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Research Article

Establishing the Terminal Classic Ik'hubil Ceramic Sphere in the Eastern Maya Lowlands of Belize

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Abstract

In this study, I use the type-variety-mode analysis to define the diagnostic ceramic material for the Ik'hubil Ceramic Complex dating to the Terminal Classic (ca. A.D. 780-930/1000). The percentages of shared ceramic content indicate that multiple sites in the mid-to-lower Sibun Valley are members of an Ik'hubil Ceramic Sphere. My preliminary analyses of sites in the lower Belize River valley suggest that the Ik'hubil Sphere may extend across a broader area of north-central Belize during the Terminal Classic, discrete from the Spanish Lookout Sphere in the upper Belize Valley. Northern Yucatec traits are identified in ceramics and architecture in the eastern Sibun and Belize Valleys, along with marked changes in foodways. The presence of trading diasporas and more intimate social relationships, such as intermarriage, may explain this mix of local and hybrid forms of material culture introduced by the ninth century in this part of the eastern Maya Lowlands.

Resumen

Recientes investigaciones arqueológicas en las tierras bajas mayas orientales han identificado numerosas poblaciones mayas que sobrevivieron al "colapso" de la civilización maya clásica y prosperaron durante el período Clásico terminal (ca. 780-930/1000 d.C.). En este estudio, utilizo el tipo-variedad-modo de análisis para definir el material cerámico de diagnóstico para el Complejo Cerámico Ik'hubil del Clásico Terminal que se encuentra en la parte baja del Valle de Sibun, Belice-Oshon y Obispo. Estos dos vecinos están ubicados al otro lado del río, a menos de 2,5 km de distancia. Contenido cerámico similar encontrado en el sitio de Pechtun Ha en el valle de Sibun, aproximadamente 20-25 km río arriba, sugiere que los tres sitios son miembros de una Esfera de cerámica Ik'hubil compartida. Desde mi trabajo en el Sibun, he identificado diagnósticos similares en mis investigaciones posteriores de sitios del Clásico Terminal en la parte media y baja del Valle del Río Belice y propongo aquí que una Esfera de Cerámica Ik'hubil puede extenderse a través de un área más amplia del centro-norte. Belice.

Comienzo describiendo los tipos cerámicos de diagnóstico del Complejo Ik'hubil y mi enfoque del análisis cerámico. Comparo los tipos cerámicos primarios con el Complejo Cerámico Spanish Lookout definido en Barton Ramie al oeste, más cerca de Petén, junto con cerámicas de sitios vecinos en la parte superior del Valle de Belice que se definen como parte de Spanish Lookout Sphere. Si bien existe cierta superposición con los tipos primarios del Complejo Ik'hubil, las frecuencias no sugieren una membresía completa en una esfera cerámica compartida.

Al comparar los conjuntos cerámicos entre sitios en Sibun y el este del Valle de Belice, los sitios seleccionados muestran evidencia de imitación de estilo yucateco o cerámica de pizarra importada, especialmente en los sitios más cercanos a la costa, como Oshon. Es importante destacar que las cerámicas con atributos del norte aparecen junto a un complejo de santuario circular distintivo en sitios en el este de los valles de Sibun y Belice. Además, la introducción de ciertas formas cerámicas, como los comales y los cucharones, apuntan a marcados cambios en las costumbres alimentarias. La evidencia indica más que la emulación y el comercio local y sugiere la posibilidad de que los migrantes yucatecos ingresen a lugares como el centro-norte de Belice. Sin embargo, la evidencia de formas cerámicas híbridas y el mantenimiento de ciertas tradiciones cerámicas locales no sugieren un reemplazo total de la población como resultado de la colonización. La presencia de diásporas comerciales y relaciones sociales más íntimas, como los matrimonios mixtos, pueden explicar esta mezcla de formas locales e híbridas de cultura material introducida durante el Clásico Terminal.

Los resultados de este estudio arrojan luz sobre el desarrollo de las esferas de interacción locales y regionales con el norte de Yucatán a medida que el poder de los centros afiliados a Petén se desvanecía al final del período Clásico. Se cree que el modelo de "esfera de interacción", desarrollado por primera vez en las décadas de 1950 y 1960, refleja diferentes tipos de afiliaciones (por ejemplo, económicas, sociales/sociopolíticas, etc.) entre sitios y regiones. La fuerza del modelo de esfera de interacción es su

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Cite this article: Harrison-Buck, Eleanor (2023) Establishing the Terminal Classic Ik'hubil Ceramic Sphere in the Eastern Maya Lowlands of Belize. Ancient Mesoamerica 1-29. https://doi.org/10.1017/S0956536123000214

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énfasis en las relaciones recíprocas entre los grupos y su formación continua. Sin embargo, queda una gran cantidad de potencial sin explotar con respecto a la teorización de las esferas de interacción. Para avanzar en este modelo, se emplea una perspectiva relacional para conceptualizar aún más las esferas de interacción, no como entidades estáticas o discretas, sino como formaciones continuas que se constituyen mutuamente entre diferentes grupos. Visto a través de una lente relacional, lo social y lo económico nunca son esferas distintas de interacción y la influencia nunca es unidireccional, sino que se entiende mejor como una "malla" continua de relaciones entrelazadas (sensu Ingold 2006).

A partir de este estudio, concluyo que los "productos básicos" compartidos, como la cerámica y estilos arquitectónicos similares que se encuentran en todo el centro-norte de Belice, pueden indicar tanto diásporas comerciales como matrimonios mixtos locales con poblaciones "extranjeras". Las diásporas comerciales pueden haber implicado la migración circular de comerciantes del norte que se casaron con la población local. La evidencia de compromiso bidireccional y el movimiento continuo de personas impactaron las esferas de interacción locales (subregionales o microrregionales) en el centro-norte de Belice y una amplia área de las Tierras Bajas Mayas durante este tiempo.

Keywords: Maya; Terminal Classic; Belize; ceramic analysis; circular architecture; interaction spheres; migration; trading diasporas; intermarriage

In this article, I explore interaction among communities in the eastern Maya Lowlands of north-central Belize during Terminal Classic times (ca. A.D. 780-930/1000) by examining ceramic typologies and their distribution patterns. I present the results of my own ceramic analysis from sites in the Sibun and eastern Belize River Valleys, two primary watersheds that flow into the Caribbean Sea and encompass the low-lying coastal zone in the north-central part of Belize (Figure 1). Here, I offer a description of the Terminal Classic ceramic types found in the Ik'hubil Ceramic Complex, which I initially defined for the Sibun Valley as part of my dissertation research (Harrison-Buck 2007). Since my work in the Sibun, I have identified similar diagnostics in my subsequent investigations of Terminal Classic sites in the mid-to-lower Belize River Valley, and I propose here that an Ik'hubil Ceramic Sphere may extend across a broader area of north-central Belize (Figure 1).

I begin by describing the diagnostic ceramic types of the Ik'hubil Complex and my approach to the ceramic analysis. I compare the primary ceramic types with the Spanish Lookout Ceramic Complex defined at Barton Ramie, along with ceramics from neighboring sites in the upper Belize Valley, which overlap with the Ik'hubil Complex, but do not suggest full membership in a shared ceramic sphere. The Terminal Classic diagnostics of the Ik'hubil Ceramic Complex depart in many ways from the earlier Late Classic, Peten-affiliated ceramic tradition, often referred to as the Tepeu Sphere, which once dominated much of the region (Rice and Forsyth 2004: Figure 3.1). Although some ceramic types of the so-called Tepeu 2 Sphere persist, there are a number of new ceramic types in the Ik'hubil Complex that suggest stylistic attributes stemming from the Gulf and northern Maya Lowlands. This includes the appearance of molded-carved ceramics, bolster-rimmed basin forms with a pronounced P-shaped lip form, and other stylistic elements introduced for the first time in this part of the eastern Maya Lowlands during the Terminal Classic. When comparing the ceramic assemblages across sites in the Sibun and eastern Belize Valley, select sites show evidence of Yucatec-style imitation or imported slate ware ceramics, especially at sites closest to the coast, such as Oshon, and sites father to the north such as

Jabonche, Chulub, and Chau Hiix (Figure 1; Fry 2013:88–89; Harrison-Buck et al. 2016:144; Harrison-Buck et al. 2020: Figure 9g; see also D. Chase 1982a; Ferguson 2006; Masson and Mock 2004 for other examples of slate wares at sites farther to the north in Belize).

