long, fairly narrow outcrop of bedrock into the eastern side of its main platform. This bedrock provides not only a natural ramp by which the platform could be accessed, but it also creates a sort of bridge extending back to an area of exposed bedrock. There, south of the Kaan Group, the exposed bedrock terrain is riddled with natural pits and cavities. During the rainy season months, these cavities served as seasonal water storage. Since this area was connected to the Kaan Group's basal platform via a stable, elevated bedrock corridor, householders could walk there easily (and without stepping in mud) to collect rainwater.

The area around the Kaan Group, in the southwestern part of the Late Formative Tzacauil settlement, was made even more accessible to year-round walking by the construction of a prepared surface running along the juncture between a large bedrock outcrop and an area of soil flats (Figure 9). Builders stabilized a wide band of *kancab* at the base of the bedrock outcrop by adding gravel and small stones to the soil. They reinforced this fill with a rough boulder alignment running parallel to the bedrock outcrop. On

https://doi.org/10.1017/S0956536120000395 Published online by Cambridge University Press

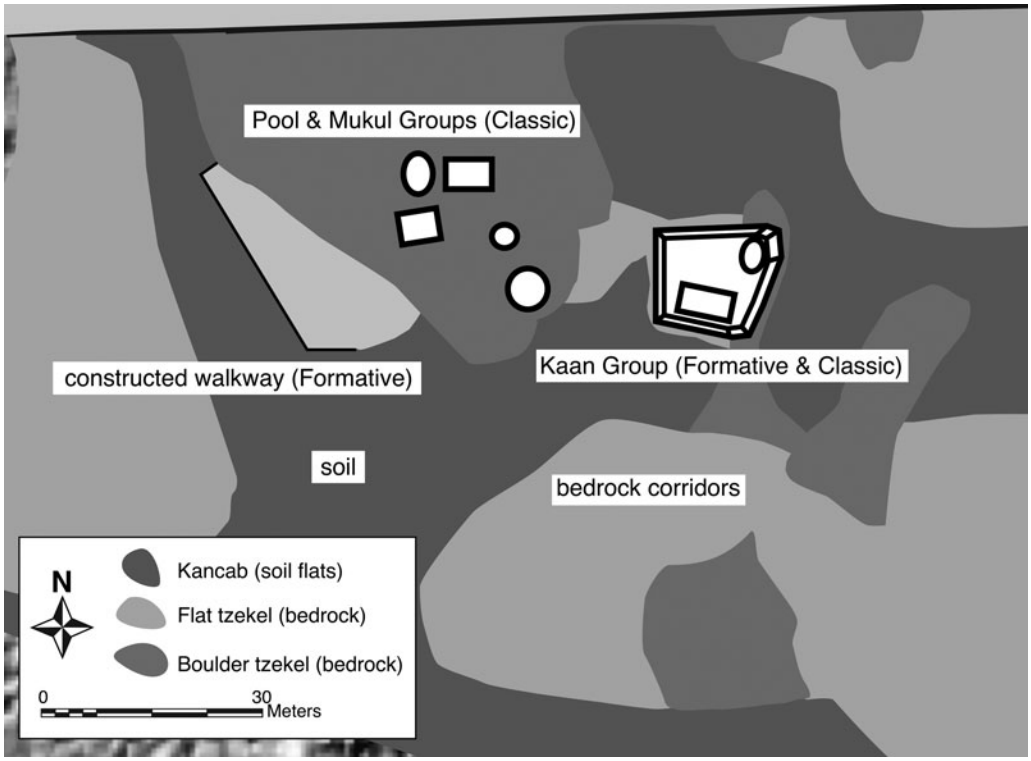

Figure 9. Detail of southwestern area of Tzacauil, showing Formative and Classic house groups, the Formative period walkway, and natural bedrock corridors. Adapted from Fisher (2019:270). Malerized architecture for some structures have been redrawn from a map previously published by Hutson and colleagues (2012).

one side of the boulder alignment the *kancab* is loose and fairly stone-free, on the other side the *kancab* is compact and packed with stones. Testing in this constructed surface suggest a Late Formative construction date. As with the ad hoc pavements, the constructed corridor was pointed out to me through conversations with Yaxunah community members while working on the *xíimbal k'áax* survey. Several expressed admiration for the logic of the constructed corridor. It stabilized the *kancab*, they said, and would have let Kaan Group householders walk easily to the seasonal reservoirs on the other side of the soil flat.

The walkways of Formative Tzacauil suggest walkers' embodied experience of the landscape was linked closely to multigenerational relationships between individual households and particular soil-rich patches of land, as well as long-term affiliations between community, forests, water, bedrock, soil, and the local environment more broadly. These relationships and their reproduction in Tzacauil's landscape were part of a wider Late Formative Maya lowlands emphasis on long-term rooting to arable lands and suggest the importance of intensive agriculture in houselot areas. Individual households embedded themselves in soil flats, choosing isolated bedrock outcrops surrounded by *kancab* as their preferred building locations (see also Pantoja et al. 2021). When choosing where to build their houses, householders spaced themselves so that each house was surrounded by ample soil-rich areas for cultivation. Households transformed the spaces around their houses to make these locations walkable year-round; the draws of living directly on farmable land outweighed the nuisance of rainy season mud. Households collaborated as a community to build the Tzacauil Sacbe, and then co-participated in maintaining the causeway's significance by orienting their houses, especially in later renovations, towards the sacbe (Fisher 2019:188). Through the end of the Formative occupation, there was community validation of the sacbe as an important pedestrian artery, one that created in contrast the possibility for markedly different ways of walking and that signaled Tzacauil's standing as a destination within the regional landscape.

