

# 1

## Nuts, Bolts, and Bridges

### Some Reflections

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This has been a long time coming. I thought I had seen the last of paradigm shifts in our discipline's local knowledge with the acceptance of the decipherment of Maya texts and the integration of history into our archaeological thinking, but I was wrong. Paradigm shifts, as Thomas Kuhn (1962) showed more than fifty years ago, are not reasoned, rational, dry, or quiet. They are exuberant, celebratory, hopeful, and potentially fragile (Lakatos and Musgrave 1970) and therefore worthy of defense and substantiation with the nuts and bolts of our efforts. With discovery in the field and in the lab, serious attention to detail and privileged information like that from Cerén, the prospect of complex variation, and the patient compilation of evidence patterns years in the making like those at Caracol, the contributors to this book show what makes archaeological science truly worth doing. We know better now and we will know much better in the future: nuts, bolts, and the interpretive bridges to a new understanding of Maya political economy that we build with them are here. Important recent books underscore the trends represented in our collective work (Hirth and Pillsbury, ed. 2013; King, ed. 2015). Friends and colleagues no longer with us like Bruce Dahlin (Dahlin et al. 2007) and Leslie Shaw—who declared: “It really does matter for the larger understanding of Maya economy how goods were moved from producer to consumer, as this exposes the power and decision-making retained by various segments of society” (Shaw 2012:118)—recently synthesized the state of this inquiry and helped pioneer the way forward. We acknowledge their foresight and intellectual courage. I am happy to say that many of the authors address Shaw's elementary concern in concrete ways. We have all been teaching

each other in the preparation of this book, and it is a great privilege for me to be able to comment on some of the major trends outlined.

Paradigms are made of paradigms, great examples of imaginative method linked compellingly to good theory. Arthur Demarest, Bart Victor, Chloé Andrieu, and Paola Torres (Chapter 3) and Eleanor King (Chapter 2) review theory and a lot of the literature for us, including reference to chapters in this book, to show that we have some ways to go before consensus on the bridges. Everyone who opens this book should study these innovative, challenging, and enthusiastic theory papers. Both King and Demarest and his collaborators argue that we need to abandon dichotomous positions such as market versus nonmarket and recognize spectrums of institutional variability. Both these chapters underscore the agency of traders and those involved in commercial enterprise. Demarest and his colleagues call on us to embrace the polythetic nature of the terms that we use to discuss political economic institutions as now core to the discipline of applied economics. They draw on more than a decade of intensive research at the site of Cancuén and applied economics as practiced by Bart Victor and others at the Owen School of Business at Vanderbilt to frame what they clearly view as a new programmatic approach to the Maya past to gain a better understanding of economic variability and agency. They suggest that we turn to applied economics as a source of new models and require ourselves to refine our chronological controls significantly, especially our ceramic chronologies, to allow for the application of such contemporary modeling. Distributional dynamics are volatile and variable in this view and hold the key to transcending a focus of marketplaces as such and discerning the presence and nature of market economics that do not even require the existence of such places—Cancuén, they declare, did not have a marketplace despite its extraordinary and innovative commercial enterprises.

Demarest and his colleagues critique the chronological and contextual controls in Masson and Freidel's collaborative work on artifact distributions and concomitant economic organization at Mayapán and Tikal suggesting the existence of marketplace exchange in both places (Masson and Freidel 2012, 2013). It is true that Classic Tikal's record spans a much longer period than Mayapán's Postclassic record. The distributional studies reflect this, so are these apples and oranges (nuts and bolts)? Andrieu (Chapter 24) suggests that the Early and Late Classic economies of Tikal were quite different in the use of jade and obsidian, so perhaps Demarest and his collaborators have a point. They would argue that in some other cases, such as at Caracol in the Late Classic Period,

evident stability in the economic institutions allows the use of longer spans to compose distributional patterns (Chase and Chase, Chapter 8). Still, Demarest and his colleagues do acknowledge that Tikal likely did have a marketplace: they just do not think that such places matter all that much when determining political economies and their development over time. What matters is getting much more clarity on distributional patterns over wider ranges of context and shorter spans of time and then using more sophisticated modeling facilitated by the use of applied economics.