It is important to note that ceramics with northern attributes appear alongside a distinctive circular shrine complex at sites in the eastern Sibun and Belize Valleys. Terminal Classic circular shrines often are associated with the northern Yucatec center of Chichen Itza, where the famous Caracol building is found (Pollock 1936; Ruppert 1935). Elsewhere, I describe in more detail the results of my excavations and interpretations of multiple Yucatec-style circular buildings that I have investigated in the Sibun and Belize Valleys at Pechtun Ha, Oshon, Obispo, Hum Chaak, and Ik'nal (see Figure 1; Harrison-Buck 2007; Harrison-Buck 2012a; Harrison-Buck and Pugh 2020; Harrison-Buck et al. 2018). I have shown that this distinctive Terminal Classic building type has a broad distribution both in and outside of the eastern Maya Lowlands (see also Harrison-Buck 2016; Harrison-Buck and McAnany 2013). I suggest that the introduction of imported and imitation Yucatec-style slate wares and architecture point to a broad regional network of interaction involving sites such as Chichen Itza and Uxmal in northern Yucatán and El Tigre (Itzamkanak) in the Gulf lowlands, where other examples of similar Terminal Classic circular architecture are found.

When examined together, ceramic and architectural data indicate a point of contact between social and economic spheres of interaction, which did not operate separately but instead were mutually constituted. In archaeology, objects such as ceramics have traditionally been organized as a fixed list of traits indexing culture history as chronological markers with diffusion as the primary mode of integration. It was not until the culture history paradigm was largely rejected by processualists that the emphasis shifted "to considerations of [objects] as components of political and social systems" (Dye 2019:126). In the post-processual movement of the 1990s, David Dye (2019) observes that defining regional stylistic traditions and tracing their origins remained important, but there was also an increased emphasis on regional networks of interaction involving

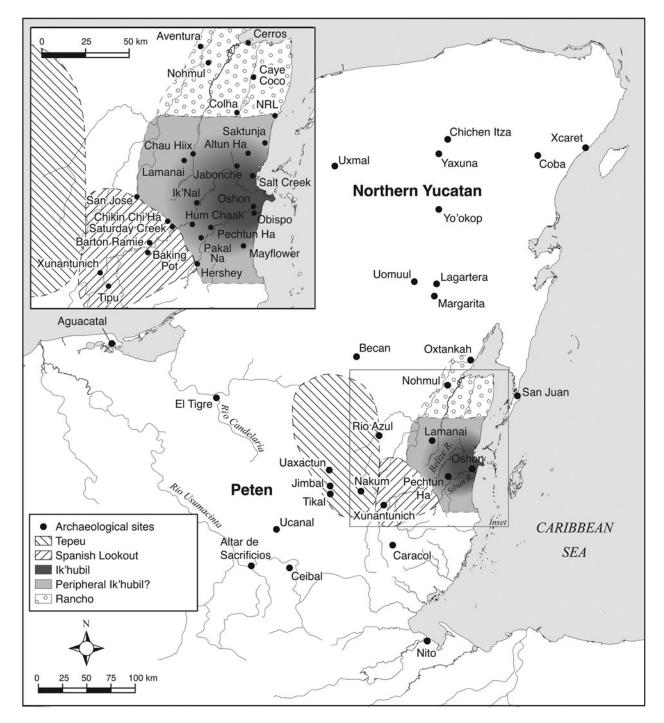


Figure 1. Terminal Classic ceramic spheres for the Maya Lowlands, including the proposed Ik'hubil Sphere. Map by M. Brouwer Burg.

people, sites, and political institutions. The studies of agency that came on the scene at this time sought to understand social processes but mostly in terms of elite persons, with the emphasis still on defining stylistic traditions and a range of motifs so as to decode the meaning of various iconographic themes that were being represented.

To move the interaction sphere model forward, a relational perspective may be useful for further reconceptualizing both local and regional interaction spheres. Relational theory incorporates indigenous ontologies and

a neomaterialist approach (see Crellin et al. 2020; Harris and Cipolla 2017). Such an approach considers interaction beyond a series of bounded groups whose changes are dependent on elite actors and institutions controlling the process for purely political or materialist gains (see Harrison-Buck 2020 for further discussion). From a relational lens, political, economic, and social relations are never distinct spheres of interaction, and influence is never unidirectional but constitutes an ongoing "meshwork" of relationships (sensu Ingold 2006; for an example,

see Harrison-Buck 2021). From this perspective, spheres of interaction are not fixed entities or top-down political institutions but mutually constituted social relationships that are continually changing and (re)forming at multiple scales of interaction.

Although the Ik'hubil Ceramic Sphere appears to generally reflect a local socioeconomic "meshwork" of interaction, the introduction of new traits seen in both ceramics and architecture may signal a number of changes taking place on a broader scale that I suggest constituted a more complex social entanglement. This includes the movement and migration of groups into the eastern Maya Lowlands and an increased participation in a circum-peninsular trade network that extended from the Gulf lowlands along the eastern Caribbean as far south as the Bay of Honduras (Harrison-Buck 2012b:113-114; see also Harrison-Buck 2016; Harrison-Buck and McAnany 2013; Harrison-Buck and Pugh 2020; Harrison-Buck et al. 2013). This longdistance network of interaction impacted localized domestic patterns of production and social practice among coastal and riverine settlements in north-central Belize beginning at least by the ninth century, and it lasted well into the tenth century, with a mixing of traits that I suggest is an indication of physical migration and possible intermarriage among local and "foreign" groups. These new influences are introduced in the eastern Maya Lowlands as many large Classic Maya centers decline and their Peten-affiliated (Tepeu) traditions wane (Harrison-Buck 2016).

Situating the Ik'hubil Ceramic Complex: Approaches to the analysis

Elsewhere, I suggest that the Ik'hubil Complex is best characterized as a mix or hybridized assemblage of local and "foreign" traits introduced during the Terminal Classic in an area of north-central Belize (Harrison-Buck et al. 2013). Scholars have long noted the increased regionalization of ceramic traditions during the ninth-century Terminal Classic. Willey and colleagues (1967:311) attributed the "proliferation of [ceramic] spheres" defined by ceramicists for this time period as a result of this high degree of local differentiation in many areas of the southern Maya Lowlands. To understand this ceramic regionalization for the ninth-century Terminal Classic transition, Demarest and colleagues (2004:558-559) have called for "systematic site-by-site, subregion-by-subregion comparison and correlation of data ... [with] alignment of chronologies and typologies and collaborative construction of subregional culturehistories." As noted above, the development of fixed culture histories in archaeology has long been critiqued for privileging the diffusion of traits and external influence over local innovation as an explanatory model and, in many ways, belies the movement and mixing of people evident in the Terminal Classic. Despite the weaknesses of the culture-historical "explanatory" model, the approach remains foundational in Maya archaeology, specifically with ceramic studies (Gándara 2012).