Tzacauil's sacbe, acropolis, and scatter of houses together suggest that, at least for those who lived there, this was a place at which a walker could arrive—a destination. But, a short walk west, the urbanizing center of Yaxuna had long secured its role as the focal social destination for the central peninsula with its elaborate monumental complexes, royal institutions, and sprawling settlement. Here I want to propose that even despite the difference in scale, the experience of walking in Late to Terminal Formative Yaxuna and Late to Terminal Formative Tzacauil share critical similarities. Rigorous comparisons between the two settlements in the Formative have not been possible, as Yaxuna's long occupation history makes it difficult to recover "pure" Formative domestic contexts. Even so, there is evidence to suggest that walking at both Yaxuna and Tzacauil consisted of coexisting grounded and groundless experiences held together in the tension of their contrasts.

Late to Terminal Formative settlement at both Yaxuna and Tzacauil suggests a shared sense of spatial order. At Yaxuna, the Late to Terminal Formative settlement consists of loose clusters of houses (boulder-lined platforms supporting foundations for perishable structures) aggregated around focal points (typically a pyramid or other monumental architecture) with open intrasettlement areas preserved between and around house platforms, likely for intensive cultivation and other houselot uses (Stanton et al. 2010). This basic unit or node is replicated across the Yaxuna core settlement area, surrounding the site's Middle to Late Formative E-Group and

https://doi.org/10.1017/S0956536120000395 Published online by Cambridge University Press

Late Formative triadic group acropolises. Yaxuna settlement nodes are sometimes connected by short sacbes that link different parts of the Late Formative site together (Stanton and Freidel 2005). With this basic settlement template replicated across a sprawling area, with a core of civic-ceremonial buildings and infrastructure, Formative Yaxuna fits many of the expectations for an urbanizing center (Stanton 2017).

If we reconsider Tzacauil from the context of Yaxuna's urbanizing Late to Terminal Formative settlement, it is striking that Tzacauil appears as just another of Yaxuna's settlement nodes: it is a loose cluster of houses scattered around a monumental focal point, integrated into a larger settlement landscape via a sacbe. The only immediate difference is that instead of being one of several such nodes gravitating around the Yaxuna civic-ceremonial core, the Tzacauil node is instead far-flung just under an hour's walk to the east. These similarities are important to conceptualizing rurality as an embodied and historically contingent experience at Tzacauil. First, though, is the question of how walking changed at Tzacauil from the Formative occupation to the Classic occupation.

WALKING TZACAUIL IN THE CLASSIC PERIOD

Tzacauil was abandoned at the end of the Terminal Formative period (ca. A.D. 250), as were many other settlements throughout the region (Glover and Stanton 2010). The Tzacauil Acropolis, the Tzacauil Sacbe, and the house groups of the surrounding Tzacauil settlement were left and fell into ruin. Centuries later, around the transition from the Late Classic to the Terminal Classic, a small number of people came to live at Tzacauil. But while Tzacauil was once again occupied, archaeological evidence suggests that walking, and with it, people's embodied understanding of this place, had changed significantly since the Formative period.

To start to explain why, we can look west to Yaxuna. Unlike Tzacauil, Yaxuna had not been left—people continued to live there past the Terminal Formative abandonment of sites like Tzacauil and into the beginning of the Classic period. Population levels dropped at Yaxuna, and people changed their relationship to earlier Formative monumental complexes, but the center was never deserted. Urban settlement at Yaxuna had revived by the Late Classic, perhaps because of the center's involvement in interregional politics. It was around this time that Sacbe 1, the longest (pre-Colonial) causeway documented in the Maya area, was built to connect Yaxuna with the urban center of Coba, some 100 kilometers east in the modern Mexican state of Quintana Roo. Archaeologists have interpreted Sacbe 1 as a sign that Coba had incorporated Yaxuna into a hegemonic relationship (Guenter 2014; Shaw 2008; Stanton et al. 2020). The causeway's construction corresponds with an increase in population at Yaxuna, and population continued to grow until it peaked in the Terminal Classic.

Sacbe 1 leaves Tzacauil—its Formative ruins and its Classic householders—by the wayside. The road passes south of the Tzacauil Acropolis and Tzacauil Sacbe as it shoots through the forest west to arrive in Yaxuna's settlement core. Whatever processions of pedestrians—whether political, priestly, militaristic, or some combination or other kind entirely—walked Sacbe 1, their paved pathway shows no signs of acknowledging the folks living at Tzacauil. Tzacauil had once been the destination of the most ambitious causeway-building project of its time. By the Late Classic, the pedestrians for whom Sacbe 1 was built seem to have simply walked on by. Like the Formative Tzacauil Sacbe, Classic Sacbe 1 created the possibility of groundless walking—walking on built, prescribed pathways—which stood in contrast to everyday grounded walking on the natural terrain. Yet the Tzacauil Sacbe arrived at Tzacauil and included the surrounding community in making meaning of this contrast between ways of walking. Sacbe 1, conversely, snubs Tzacauil. Processions and those walkers following the regimented trajectory of Classic Sacbe 1 would not have engaged Tzacauil in the same way those using the Formative sacbe would have engaged this place.