But marketplaces are likely to remain of interest to many contributors to this book, including me, even as we strive to refine our other approaches to Maya political economy. Christopher Jones (1996), of course, identified the central market at Tikal decades ago, a distinctive masonry complex. Recently Ruhl, Dunning, and Carr (2018) used LiDAR imagery to detect other likely masonry marketplaces with designs similar to the Tikal market in southwestern Campeche. Bernadette Cap (Chapter 22) shows how archaeologists can forensically identify marketplaces in what Marilyn Masson and I dubbed “wide open spaces” (Masson and Freidel 2013). If Cancuén did not have a marketplace, that may have been due to its exceptional economic organization as now being published by Demarest and his colleagues in many new articles and chapters (as summarized in Chapter 3). They make the intriguing observation that eighth-century Cancuén’s economic strategies were quite distinct from those used at coeval Classic cities to the north in the southern Maya lowlands. They argue that such dynastic Classic Maya polities evince a hypercoherent pattern of settlement and political economic interaction. I am reminded of the great excitement surrounding the adoption of theory from the New Geography and the application of Central Place Theory to the Maya lowland polities.

Eleanor King, along with Leslie Shaw, has been working on marketplaces and their denizens. She points out that we need more refined ways to access the institutions of exchange themselves, the kinds of traders, their class status, and their organizations. In ethnohistorical literature she discerns levels within the institutionalization of Ppolom (or *pòlom*) merchants, pointing to specialists in local trade as well as specialists in long-distance trade. On the nitty-gritty side, Kenneth Hirth’s (1998) exemplary study of the economy of Xochicalco has gained traction among us. We learned from Hirth that we can potentially discern the economic agents in a marketplace economy if we pay close attention to the distribution patterns of the things people made, used, and discarded: those lively social things described by Appadurai (1988),

chirping quietly in our lab drawers and boxes and waiting as in *Toy Story* for us to get with the program.

Marilyn Masson (Masson and Freidel 2012, 2013) used this distributional analysis technique to show that the people of Classic Period Tikal, like those of Mayapán, worked with market places as registered in the kinds and amounts of trade goods found in households of the city. In another close-grained study of contextual distribution (Chapter 4), Scott Hutson, a collaborator in Bruce Dahlin's (2009) marketplace hypothesis, shows how the obsidian consumers of Chunchucmil are not like those of Tikal. Keying into obsidian, a commodity of focus for many scholars looking at Maya exchange, Hutson uses statistical analyses comparing Tikal and Chunchucmil household samples to conclude that, while frequency of this import at Tikal seemingly varies with overall prosperity or wealth of households and proximity to the central market, at Chunchucmil such correlations remain more obscure and problematic. He concludes that marketplace exchange exists in both places, but it was no doubt institutionally part of larger and distinct political and social arrangements—dynastic rulers and their courts at Tikal, more likely peer associations of great merchant houses at Chunchucmil for starters. Personally, I am intrigued by the Chunchucmil household with high access to obsidian and evidence of processing rough textiles. Bulk commodities require bulk containment, and bags of cactus fiber cloth would have been at a premium in the salt trade of Chunchucmil. Perhaps the obsidian tools were important to such production.

Once we have the perspective and the methodology, we can start to discern and study the variability. We see the choices made by people operating within institutional parameters, defining their social relationships and undertaking daily business. The Terminal Classic rural households studied by Masson and her colleagues (Chapter 5) had access to a wide array of nonlocal goods, suggesting that they had options for trading opportunities to supply basic household inventories. But what could be more commonsensical than those Postclassic rural farmers and craftswomen who found themselves drawn to the urban marketplace of Mayapán, the last standard of the north? The Maya got into the towns and cities. Marketplaces were socializing places, good for exchanging glances as well as goods and setting up family negotiations that resulted in reproduction. And they got around a lot: bioarchaeologists Andrew Scherer and Lori Wright (2015; see also Cucina 2015) show us that there is really only one genetic pool in the Maya lowlands.

When people were in their places, they very likely owned them. Iván