Rather than a clear theoretical persuasion, the culturehistorical approach in ceramic studies is perhaps best viewed as one aspect of the archaeologist's tool kit that serves as a "first step" for understanding regional and subregional differences in ceramic assemblages. The typevariety method as a culture-historical approach is considered among the most efficient for achieving intersite ceramic comparisons (Forsyth 1983:241). Type-variety is a mode of classification in which archaeologists "[have] established a common language for the description of ancient pottery by organizing pottery hierarchically into wares, groups, types, and varieties based on stylistic similarity" (Aimers and Graham 2013:92). A ceramic group is a discrete collection of ceramic types grouped together based on a suite of shared attributes. The ceramic types within the group share "a distinctive homogeneity in range of variation concerning form, base color, technological, and other allied attributes" (Gifford 1963:23, cited in Forsyth 1983:9). The variety further subdivides individual types, usually based on specific stylistic elements (e.g., plain versus incised). As Aimers and Graham (2013:96) observe, type-variety as an analytical approach tends to privilege stylistic choices over those of production, but it remains a useful mode of classification for addressing specific questions regarding consumption and—of importance for this study—intersite and interregional comparisons.

A typological approach such as type-variety is a classification system that groups ceramics based on select sets of attributes, usually a specific suite of surface treatments, whereas a modal approach can crosscut individual types and varieties (Forsyth 1983:9). The latter classifies ceramics using single features or attributes, most commonly vessel form or technological modes of manufacture (Forsyth 1983:3). Scholars such as Donald Forsyth (1983) advocate for the use of a combination of approaches to ceramic studies—what is often referred to as a type-variety-mode classification system. Although my approach here emphasizes the type-variety system of classification, I do consider select modal attributes in terms of certain vessel forms and functions, as well as paste and other technological aspects of manufacture. Additionally, there are some distinctive and chronologically significant modes found in select ceramics that I describe as "horizon markers" (Forsyth 1983:9; Willey et al. 1967:305-306), because they are widely shared across space and between complexes. Like the northernstyle circular architecture, these distinctive modes found in Terminal Classic ceramics mark broader regional changes taking place during this transitional time in the Maya Lowlands.

Defining a ceramic complex using type-variety offers an effective means for not only making typological comparisons but also constructing a general chronological framework that can be compared with other sites across the Maya Lowlands. In the type-variety system of classification, a ceramic "complex" is defined as "the sum total of the ceramic content of an archaeological unit or phase" (Forsyth 1983:9). The ceramic complex provides "a means for categorizing the contents of individual site assemblages and for exploring and expressing the degree of similarity between assemblages from different sites" (Bill 2013:29). In its strictest definition, a ceramic complex is only

applicable to one site (Willey et al. 1967:292). The Ik'hubil Complex presented here deviates from this strict definition of a ceramic complex because it is defined based on my own quantitative and qualitative type-variety analyses of ceramics from two neighboring sites in the Sibun Valley—Oshon and Obispo. These sites are located across the river from one another about 2.5 km apart (see Figure 1; Harrison-Buck 2007). The site of Pechtun Ha in the middle reaches of the Sibun Valley around 20–25 km away also shares a majority of the ceramic content of the Ik'hubil Complex, so it is appropriately referred to as a member of a larger ceramic "sphere" (see discussion below).

All three sites in the Sibun Valley share not only ceramic content but also a distinctive circular architectural complex indicative of a similar occupational history and chronological framework. I relied most heavily on these three sites for defining the primary ceramic groups of the Ik'hubil Sphere (see Table 1). I compared the ceramic content with two other sites in the Sibun Valley—Pakal Na and Hershey which lack circular architecture. Although all five sites generally share similar ceramic content, the distributions vary somewhat (see Table 2). Pakal Na and Hershey, located in the middle and upper reaches of the Sibun Valley (respectively), show greater affinities with the upper Belize/Peten region to the west in terms of both material culture and architecture (see Harrison-Buck et al. 2007). Although both Pakal Na and Hershey have a stronger Late Classic occupation than the other three sites, there is also clear evidence of Terminal Classic construction with stratified deposits.

The Ik'hubil Ceramic Complex was defined based on ceramic data collected from a series of test excavations carried out at Oshon and Obispo and compared with assemblages from multiple sites as part of a valley-wide settlement survey. Normally, ceramic complexes are defined based on a large quantity of ceramic data derived from years of excavations at a single site. For instance, most of the ceramic complexes described by Willey and colleagues (1967:Figure 1) provide seminal examples, one of which is the Spanish Lookout Complex defined at Barton Ramie (see Gifford 1976). In valley-wide settlement studies, such

Table 1. Primary ceramic types for the Spanish Lookout, Ik'hubil, and Rancho Ceramic Spheres

lk'hubil	Rancho
Sibun Red Neck	Kik Red
Roaring Creek Red	Campbells Red
Cayo Unslipped: Cayo Variety	Chambel Striated
Indian Creek Polychrome	Achote Black
Tu-Tu Camp Striated	Buyuk Striated
Dolphin Head Red	Taak Orange-Red
	Sibun Red Neck Roaring Creek Red Cayo Unslipped: Cayo Variety Indian Creek Polychrome Tu-Tu Camp Striated

Table 2. Total percentages of primary ceramic groups from sites in the Sibun and Upper Belize Valley $^{ extstyle}$

			Sibun Valley				Belize Valley	ley	
Primary ceramic groups	Oshon	Obispo	Pechtun Ha	Pakal Na	Hershey	Barton Ramie	Baking Pot	Tipu	Xunantunich
Belize Red	8.4	4.5	2.8	18.0	15.2	32.8	47.1	16.4	11.7
Mount Maloney	1.0	8.0	0.0	0.7	5.3	1.3	10.8	40.9	40.3
Garbutt Creek	2.6	1.4	0.2	1.0	1.6	6.8	2.0	0.7	0.2
Vaca Falls	15.6	10.5	7.5	16.4	7.3	2.2	4.7	0.2	1.1
Cayo	14.6	1.6	10.8	11.5	14.8	22.3	12.8	28.0	20.5
Tu-Tu Camp	8.6	15.3	13.2	0.3	18.4	5.6	9.9	3.8	0.3
Dolphin Head	5.0	5.2	2.3	9.61	15.4	4.7	4.8	3.1	2.9
Sibun	24.6	23.1	20.5	10.2	5.4	0.0	0.0	0.0	0.0
Kik Polychrome	4.5	3.1	10.6	4.7	0.0	0.0	0.0	0.0	0.0
All other groups	16.0	27.0	32.1	17.6	16.6	24.3	11.2	6.9	20.7

as the Sibun, test excavations tend to be more limited in scope and as such have less chance of finding intact deposits with whole ceramic pots. However, the benefits of such valley-wide studies are that they provide more comprehensive areal coverage and offer greater information about the occupational histories for many different sites across a larger region. Moreover, they allow the same analyst to make firsthand intersite comparisons, enabling a better understanding of how ceramic typologies and modes vary through time and also across space.

Below I provide an overview of the primary ceramic types of the Ik'hubil Complex. I compare the assemblage alongside published ceramic studies, including the typevariety analysis of the Spanish Lookout Complex, considered one of the best documented ceramic complexes from the site of Barton Ramie in the upper Belize Valley (see Gifford 1976). While I did not do a first-hand analysis of any of the ceramics from the upper Belize Valley, Dr. Jim Aimers was kind enough to spend several weeks with me in the Sibun Lab during the summer of 2004 and was instrumental in helping me to identify ceramic types that resembled those from his own first-hand studies of the ceramics from Barton Ramie, Baking Pot, and Tipu. Through the course of my analysis, it became clear that many of the primary ceramic types found at sites in the upper Belize Valley were noticeably absent or underrepresented at sites in the lower Sibun Valley, namely at Oshon and Obispo where I defined the Ik'hubil Complex. Below I describe in more detail both the similarities and differences of these two ceramic complexes.