Still, for farmers, hunters, and all people living at Tzacauil and in the less-settled areas east of Yaxuna, Sacbe 1 offered opportunities for casual, clandestine, and improvised passage through forests and fields. As ambitious as it was as political infrastructure, in quieter quotidian moments this causeway was likely part of people's everyday embodied understanding of the forests and fields east of Yaxuna. Like the twenty-first century walkers whose feet create the queer desire lines of Detroit (Ahmed 2006; Foster and Newell 2019) or whose steps seek improved passage through industrial ruins (Edensor 2008), Classic period walkers cocreated new ways of understanding Tzacauil's landscape through the centuries-old Formative sacbe. The constructed but now crumbling Tzacauil Sacbe created for Classic-era pedestrians a liminal crossing between grounded and groundless ways of walking.

Differences in how homesites were selected also tell us about how walking had changed at Classic period Tzacauil. The people who resettled Tzacauil in the Classic chose to build their houses in the southwestern part of the site, at the Pool, Mukul, and Kaan Groups (Figure 9). These house groups cluster in an area that is mostly exposed bedrock (*tzekeles*). Classic householders in Tzacauil preferred to live on elevated bedrock promontories and flat bedrock expanses riddled with water storage cavities. The low-lying soil flats so preferred by Formative settlers were no longer desired as homesites.

At Yaxuna, all investigated Late to Terminal Formative house groups show signs that they were renovated and reoccupied by Terminal Classic inhabitants (Fisher 2019:383; Stanton et al. 2010). But at Tzacauil, only one Formative house group (out of five) had clear evidence of significant Classic reoccupation. The single group reoccupied at Tzacauil is the Kaan Group, the group that integrated natural and artificial corridors to create a network of walkways between soil-rich and bedrock terrain. The founders of Tzacauil's first and most elaborate Formative house group, the Jach Group, embedded their home in an exceptionally soil-rich area flanking the point where the Tzacauil Sacbe meets the Tzacauil Acropolis. Yet there is no evidence that this area held any particular attraction to the founders of the Classic settlement at Tzacauil, at least not as a place to build their homes.

Tzacauil's Classic houses cluster on the bedrock of the southwestern part of the site, but a few lone Terminal Classic structures sit amid the soil flats north of the Tzacauil Sacbe. Horizontal excavations of these two structures, the Jaltun and T'uup Groups, found them to be nearly clean of artifacts and likely too small to have been used as houses (Fisher 2019:290–301). Instead I believe that they were ancillary structures used seasonally for farming, perhaps as corn cribs or temporary field huts (see Farriss [1984] and Restall [1997] for Colonial-era analogs). Ceramic data suggests that the Classic houses at the southwestern part of Tzacauil may have already been abandoned by the time these two ancillary structures were built. These structures were likely maintained by people living elsewhere, who came to Tzacauil not to live full-time but to farm and walk the forests (i.e., for hunting, wood gathering, and beekeeping) periodically.

https://doi.org/10.1017/S0956536120000395 Published online by Cambridge University Press

For the Late and Terminal Classic people who walked Tzacauil, it was not necessary to physically embed their houses in the soil-rich *kancabales* in order to be able to farm them, or perhaps even to walk them. Homesites preferred by the founders of the Formative Tzacauil community—bedrock outcrops surrounded by *kancabales*—were not where the Classic householders chose to live. They favored instead the natural drainage and stable living and walking surfaces provided by bedrock. Classic people who resettled the Kaan Group adapted a pre-existing Formative platform that had cleverly incorporated bedrock terrain into its construction. The platform came furnished with a network of natural and already-constructed walkways.

Bedrock provided stable walking surfaces above the soil flats. Considering that these soil flats turn to mud several months out of the year, this presented an advantage particularly valued among many Yaxunah community members with whom I discussed walking at the site. Aside from keeping people's feet clean, these networks of bedrock promontories served to connect Classic house groups with wide expanses of flat bedrock riddled with natural reservoirs. The Formative settlement had incorporated these bedrock areas, too, but Formative householders' priority seems to have been to invest in homesites surrounded by soil, even if it meant having to invest labor in solutions for year-round walkability. Because walking in the Classic seems to have been grounded in synch with natural terrain and seasonal rhythms, it was less constrained, more dispersed, and generally harder to distinguish archaeologically a thousand years later.

I had scarcely considered the logistics of rainy season walking before conducting *xíimbal k'áax* survey with Yaxunah community members—even after having spent four rainy seasons living and working in the Yaxunah ejido myself. Questions of walkability were raised repeatedly during survey and excavations with Yaxunah community members, especially when we discussed why Tzacauil houses were built where they were. *Kancabales* are good for planting, but *kancab* turns to gluey mud in the rainy season. Figuring out ways to avoid having to walk in mud is a basic consideration for people living in Yaxunah today, the kind so basic that it feels funny to even point it out. And still, engaging these logistics of living on bedrock and living on soil are important to historicizing walking and rurality at small sites like Tzacauil.