Comparing the Ik'hubil and Spanish Lookout Ceramic Complexes

The primary ceramic types of the Ik'hubil Sphere are presented in Table 1. In defining the Ik'hubil Complex, one general observation I gleaned from my analysis of the ceramics from the Sibun Valley is that the most common ceramic types typically represent the *least* common types in the Spanish Lookout Complex (Harrison-Buck 2007). Conlon and Ehret (2002) made a similar observation in their analysis of

the Terminal Classic ceramics at Saturday Creek in the middle Belize Valley despite this site being in close proximity to Barton Ramie (see also Lucero 1999a, 1999b, 2002). The site of Barton Ramie is located just 20km overland to the west of Saturday Creek in the middle Belize Valley, or roughly 40 km if paddling the sinuous Belize River (refer to Figure 1).

The Spanish Lookout Complex is divided into an early facet (generally dating to Late Classic II) and a late facet (dating to the Terminal Classic) that was originally defined by James Gifford (1976) based on his analysis of the ceramic assemblages from Barton Ramie. Because many Late Classic II ceramics continue to be used through Terminal Classic times, it is almost impossible to parse these two time periods neatly with the existing published data on ceramic counts. For this reason, the comparative calculations presented in Table 2 (given as relative percentages) are based on the combined total percentage of all early and late-facet Spanish Lookout ceramic types recorded from Barton Ramie. For the sake of intersite comparison, counts of both Late Classic II and Terminal Classic ceramics from other sites are also combined in Table 2 (see Aimers 2004a:Appendices B-D; LeCount 1996: Table 5.9). For the most part, percentages are calculated based on raw counts (total rim and body sherds) for ceramics recovered from the sites in the Sibun and Upper Belize Valley. The one exception is Xunantunich, where rim counts are used to generate percentages of Late Classic II and Terminal Classic assemblages (see LeCount 1996:Table 5.9). Because the Xunantunich counts are based on rims, the percentages of each ceramic group and type may be a more conservative calculation than the others. But when charted alongside Barton Ramie, Baking Pot, and Tipu, I believe a shared Spanish Lookout Ceramic Sphere is clearly demonstrated (Table 3).

A ceramic "sphere" is defined "when two or more [ceramic] complexes share a majority of their most common types" (Willey et al. 1967:306). Full membership in a specific ceramic sphere is traditionally defined based on the percentage (at least 60 percent or more) of shared ceramic content found among the various ceramic complexes that have been reported from sites (Rice and Sharer 1987; Willey et al. 1967:306). Willey and colleagues (1967:Figure 3) defined the

Table 3. Percentage of shared primary ceramic types of the Spanish Lookout Sphere at sites in the Upper Belize Valley^a

		Spanish Lookout Sphere					
Shared primary ceramic types	Barton Ramie	Baking Pot	Tipu	Xunantunich			
Belize Red	32.8	47.1	16.4	10.2			
Mount Maloney Black	1.3	10.8	40.9	40.2			
Cayo Unslipped	14.1	5.4	26.2	20.3			
Garbutt Creek Red	6.8	2.0	0.7	0.0			
Tu-Tu Camp Striated	5.6	6.6	3.8	0.0			
Dolphin Head Red	4.7	4.8	3.1	1.6			
Total % of shared primary types	65.3	76.7	91.1	72.3			

^aPercentages generated from Aimers 2004a:Appendices B–D; Gifford 1976; LeCount 1996:Table 5.9.

Spanish Lookout Complex as a ceramic sphere, and others have subsequently suggested that this sphere may extend from Barton Ramie west throughout much of the upper Belize Valley, where similar Late Classic II and Terminal Classic ceramics have been found at the sites of Baking Pot, Tipu, and Xunantunich (see Tables 2 and 3). Belize Red is the primary shared type for the Spanish Lookout Sphere (Gifford 1976). However, scholars have shown that Mount Maloney Black, although less common at Barton Ramie, is also a widely shared primary ceramic type at sites in the upper Belize Valley and might be considered a primary diagnostic of the Spanish Lookout Ceramic Sphere (Aimers 2004a, 2004b; Gifford 1976; LeCount 1996, 2005).

Willey and colleagues (1967:302) suggest that the late facet of the Spanish Lookout Complex shows "some modal similarities to Eznab at Tikal [but] the total complex does not articulate well with the Petén." However, more recent analysis suggests that ceramics associated with the early and late facets of the Spanish Lookout Complex show strong stylistic and modal connections with the Peten-affiliated Tepeu/Eznab Ceramic Sphere (Figure 1). Prudence Rice and Donald Forsyth (2004:37) even question whether the Spanish Lookout Sphere should be considered a distinct sphere or simply a peripheral Tepeu/Eznab Sphere (sensu Ball 1976), highlighting the fuzziness of sphere boundaries. Lisa LeCount (2005:101-102) concludes, "The Petén influence in pottery styles was unwavering within the Upper Belize Valley during the Terminal Classic even though this region was experiencing considerable internal turmoil." There are strong similarities in their ritual and serving vessels along with the presence of volcanic ash paste commonly found in the Peten-style Tinaja Red ceramics (LeCount 2005:102, Figures 5 and 7; see also intersite comparisons of Tinaja and other Eznab ceramics in Culbert and Kosakowsky 2019).

The distribution patterns of ceramic groups (representing the total percentage from Late and Terminal Classic assemblages) shown in Table 2 derive from James Gifford's (1976) ceramic study of Barton Ramie; subsequent studies by James Aimers (2004a, 2004b) and Lisa LeCount (1996, 2005) carried out at Baking Pot, Tipu, and Xunantunich; as well as my own analyses of the Sibun Valley ceramics (Harrison-Buck 2007). One pattern that emerges from the differential distribution patterns visible in Table 2 is that some of the most common ceramic groups associated with sites in the Sibun Valley represent the least common ceramic groups at sites in the upper Belize Valley. For instance, Belize Red (closely related to the Peten Eznab Tinaja Red) is the most common red slipped ceramic group in the upper Belize Valley, but this volcanic ashware is relatively rare in the Sibun, especially at the three sites in the middle and lower reaches with circular architecture-Oshon, Obispo, and Pechtun Ha. Inversely, Table 2 shows that the Vaca Falls ceramic group is relatively rare in the Spanish Lookout Complex at Barton Ramie and throughout the upper Belize Valley, but it is the most common red slipped ceramic group identified throughout the Sibun Valley during the Terminal Classic (see Table 4 for a breakdown of Vaca Falls ceramic types).

Table 4. Total percentages of ceramic types from the Vaca Falls group from sites in the Sibun and Upper Belize Valley

Vaca Falls Type Oshon Obispo Pechtun Ha Pakal Na Hershey Barton Ramie Baking Pot Tipu Kaway Impressed 0.6 0.1 0.7 0.0 2.6 1.1 0.0 0.0 Vaca Falls Red 0.0 0.0 0.0 0.0 4.3 2.5 0.0 Roaring Creek Red 15.0 10.4 6.8 16.4 7.3 2.2 4.7 0.2			Sik	Sibun Valley				Belize Valley	ey	
0.6 0.1 0.7 0.0 2.6 1.1 0.0 0.0 0.0 0.0 0.0 4.3 2.5 cd 15.0 10.4 6.8 16.4 7.3 2.2 4.7	Vaca Falls Type	Oshon	Obispo	Pechtun Ha	Pakal Na	Hershey	Barton Ramie	Baking Pot	Tipu	Xunantunich
Red 15.0 10.4 6.8 16.4 7.3 2.2 4.7	Kaway Impressed	9.0	0.1	0.7	0.0	2.6	l.1	0.0	0.0	0.3
15.0 10.4 6.8 16.4 7.3 2.2	Vaca Falls Red	0.0	0.0	0.0	0.0	0.0	4.3	2.5	0.0	8.
	Roaring Creek Red	15.0	10.4	6.8	16.4	7.3	2.2	4.7	0.2	0.0

Table 5. Percentage of primary Spanish Lookout ceramic types in the Sibun Valley^a

	Sibun Valley					
Primary ceramic types from Spanish Lookout Sphere	Oshon	Obispo	Pechtun Ha	Pakal Na	Hershey	
Belize Red	8.4	4.5	2.8	18.0	15.2	
Mount Maloney Black	0.1	0.8	0.0	0.7	5.3	
Cayo Unslipped	14.6	9.1	10.8	11.5	14.8	
Garbutt Creek Red	2.6	1.4	0.2	1.0	1.6	
Tu-Tu Camp Striated	8.6	15.3	13.2	0.3	18.4	
Dolphin Head Red	5.0	5.2	2.3	19.6	15.4	
Total % of primary ceramic types	39.3	36.3	29.3	51.1	70.7	

^aPercentages generated from Harrison-Buck 2007.

Similarly, Sibun Red Neck jars (defined as part of the Sibun Group) are prevalent in the Sibun Valley but appear to be virtually absent at sites in the upper Belize Valley (Table 2). Although this is a ceramic group and type name that postdates the type-variety studies from the upper Belize Valley, a careful read of the ceramic reports from Barton Ramie, Baking Pot, Tipu, and Xunantunich show that jars slipped red on the neck are exceedingly rare at these sites (see Cayo Unslipped: Variety Unspecified [Red-slipped] in Gifford [1976:282] for a possible analogous type at Barton Ramie, as well as two other possible examples of Sibun Red Neck jars lumped in with the Vaca Falls Red type by Gifford [1976: Figure 144j-k] at Barton Ramie).

Other unslipped types belong to the Tu Tu Camp and Cayo Ceramic Groups, both of which appear in the Spanish Lookout and Ik'hubil Spheres (Table 1). Because the studies of ceramics at sites in the upper Belize Valley do not consistently present the ceramic types with variety designations (e.g., Aimers 2004a:Appendices B–D and LeCount 1996: Table 5.9), I am only able to compare counts and percentages of ceramic types (Table 1) and groups (Table 2). This only presents an issue with Cayo Unslipped, given that significant differences at the variety level are noted between the Upper Belize Valley and the Sibun Valley sites (described further below). In such circumstances, I am unable to accurately calculate these differences because I only have exact counts and percentages for the Upper Belize Valley down to the type level.

In terms of the Dolphin Head ceramic group, no clear differential distribution patterns could be drawn between the Sibun and upper Belize Valley—the numbers are relatively low but generally equivalent across these two regions (see Table 2). Mount Maloney Black bowls, on the other hand, are virtually absent in the Sibun Valley, but they are ubiquitous at most sites in the upper Belize Valley, with the exception of Barton Ramie. Given its abundance elsewhere in the upper Belize Valley, Mount Maloney is generally considered a primary ceramic group for the Spanish Lookout Sphere (see Tables 1–3).

When cross-examining the ceramic types present at Oshon, Obispo, and Pechtun Ha in the Sibun Valley, it is

clear that, for the most part, these sites cannot be considered full or even peripheral members of the Spanish Lookout Sphere given that they share less than 40 percent of the same primary ceramic types (Table 5 [see Ball 1976:323]). Pakal Na and Hershey, on the other hand, share greater ceramic and architectural affinities with the upper Belize Valley and Peten region to the west. Hershey is the only site in the Sibun Valley that might be considered a full member of the Spanish Lookout Sphere. Pakal Na also may be a peripheral member, with just over 50 percent of shared ceramic content (see Ball 1976:323). However, when comparing the total percentages of primary ceramic types found at the three sites with circular architecture in the Sibun Valley—Oshon, Obispo, and Pechtun Ha—the frequencies suggest that these three sites are full members of the Ik'hubil Ceramic Sphere, sharing roughly 60 percent of the same primary ceramic content (Table 6). Pechtun Ha falls slightly below this number and might be considered a peripheral member, but more likely, this reflects the lack of preservation at the site. When compared to Oshon and Obispo, Pechtun Ha had the highest percentage of unidentified ceramics as a result of severe erosion of the sherds,

Table 6. Percentage of Ik'Hubil primary ceramic types in the Sibun Valley.^a

		Ik'hubil Sphe	re
Shared primary ceramic types	Oshon	Obispo	Pechtun Ha
Sibun Red Neck	24.6	23.1	20.5
Roaring Creek Red	15.0	10.4	6.8
Cayo Unslipped	14.5	9.1	10.6
Tu-Tu Camp Striated	8.6	15.3	13.2
Indian Creek Polychrome	3.4	1.9	0.9
Dolphin Head Red	5.0	5.2	2.3
Total % of shared primary types	71.1	65.0	54.3

^aPercentages generated from Harrison-Buck 2007.

which made solid identifications down to the type level more difficult to ascertain.

The diagnostic ceramic types associated with the Ik'hubil Complex described herein provide ceramic data for an area of north-central Belize that has up until now remained poorly documented. The ceramic typology is grouped below more generally in terms of broader modal categories, including slip (or lack thereof), and discussed in terms of surface treatment and-to some extent-form. In addition to the Sibun Valley, I make note of similar ceramic types identified in my more recent studies of archaeological sites in the eastern half of the Belize Valley, including Saturday Creek, Chikin' Chi'Ha, Hum Chaak, Ik'nal, Chulub, and Jabonche, which may be part of a larger peripheral Ik'hubil Sphere (see Figure 1). While comparable calculations have not yet been carried out at sites outside of the Sibun Valley, I have observed similar trends with the ceramic distribution patterns for sites in the eastern half River watershed (Harrison-Buck Harrison-Buck, ed. 2011, 2013, 2015a, 2015b, 2018, 2020). I present these and other heuristic comparisons to prompt researchers to further cross-examine the aerial extent of the proposed Ik'hubil Sphere. Below, I discuss the different ceramic types, grouping them by modal categories of surface treatment.

Unslipped types

The most common unslipped jar form found in both the Spanish Lookout and Ik'hubil Complexes is Cayo Unslipped. However, there are important stylistic and modal differences in the paste, surface treatment, and lip form of Cayo Unslipped that Gifford (1976) differentiated at the varietal level. In the upper Belize Valley during the Terminal Classic period, unslipped jars tend to have an elaborate lip treatment: either pinched and flared downward or upward, grooved, given "pie crust" treatments, or bolstered and rolled (Aimers 2004a:79; LeCount 1996:159; LeCount 1999:251, Figure 6). Aimers (2004a:79–80) notes that these jars with such fancy rim treatment tend to be a buff variety, defined by Gifford (1976:179–180, Figure 181) as Cayo Unslipped: Variety Unspecified (Buff).

There were only a select few examples of the Cayo Unslipped: Variety Unspecified (Buff) type recorded in the Sibun Valley, and none with the fancy rim treatment. There was a slightly higher number of examples of Alexanders Unslipped, another Cayo Group type defined at Barton Ramie, which is a significantly larger jar form (Figure 2). Both types make up most of the Terminal Classic Cayo Group assemblages at sites in the upper Belize Valley (Aimers 2004a; Gifford 1976; LeCount 1996). In the Sibun Valley, the Cayo Unslipped: Cayo Variety defined by Gifford (1976) at Barton Ramie is the most common type of unslipped jar. This outflaring jar form ranges from smudged brown to brick red and contains plain rims that tend to be thicker walled and more crudely made than the Cayo Unslipped: Variety Unspecified (Buff) type. Gifford (1976) placed these two unslipped ceramics under the same group (Cayo) and type name (Cayo Unslipped)

and only distinguished them at the varietal level. However, the stark differences in paste color, firing, and decorative treatment suggest they should probably be given two separate type names and, perhaps, even be separated at the group level.