DISCUSSION: WALKING RURAL AS HISTORICALLY CONTINGENT EMBODIED PRACTICE

Tzacauil is a small site outlying a larger site—but to use that distinction alone to categorize Tzacauil as "rural" is to treat the people who lived in small settlements like Tzacauil as ahistorical. On their own, size and location as definers of rurality cannot account for the dynamics of community life outside of and in relation to urban centers. My aim in this article has been to shift anthropological frameworks of past rural life from the static view of settlement hierarchies to an exploration of how these places were experienced at the ground level. Walking is one way that people produce and reproduce embodied understandings of place. There are others; eating, building houses, and burying the dead come to mind as examples.

Sacbes open a conversation into Ingold's (2004) conception of "groundless" walking: prescribed movements along the sterile and artificial surfaces of constructed walkways, imposing order, following regimented expectations. Groundless walking is often associated with the so-called built environment of cityscapes. In Maya settlements, constructing sacbes creates the possibility for a more groundless sort of walking—we might imagine the public processions and marches these causeways periodically facilitated—but just as soon as they created the possibility for such formalities, sacbes created opportunities for ignoring and transgressing prescriptions. Sacbes created, too, a sense of contrast between sensuous experiences particular to sacbe walking and those particular to trail walking. Everyday "grounded" walking was more embedded in the land, on footpaths and trails that adhered closely to the terrain, and its subtle changes.

In thinking about sacbes and walking in Tzacauil, I talked about the Late to Terminal Formative Tzacauil Sacbe, which arrived at and originated from Tzacauil's acropolis (even while its other end was never fully defined). The sacbe enabled Tzacauil to be experienced as a destination. House groups are scattered around the sacbe, each "planted" on a bedrock outcrop surrounded by open areas of soil. The Formative householders who chose these homesites seem to have felt compelled to prioritize living in arable patches of land where they could practice intensive agriculture in their houselots. Living surrounded by soil flats, though, posed a walkability problem: for several months of the year, these areas would have been muddy and messy to walk on. Some Formative householders, in echoes of the sacbe's decisive trajectory across the terrain, handled this issue by reordering the materials of the land into ad hoc stepping stones and at least one gravel-packed terrace around their homesites. Not all house groups show signs of these accommodations. These built surfaces, along with the Tzacauil Sacbe, suggest a coexistence and potential tension between grounded and groundless ways of walking Tzacauil in the Formative.

I proposed here that for most walkers and on most days, Tzacauil and Yaxuna were probably experienced in similar key ways on the ground in the Late to Terminal Formative period. Yaxuna boasted a civic-ceremonial core that set it apart in central Yucatan, and its settlement was sprawling; for these and other reasons, Formative Yaxuna can be considered urbanizing if not outright urban. Looking more closely at Yaxuna's Formative sprawl suggests that it consists of community or neighborhood nodes replicated several times across the landscape. These nodes follow a template: several house groups, loosely clustered around a monumental focal point with open spaces preserved around the house groups, and with sacbes articulating monumental focal points with each other. Tzacauil follows the template of urbanizing Yaxuna's settlement nodes. The main difference is simply that while the other nodes are within a few minutes' walk to Yaxuna's central core, the walk to Tzacauil takes almost an hour. Tzacauil was certainly smaller. Fewer people lived there, and it lacked Yaxuna's sheer number of plazas and pyramids and the political institutions associated with those complexes. But as experienced on the ground level, the everyday differences of walking in these two places may have felt muted.

For many walkers, much of the time, Late to Terminal Formative Yaxuna and Tzacauil may not have been experienced in categorically separate ways. In both places, sacbes created the possibility for regimented walking, which in turn created contrasts with everyday grounded walking on trails and footpaths. Sacbes offered similar possibilities for transgressing and ignoring their own prescribed formalities. In both places, householders molded a certain expectation of how they wanted to live onto the land. They took steps to "unground" even casual walking in houselot areas to make their home-siting decisions viable in all seasons.

If on-the-ground differences between Tzacauil and Yaxuna may have been muted in the Formative, they became pronounced in the Late to Terminal Classic period. Householders who resettled

https://doi.org/10.1017/S0956536120000395 Published online by Cambridge University Press

Tzacauil centuries after its Terminal Formative abandonment were living among the ruins of the sacbe—a way of walking decidedly rejected, yet rich with potential for reimagination. To the south passed Sacbe 1, the most ambitious causeway-building project of pre-Colonial Maya history, all but snubbing the handful of people living at Tzacauil. As in the Formative period, there is the contrast of groundless (*sacbe*) and grounded (path and trail) walking, but the dynamic had changed; Tzacauil's small community were now no longer active participants in the contrast, as their settlement was no longer the destination at the end of the causeway. Classic householders adjusted their home-siting decisions to make their walking even more grounded. They chose to resettle areas that offered the greatest access to networks of natural bedrock and abandoned-constructed walkways. This embrace of grounded walking suggests a freedom and flexibility to improvise, to synchronize settlement and movement not only with terrain but with the seasons. Yaxuna, meanwhile, had reached an even higher population peak, was experiencing denser levels of settlement than ever before, and was politically tied up in conflicts and alliance building spanning the peninsula. Walking in Tzacauil and walking in Yaxuna during this time, it seems, would have yielded fundamentally different embodied understandings of place.

It is there, in the Classic period community at Tzacauil, that I would reopen the discussion of what "rural" meant on the ground in central Yucatan. Walking rural and walking urban is not a simple distinction. A binary of rural walking as freeform and gamboling and urban walking as orderly and calculated would be forced and fail to attend to historical changes. What strikes me as more productive is considering a spectrum of grounded and groundless walking, and working to notice how and when Maya settlements show signs of shifting support for different kinds of walking through time. Classic period Tzacauil shows a move away from groundless walking (i.e., sacbes, artificial surfaces) towards grounded walking (i.e., natural bedrock corridors). Classic Tzacauil householders also incorporated pre-existing, decaying architecture into the natural passages and walkways they picked as places for homesites. We can observe these subtle shifts, and glimpse the unknowable, ephemeral ways that walking was grounded in conversational relationship with land: footpaths that followed the shade of trees, trails that jogged to avoid the stings of a wild *chaya* plant, or bedrock passages that reflected enough moonlight for night walking. These ways of walking existed in urban centers, but they existed alongside ways of walking that worked to impose order on the terrain through straight lines, stairs, and paved surfaces. This coexistence and potential for tension changed the way such places were understood; perhaps in the absence of that tension, places were understood as rural.

The boundary between rural and urban may not be where we presumed, and walking as a form of embodied understanding of place provides an opening for interrogating how rurality was experienced. By investigating how places were walked through time, we can better attend to the historical dynamics of small settlements and track how they slipped into and out of being experienced as rural. Archaeological documentation of walking in the Maya lowlands poses difficulties, not least of which is (to bring up our own imposed boundaries again) due to how we define the built environment against the natural environment. In Yucatan, Maya householders have for millennia learned to integrate terrain—especially bedrock in all its forms—into construction in ways that defy the built-natural binary. If we are to approach an understanding of rurality and landscape, we would do well to recognize this as a form of traditional ecological knowledge and continue to engage with the communities who walk these landscapes today.

RESUMEN

¿Cómo fueron percibidos los asentamientos pequeños—y supuestamente rurales—por los mayas del pasado? En este artículo, discuto una arqueología de caminata en el pequeño sitio de Tzacauil, Yucatán (en las afueras del antiguo centro urbano de Yaxuná), para explorar cómo las experiencias de ruralidad fueron historicamente y socialmente contingentes. La práctica de caminar es capaz de producir y reproducir comprensiones encarnadas del lugar y, como tal, produce una conceptualización más dinámica de la ruralidad. Evalúo cómo los patrones de caminar en Tzacauil cambiaron de ca. 300 a. C. a 1100 d. C. a través de: (1) un recorrido con agricultores y jardineros de la comunidad actual de Yaxunah, quienes manejan Tzacauil y sus alrededores como parte de su ejido; y (2) datos de excavación de viviendas y solares en Tzacauil y Yaxuná.

Mi equipo y yo documentamos evidencia arqueológica de caminatas pasadas en Tzacauil. Junto con un sacbe construido durante el período formativo (ca. 300 a.C. a 250 d.C.), también identificamos superficies caminables construidas alrededor de algunas casas del formativo. Por el contrario, encontramos que el reasentamiento del período clásico de Tzacauil (550–1100 d.C.) no se asoció con ninguna superficie construida para caminar.

Trabajando con miembros de la comunidad de Yaxunah, pude determinar que los primeros pobladores formativos priorizaron construir sus casas en áreas con mucha tierra. Durante los meses de la temporada de lluvias, caminar habría sido difícil en estas áreas lodosas. Por eso, las viviendas formativas utilizaron senderos naturales y artificiales para acceder a sus tierras circundantes. Aunque Tzacauil estuvo relativamente lejos del centro de urbanización de Yaxuná, las huellas físicas del caminar sugieren que ambos sitios se experimentaron el paisaje de manera similar.

Tzacauil fue abandonado al final del formativo, y luego unas pocas familias lo volvieron a ocupar en el período clásico. El asentamiento clásico indica que las viviendas clásicas priorizaron construir sus casas sobre afloramientos de laja (roca madre), en lugar de las áreas terrenosas favorecidas por los habitantes anteriores. Al contrario del asentamiento formativo, la investigación arqueológica sugiere que caminar en el asentamiento clásico era relativamente libre y sin restricciones. El Sacbe de Tzacauil ya había sido abandonado en esta época. Un camino posterior, aún más largo, Sacbe 1, conectó Yaxuná con Cobá, y pasó Tzacauil hacia el sur sin detenerse. Tzacauil ya no era un destino. Discuto cómo estas formas muy diferentes de caminar sugieren que Tzacauil no fue caminado ni percibido como un lugar rural, como un lugar categóricamente diferente de Yaxuná, hasta la segunda fase de su asentamiento.