LeCount (1996) proposed separate ceramic groups and type names for some unslipped types at Xunantunich based on their paste color and other modal characteristics, which might apply here provisionally. She notes that "paste colors [that] range from light gray or pale brown to brown 10YR 4/3; 5/2-4; 6/2-6; 7/2; to 7.5 YR 4/2; 5/3-6; and 6/3-6) -[are] exemplary of the Cayo Ceramic Group," whereas those that "exhibit more red or reddish brown pastes (7.5 YR, 5 YR, or 2/5 YR hues within 5/4-8 value and chroma)...are defined as members of the Cambio Ceramic Group" (LeCount 1996:374). At Xunantunich, most of the Cambio Group ceramics (which are rare) include "large flaring bowls, lids, and censers" (LeCount 1996:274) and in the Sibun and eastern Belize Valley, the unslipped forms are predominantly large, flaring jars. Most analysts tend to view Cayo and Cambio Groups as roughly equivalent (see Culbert and Kosakowsky 2019:345; Kosakowsky et al. 2020:25-26). Because I have not carried out firsthand analytical comparisons, for now, I have retained Gifford's (1976) Cayo Unslipped type-variety designations in Table 2, distinguishing the two types at the varietal level. However, because the studies of ceramics at sites in the upper Belize Valley do not consistently quantify the ceramic types at the varietal level (e.g., Aimers 2004a:Appendices B-D; LeCount 1996:Table 5.9), I am unable to compare exact counts and percentages of the different varieties. My assessments of the more common buff variety of Cayo Unslipped in the upper Belize Valley are based on various qualitative discussions provided in the ceramic reports.

In the Ik'hubil Complex, the most abundant unslipped jar type is referred to as Sibun Red Neck (Table 2). The Sibun Red Neck jars have short, outflaring necks that are slipped red on the interior and exterior rim extending down to the neck of the vessel, with the remainder of the jar unslipped (Figure 3). In some cases, the unslipped portion has a "wash" and is lightly striated on the exterior (Figure 3d-e). To my knowledge, similar-style jars are not common in the upper Belize Valley Spanish Lookout Sphere or farther west in the Peten (Tepeu Sphere). As noted above, I have identified in Gifford's (1976) Barton Ramie report only a few isolated examples of red-necked jars that Gifford (1976:282, Figure 144j-k) placed under the late facet Spanish Lookout Complex.

Graham (1987:78–79) notes a red-neck jar at sites such as Lamanai (see Pierce 2016:Figure A.13-LA640/3) and San Jose (Thompson 1939:138–139, Plate 21c) that resembles the form and surface treatment of the Sibun Red Neck type. In addition, a similar striated type referred to as Red Neck Mother Striated jars has been found farther north in the Ikilik Complex at Nohmul, which is defined as part of the Rancho Sphere (D. Chase 1982a:75; Table 1). Although there may be a plain variant, the Red Neck Mother Striated name suggests this is the predominant variant. In the Ik'hubil Complex, there is a striated variety that occurs, but it is less common. Firsthand analysis is

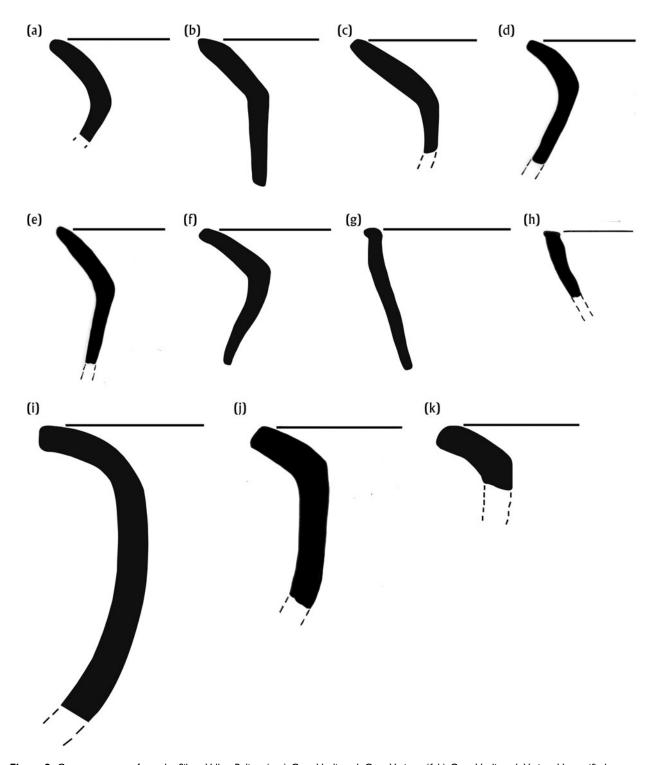


Figure 2. Cayo group types from the Sibun Valley, Belize: (a–e) Cayo Unslipped: Cayo Variety; (f–h) Cayo Unslipped: Variety Unspecified (Buff); (i–k) Alexanders Unslipped: Alexanders Variety. Illustrations by the author and C. Cesario.

necessary to determine if all of these similar-style ceramics should be considered the same type.

Red slipped types

Both Roaring Creek Red and Dolphin Head Red are red slipped types that are considered primary ceramic types

of the Ik'hubil Complex/Sphere (Figures 4 and 5, Tables 1 and 6). The Roaring Creek Red type is part of the Vaca Falls group, and in the Sibun Valley, it consists primarily of outflaring dishes that are slipped red on the interior and exterior of the vessel and that have a basal break with sometimes a fairly pronounced basal ridge. They are supported by either a low ring base or somewhat elevated

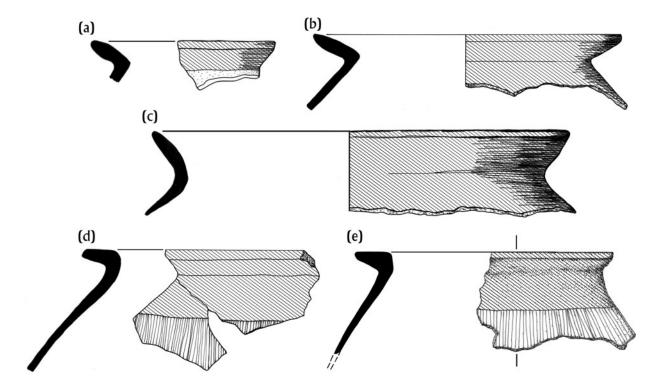


Figure 3. Sibun Red Neck jars from the Sibun Valley, Belize. Illustrations by the author.

pedestal base. Gifford (1976:227-230, 240-243, Figures 137-139, 149-151) defined the Roaring Creek Red and Dolphin Head Red types at Barton Ramie, but both are relatively

rare at this site and elsewhere in the Upper Belize Valley compared to other red slip types, such as Belize Red (see Tables 1–3; LeCount 2005).

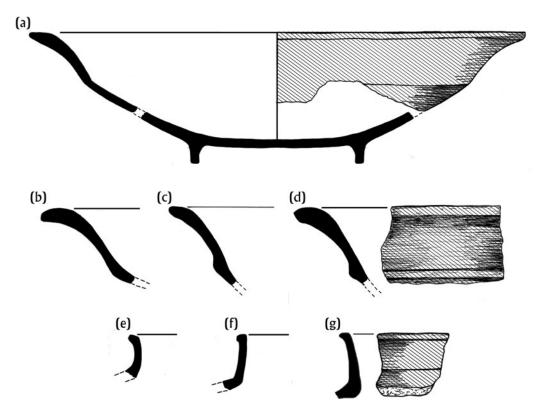


Figure 4. Roaring Creek Red type from the Sibun Valley, Belize. Illustrations by the author.