Los ritmos dinámicos de caminar, y los cambios estacionales y centenarios que dieron forma a los senderos de los caminantes, demuestran que la ruralidad en el área maya fue (y sigue siendo) históricamente contingente. Las comunidades agrícolas no eran ahistóricas. No podemos asumir que los sitios pequeños y periféricos como Tzacauil eran automáticamente rurales simplemente porque son pequeños y periféricos.

https://doi.org/10.1017/S0956536120000395 Published online by Cambridge University Press

ACKNOWLEDGMENTS

I thank the community members of Yaxunah for permitting me to work in their ejido, and for generously sharing how they walk the forested landscape. Archaeological investigations at Tzacauil were made possible through the permission of the Instituto Nacional de Antropología e Historia and through funding from the National Science Foundation, the Wenner-Gren Foundation, the U.S. Department of Education Fulbright-Hays Program, the University of Michigan Department of Anthropology, and the University of Michigan Museum of Anthropological Archaeology. I thankfully acknowledge the support of the Proyecto de Interacción Política del Centro de Yucatán (PIPCY), Travis Stanton, Traci Ardren, Aline Magnoni, 2013–2017 PIPCY project members, Joyce Marcus, and the Washington and Lee University Environmental Studies Program. I thank Scott Hutson and two anonymous reviewers for their thought-provoking comments on an earlier version of this article. Finally, my sincere thanks to Céline Lamb for her efforts coordinating this discussion of Maya rurality.

References

Ahmed, Sara
2006 *Queer Phenomenology: Orientations, Objects, Others*. Duke University Press, Durham.

Alcocer Puerto, Elias M., Grace Bascopé, and Nidelvia Vela Cano
2010 El Turismo en una comunidad maya yucateca: Pasado, presente, y un probable futuro. *Teoría y Praxis* 8:95–112.

Anderson, David S.
2011 Xtobo, Yucatan, Mexico, and the Emergent Preclassic of the Northern Maya Lowlands. *Ancient Mesoamerica* 22:301–322.

Benavides Castillo, Antonio
1981 Coba y Tulum: Adaptación al medio ambiente y contról del medio social. *Estudios de Cultura Maya* 13:205–222.

Benavides Castillo, Antonio, and Linda Manzanilla
1987 Introducción: Estudio de centros urbanos. In *Coba. Quintana Roo: Análisis de dos unidades habitacionales mayas*, edited by Linda Manzanilla, pp. 11–24. Universidad Nacional Autónoma de México, Mexico City.

Carolan, Michael S.
2008 More-Than-Representational Knowledge/s of the Countryside: How We Think as Bodies. *Sociologia Ruralis* 48:408–422.

Chase, Arlen F., and Diane Z. Chase
2001 Ancient Maya Causeways and Site Organization at Caracol, Belize. *Ancient Mesoamerica* 12:273–281.

Chase, Diane Z., and Arlen F. Chase
2014 Ancient Maya Markets and the Economic Integration of Caracol, Belize. *Ancient Mesoamerica* 25:239–250.

Cobos, Rafael
2001 El centro de Yucatán: De área periférica a la integración de la comunidad urbana en Chichén Itzá. In *Reconstruyendo la Ciudad maya: El urbanismo en las sociedades antiguas*, edited by Andrés Ruiz Ciudad, María Josefa Iglesias Ponce de León, and Maria del Carmen Martínez, pp. 253–276. Sociedad Española de Estudios Mayas, Madrid.

Collins, Ryan H.
2018 *From Sedentism to Sprawl: Early Urban Process at Yaxuná, Yucatan, Mexico 1000 BCE to 250 CE*. Unpublished Ph.D. dissertation, Department of Anthropology, Brandeis University, Boston.

Edensor, Tim
2000 Walking in the British Countryside: Reflexivity, Embodied Practices and Ways to Escape. *Body and Society* 6:81–106.
2008 Walking Through Ruins. In *Ways of Walking: Ethnography and Practice on Foot*, edited by Tim Ingold and Jo Lee Vergunst, pp. 123–141. Ashgate, Aldershot.

Farriss, Nancy M.
1984 *Maya Society under Colonial Rule: The Collective Enterprise of Survival*. Princeton University Press, Princeton.

Fedick, Scott L., Maria De Lourdes Flores-Delgadillo, Sergey Sedov,
Elizabeth Solleiro-Rebolledo, and Sergio Palacios-Mayorga
2008 Adaptation of Maya Homegardens by "Container Gardening" in Limestone Bedrock Cavities. *Journal of Ethnobiology* 28:290–304.

Fisher, Chelsea
2014 The Role of Infield Agriculture in Maya Cities. *Journal of Anthropological Archaeology* 36:196–210.
2019 *Maya Farming Communities and the Long View of Sustainability at Tzacauil*. Ph.D. dissertation, Department of Anthropology, University of Michigan, Ann Arbor.

Fisher, Chelsea, and Traci Ardren
2020 Partaking in Culinary Heritage at Yaxunah Yucatán During the Noma Mexico Pop-up of 2017. *Heritage* 3:474–492.

Folan, William J.
1991 Sacbes of the Northern Maya. In *Ancient Road Networks and Settlement Hierarchies in the New World*, edited by Charles D. Trombold, pp. 222–229. Cambridge University Press, Cambridge.