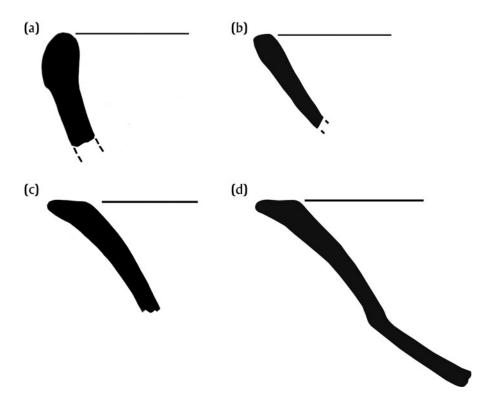


Figure 5. Dolphin Head Red type from the Sibun Valley, Belize. Illustrations by the author and C. Cesario.

LeCount (1996:Table 5.9) notes that Dolphin Head Red is predominantly a Late Classic I-II type at Xunantunich but does carry through to the Terminal Classic. Aimers (2004a) observed the presence of collared jars in the Dolphin Head Red type at Baking Pot dating to the Terminal Classic. Although no jars were identified in the Sibun Valley, the Dolphin Head Red type occurs in the Late Classic II and is fairly well represented in stratified Terminal Classic contexts. The types in the Ik'hubil Complex most closely align with the forms and type descriptions for the Dolphin Head Group presented by LeCount (1996:183-386, Figure E7) for Xunantunich. The forms, paste, and slip resemble the earlier Silver Creek Impressed variety that is also found in the Sibun Valley but strictly in Late Classic II contexts. It is notable that, at Xunantunich, the few Roaring Creek Red types that were identified were mostly shouldered bowls and jar forms (LeCount 1996:388, Figure E.9a), which are exceedingly uncommon in the Ik'hubil Complex (see Figure 4e-g for some rare examples of jar forms). Given the abundance of Roaring Creek Red, it is surprising that the Vaca Falls Red type is largely absent in the Sibun Valley (see Table 4). It does occur to some extent in the upper Belize Valley (see Table 4).

Belize Red is a red slip type that can be considered the primary ceramic type of the Spanish Lookout Complex at Barton Ramie, but it is significantly less common in the Ik'hubil Complex (Tables 3 and 5). From my own excavations (see contributions in Harrison-Buck, ed. 2015a, 2015b) and preliminary analysis of the ceramics at Saturday Creek (Harrison-Buck 2010), I observed a much heavier frequency

of Roaring Creek Red and Dolphin Head Red types, with relatively few examples of Belize Red when compared to the ceramics from Barton Ramie. I would agree with the observations made by Conlon and Ehret (2002) of what they refer to as "reversed redware frequencies" at Saturday Creek: Roaring Creek Red and Dolphin Head Red predominate, and Belize Red is exceedingly rare. This trend is also reflected when comparing the distribution patterns between sites in the Sibun Valley and upper Belize Valley (see Tables 2, 3, 5).

Belize Red—the most common of all the red slipped types in the Spanish Lookout Complex—has a distinctive volcanic-ash paste (see full description in Gifford 1976). Only a few examples of the Belize Red type were found in the Sibun Valley (Table 2), and of these as many as half were "imitation" ash wares made from a fine, calcite-based paste (Harrison-Buck et al. 2013). One example was found in a burial context at the site of Pakal Na in the Sibun Valley (Figure 6e) that is virtually indistinguishable from a "real" volcanic-ash-paste version found at Xunantunich (Figure 6f). Only through a combination of petrographic analysis and chemical testing were we able to confirm that this was not a volcanic ash ware (Harrison-Buck et al. 2013).

The outflaring dish form of Roaring Creek Red (Table 4, Figure 4) is one of the most common types found at sites in the eastern Belize and Sibun Valleys (Conlon and Ehret 2002; Harrison-Buck 2007, 2010). Shirley Mock (1994:280–281) also notes that Roaring Creek Red dishes are found in abundance at sites along the north-central coast of Belize, such as Northern River Lagoon (NRL) and Saktunja, during the Terminal Classic period (see also Masson and Mock 2004).

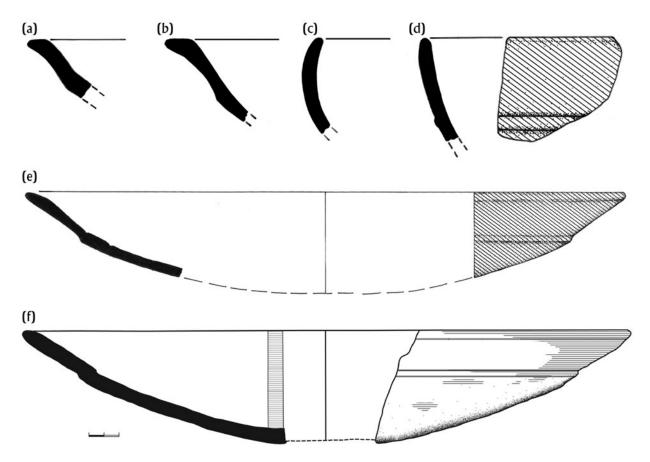


Figure 6. Belize Red type (a-e) from the Sibun Valley, Belize; and (f) from Xunantunich (redrawn after LeCount 1996:Figure E.14a). Illustrations by the author.

Although they have not been identified using type-variety, similar-style ceramics also appear illustrated in ceramic reports from Altun Ha (Pendergast 1990:357, Figures 46e, 46j, 97h, 152e), Lamanai (Howie 2006, 2012), San Jose (Thompson 1939:Figures 76a-n, 76s, 78), Mayflower, T'au Witz, and other sites in the Stann Creek District (Graham 1987:78-79; see also Graham 1985, 1994). Firsthand analysis is necessary to determine if all of these similar-style ceramics should be considered the same type.

Black slipped types

At Saturday Creek, Conlon and Ehret (2002:11) observed that "even more lacking than Belize Red is Mount Maloney Black." The Mount Maloney Black type consists of black-slipped utilitarian bowl and jar forms that are ubiquitous at sites such as Xunantunich, particularly the bowl form (LeCount 1996, 2005). In my own analyses, I have found that Mount Maloney Black types are rare at sites in the mid-to-lower Belize Valley east of Saturday Creek, and they are also exceedingly rare throughout the Sibun Valley (Table 2). When found, it is never the bowl form; invariably, it is the jar form (Figure 7), which is much less common in the upper Belize Valley, even at sites such as Xunantunich, where the Mount Maloney ceramic group is most heavily represented (see Table 2). This seems to be another reverse modal frequency—in this case, with ceramic

forms: jars of Mount Maloney (along with Roaring Creek Red jars described above) are reversed in frequency between the Spanish Lookout and Ik'hubil Spheres.

When they are found in the upper Belize Valley during the Terminal Classic, LeCount (1996:160) notes that Mount Maloney jars typically have overhanging, angled profiles (see Figure 7), whereas the Late Classic II jars generally have smooth contours (see LeCount 1996:Figure 5.6 for illustrations of this lip microseriation). LeCount (1996:245–246) concludes that narrow-necked jars such as Mount Maloney Black, with a collar diameter of less than 13 cm, were probably used for transporting and serving liquids. These utilitarian jars were probably not the product of any formal exchange between elites. Rather, their value as an "import" in the Sibun and eastern Belize Valleys was probably in what they carried (water, chocolate, chicha, balche, or some other precious liquid). Very few Mount Maloney bowls have been identified in the Ik'hubil Complex; the more common are Dolphin Head Red and Garbutt Creek Red bowls (Gifford 1976:230-231, Figures 140 and 141; Harrison-Buck 2007: Figure 6.8a-f, Plate 3a). The Dolphin Head Red tends to have a brighter "velvety" red slip as opposed to the darker red-brown slip on the interior of Garbutt Creek bowls. The latter type also appears to be fairly common at Barton Ramie, but the Garbutt ceramic group decreases in frequency to the west at places such as Xunantunich, where bowls from the Mount Maloney group predominate (Table 2).