Folan, William J., Jacinto May Hau, Joyce Marcus, W. Frank Miller, and
Raymundo González Heredia
2001 Los caminos de Calakmul, Campeche. *Ancient Mesoamerica* 12: 293–298.

Foster, Alec, and Joshua P. Newell
2019 Detroit's Lines of Desire: Footpaths and Vacant Land in the Motor City. *Landscape and Urban Planning* 189:260–273.

Glover, Jeffrey B., and Travis W. Stanton
2010 Assessing the Role of Preclassic Traditions in the Formation of Early Classic Yucatec Cultures. *Journal of Field Archaeology* 35: 58–77.

Goñi Motilla, Guillermo Antonio
1993 *Solares prehispánicos en la península de Yucatán*. Licenciatura thesis, Ciencias Antropológicas en la Especialidad de Arqueología, Escuela Nacional de Antropología e Historia, Mexico City.

Guenter, Stanley P.
2014 The Queen of Cobá: A Reanalysis of the Macanxoc Stelae. In *The Archaeology of Yucatán: New Directions and Data*, edited by Travis W. Stanton, pp. 395–421. ArchaeoPress Pre-Columbian Archaeology 1. Archaeopress, Oxford.

Haviland, William A.
1970 Tikal, Guatemala, and Mesoamerican Urbanism. *World Archaeology* 2:186–198.

Hernández Álvarez, Héctor Abraham
2014 *Etnoarqueología de grupos domésticos mayas: Identidad social y espacio residencial de Yaxunah, Yucatán*. Ph.D. thesis, Universidad Nacional Autónoma de México, Mexico City.

Hutson, Scott R.
2010 *Dwelling, Identity, and the Maya: Relational Archaeology at Chunchucmil*. AltaMira Press, Lanham.

Hutson, Scott R., Aline Magnoni, and Travis Stanton
2012 "All That is Solid…": Sacbes, Settlement, and Semiotics at Tzacauil, Yucatan. *Ancient Mesoamerica* 23:297–311.

Hutson, Scott R., and Jacob A. Welch
2014 Sacred Landscapes and Building Practices at Uci, Kancab, and Ucanha, Yucatan, Mexico. *Ancient Mesoamerica* 25:421–439.

Hutson, Scott R., Gertrude Kilgore, Daniel Conley, Jacob Welch, Travis
Stanton, and Traci Ardren
2020 Lidar-based Advances in Linear Features: Sacbes, Ridges, and Terraces in Quintana Roo and Yucatan. Paper presented at The University of Texas Lidar Workshop/Sibley Conference, Austin.

Ingold, Tim
2004 Culture on the Ground: The World Perceived Through the Feet. *Journal of Material Culture* 9:315–340.
2010 Footprints Through the Weather-world: Walking, Breathing, Knowing. *Journal of the Royal Anthropological Institute* (N.S.):S121–S139.

Ingold, Tim, and Jo Lee Vergunst (editors)
2008 *Ways of Walking: Ethnography and Practice on Foot*. Ashgate, Aldershot.

Isendahl, Christian
2012 Agro-Urban Landscapes: The Example of Maya Lowland Cities. *Antiquity* 86:1112–1125.

Keller, Angela
2010 A Road by Any Other Name: Trails, Paths, and Roads in Maya

Language and Thought. In *Landscapes of Movement: Trails, Paths and Roads in Anthropological Perspective*, edited by James E. Snead, Clark L. Erickson, and Andrew Darling, pp. 133–157. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.

Kurjack, Edward B.
1974 *Prehistoric Lowland Maya Community Social Organization: A Case Study at Dzibilchaltun, Yucatan, Mexico*. Middle American Research Institute, Publication 38. Tulane University, New Orleans.

Kurnick, Sarah and David Rogoff
2020 Maya Cartographies: Two Maps of Punta Laguna, Yucatan, Mexico. *Journal of Social Archaeology* 20:119–143.

Lefebvre, Henri
1996 *Writings on Cities*. Translated by Eleonore Kofman and Elizabeth Lebas. Blackwell, Malden.

Lucero, Lisa J., Roland Fletcher, and Robin Coningham
2015 From "Collapse" to Urban Diaspora: The Transformation of Low-Density, Dispersed Agrarian Urbanism. *Antiquity* 89:1139–1154.

Magnoni, Aline, Scott R. Hutson, and Bruce H. Dahlin
2012 Living in the City: Settlement Patterns and the Urban Experience at Classic Period Chunchucmil, Yucatan, Mexico. *Ancient Mesoamerica* 23:313–343.

Marcus, Joyce
1993 Ancient Maya Political Organization. In *Lowland Maya Civilization in the Eighth Century A.D.*, edited by Jeremy A. Sabloff and John S. Henderson, pp. 111–184. Dumbarton Oaks, Washington, DC.

Restall, Matthew
1997 *The Maya World: Yucatec Culture and Society, 1550–1850*. Stanford University Press, Stanford.

Robin, Cynthia
2002 Outside of Houses: The Practices of Everyday Life at Chan Nòohol, Belize. *Journal of Social Archaeology* 2:245–268.

Robin, Cynthia (editor)
2012 *Chan: An Ancient Maya Farming Community*. University Press of Florida, Gainesville.

Rohrer, Patrick, and Travis W Stanton
2019 Imaging and Imagining Ancient Maya Causeways: When Sacbes Turn. In *Chacmool at 50: The Past, Present, and Future of Archaeology*, edited by Kelsey Pennanen and Susanne Goosney, pp. 25–36. Proceedings of the 50th Annual Chacmool Archaeology Conference, Chacmool Archaeology Association, Calgary.

Roys, Ralph
1957 *The Political Geography of the Yucatan Maya*. Carnegie Institute of Washington, Washington, DC.

Sharer, Robert J.
1992 The Preclassic Origin of Lowland Maya States. In *New Theories on the Ancient Maya*, edited by Elin C. Danien and Robert J. Sharer, pp. 131–36. University Museum, University of Pennsylvania, Philadelphia.

Shaw, Justine M.
2008 *White Roads of the Yucatán: Changing Social Landscapes of the Yucatec Maya*. University of Arizona Press, Tucson.
2012 Roads to Ruins: The Role of Sacbeob in Ancient Maya Society. In *Highways, Byways, and Road Systems in the Pre-Modern World*, edited by Susan E. Alcock, John Bodel, and Richard J.A. Talbert, pp. 128–46. John Wiley and Sons, Malden.

Sheets, Payson, Christine Dixon, David Lentz, Rachel Egan, Alexandria Halmbacher, Venicia Slotten, Rocío Herrera, and Céline Lamb
2015 The Sociopolitical Economy of an Ancient Maya Village: Cerén and Its Sacbe. *Latin American Antiquity* 26: 341–361.

Snead, James E., Clark L. Erickson, and J. Andrew Darling (editors)
2009 *Landscapes of Movement: Trails, Paths, and Roads in Anthropological Perspective*. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.

Stanton, Travis, and Ryan Collins
2017 Los orígenes de los mayas del norte: Investigaciones en el Grupo E de Yaxuná. *Arqueología Mexicana* 25:32–37.

Stanton, Travis W.
2017 The Founding of Yaxuná: Place and Trade in Preclassic Yucatán. In *Early Maya E-Groups, Solar Calendars, and the Role of Astronomy in the Rise of Lowland Maya Urbanism*, edited by David A. Freidel, Arlen F. Chase, Anne S. Dowd, and Jerry Murdock, pp. 450–479. University of Florida Press, Gainesville.

Stanton, Travis W., and David A. Freidel
2005 Placing the Centre: Centering the Place: The Influence of Formative Sacbeob in Classic Site Design at Yaxuná, Yucatán. *Cambridge Archaeological Journal* 15:225–249.

Stanton, Travis W., and Traci Ardren
2005 The Middle Formative of Yucatan in Context: The View from Yaxuna. *Ancient Mesoamerica* 16:213–228.

Stanton, Travis W., David A. Freidel, Charles K. Suhler, Traci Ardren, James Ambrosino, Justine M. Shaw, and Sharon Bennett
2010 *Archaeological Investigations at Yaxuná, 1986–1996: Results of the Selz Foundation Yaxuna Project*. BAR International Series 2056. Archaeopress, Oxford.

Stanton, Travis W., Traci Ardren, Nicolas C. Barth, Juan C. Fernandez-Diaz, Patrick Rohrer, Dominique Meyer, Stephanie J. Miller, Aline Magnoni, and Manuel Pérez
2020 'Structure' Density, Area, and Volume as Complementary Tools to Understand Maya Settlement: An Analysis of Lidar Data along the Great Road between Coba and Yaxuna. *Journal of Archaeological Science: Reports* 29:102178.

Tiesler, Vera, Andrea Cucina, Travis W. Stanton, David A. Freidel, and Traci Ardren
2017 *Before Kukulkán: Bioarchaeology of Maya Life, Death, and Identity at Classic Period Yaxuná*. University of Arizona Press, Tucson.

Tilley, Christopher Y.
1994 *A Phenomenology of Landscape: Places, Paths, and Monuments*. Berg, Oxford.

Tozzer, Alfred M.
1941 *Landa's Relacion de Las Cosas de Yucatan*. Papers of the Peabody Museum of American Archaeology and Ethnology, No. 18. Peabody Museum of American Archaeology and Ethnology, Harvard University, Cambridge.

Vargas, Ernesto, Patricia S. Santillan, and Marta Vilalta
1985 Apuntes para el análisis del patrón de asentamiento de Tulum. *Estudios de Cultura Maya* 16:55–83.

Villa Rojas, Alfonso
1934 *The Yaxuna-Coba Causeway*. Contributions to American Archaeology, No. 9. Carnegie Institution of Washington, Publication 436. Carnegie Institution of Washington, Washington, DC.

Vogt, Evon V.
1961 Some Aspects of Zinacantan Settlement Patterns and Ceremonial Organization. *Estudios de Cultura Maya* 1: 131–145.
1983 Ancient and Contemporary Maya Settlement Patterns: A New Look from the Chiapas Highlands. In *Prehistoric Settlement Patterns: Essays in Honor of Gordon R. Willey*, edited by Evon V. Vogt and Richard M. Leventhal, pp. 89–114. University of New Mexico Press, Albuquerque.

Woods, Michael
2010 Performing Rurality and Practising Rural Geography. *Progress in Human Geography* 34:835–846.