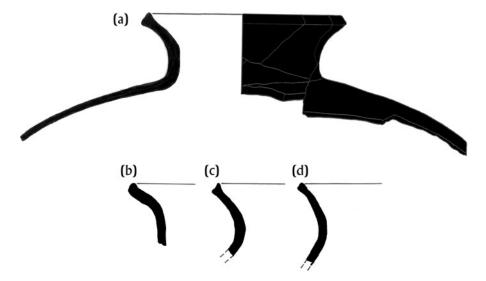


Figure 7. Mount Maloney Black jars from the Sibun Valley, Belize, showing overhanging, angled profiles typical of the Terminal Classic. Illustrations by the author.

In the Ik'hubil Complex, the most common black-slipped vessel is a stamp-impressed variety of Achote Black (Figure 8e, g-i). Unlike Mount Maloney, Achote group ceramics are not utilitarian ceramics but more finely crafted specialty serving vessels. The Achote group was originally defined in Peten ceramic studies and is found in the Terminal Classic Eznab Complex at Tikal (Culbert and Kosakowsky 2019:350-351) among other Peten sites in Guatemala (e.g., Chase 1984). Achote group ceramics, including a type known as Cubeta Incised, is also reported from northwestern Belize at sites such as Ka'kabish and La Milpa, where they become increasingly common during the Terminal Classic period (Sagebiel 2014; Sagebiel and Haines 2015:364). Achote Black is also found at Nohmul and Santa Rita Corozal and is considered a primary type of the Rancho Sphere in this far northern part of Belize (Chase 1982a; Figure 1, Table 1). In her study of the Terminal Classic Ikilik ceramics from Nohmul, Diane Chase (1982b:507) noted differences between Achote group ceramics in the Peten and those in northern Belize, and she went so far as to propose a new ware designation—"San Pablo Gloss"—to distinguish them from the Peten Gloss Wares.

Although this ware designation has never been widely applied, other analysts working in northern Belize agree that the Peten Achote group ceramics are somewhat different from the black slipped types in northern Belize, which are mottled and fire clouded and have a somewhat soapy to waxy surface rather than a pure, hard, glossy black surface (Kerry Sagebiel, personal communication 2022). Shirley Mock (2005:124) provides a similar description of the northern Belize Achote types at Northern River Lagoon (NRL) and notes a northern Yucatec influence. She concludes that these black slipped types "show the influence of thin slate wares in northern Belize and perhaps even imitation of Ticul slate ware bowls by local potters as the gray, fire-clouded slip on some bowls is slightly waxy or soapy." Both Mock (1994:242-244) and Ball (1977:34-36) observe that the Achote Black in northern Belize as well as

Quintana Roo typically have a very pale brown paste with calcite inclusions, but they also describe a less common pink paste variant that also occurs. Both paste variants have been identified in the Sibun Valley, displaying a similar waxy or soapy black exterior slip.

Kosakowsky and colleagues (2020:26) observe that types in the Achote group, like Cubeta Incised, become the predominant serving vessel during the Terminal Classic at sites in northern Belize (see also Sagebiel 2014; Walker 1990): "These black types are often incised, fluted, gouged-incised, impressed, modeled, or stamped" (Kosakowsky et al. 2020:Figure 7g-h). According to these scholars, the most common forms of the Achote group in northern Belize include outflared and round bowls and cylinder vases. Although it is not considered a "primary" ceramic group in the Ik'hubil Sphere (Table 2), these same forms—especially the rounded bowl form with a slightly outflaring neck—have been identified at sites in the Sibun and eastern Belize Valleys (see Figure 8e, g-i).

In both the Sibun and eastern Belize River Valleys, types in the Achote group are found in trash heaps and other "domestic" contexts, but they are also found associated with burials and other special ritual deposits. The Achote group ceramics are described as an important serving vessel and tradeware throughout north-central Belize (Chase and Chase 2020:38; Kosakowsky et al. 2020; Sagebiel 2014:129, 132; Sagebiel and Haines 2015; see also Culbert and Kosakowsky 2019:351 for other intersite comparisons). Achote types in the Sibun and eastern Belize Valleys have less diverse styles when compared to the types from sites in northeastern Belize (such as NRL) and southern Quintana Roo (such as Becan), where they incorporate a wide range of surface treatments-including appliquéd, impressed, incised, modeled, and composite surface attributes—and, in rare cases, resist slip decoration (Ball 1977:34-36; Mock 2005:124).

In the Sibun and eastern Belize Valleys, the most common forms of Achote Black include a round-sided bowl, as

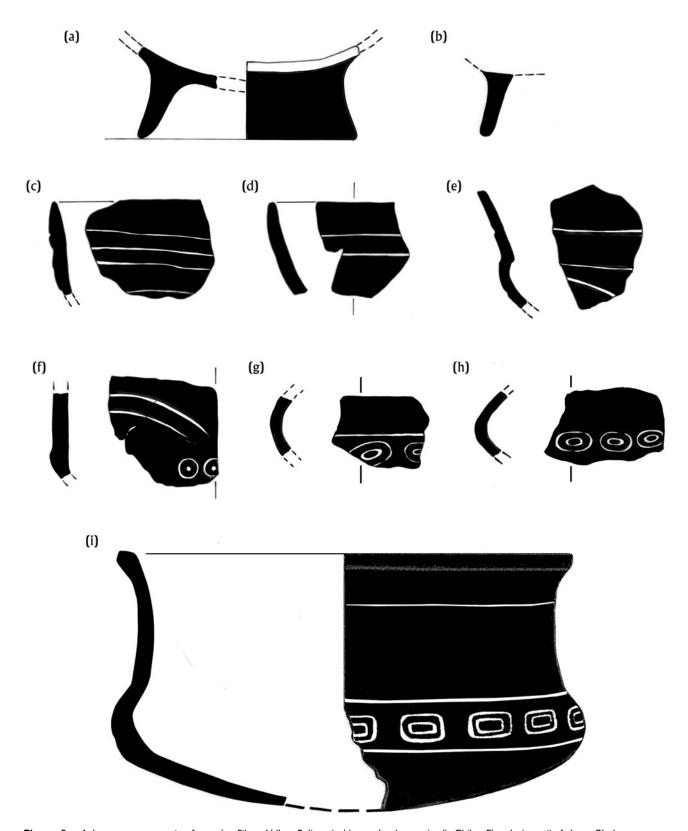


Figure 8. Achote group ceramics from the Sibun Valley, Belize: (a–b) annular bases; (c–d) Chilar Fluted; (e, g–i) Achote Black: Stamp-Impressed Variety bowls; (f) Cubeta Incised. Illustrations by the author and C. Cesario.

well as a squat rounded bowl with a high neck that has slightly outflaring sides. Incising and stamped-impressed designs in the form of circles and ovals frequently occur on these bowl forms (Figure 8e-i). Similar examples of squat and round-sided bowls with black slip are recorded as San Jose IV Black Ware at San Jose (Thompson 1939:

Figure 73a, e-f, h-j, l), and other similar-looking vessels are found at Lamanai (Pierce 2016:Figure A13) and Altun Ha (Pendergast 1990:Figures 19m, 64a, 64c, 90d, 90f, 163n, 163q). Is it noteworthy that the squat bowls from Lamanai, Altun Ha, and San Jose share nearly identical forms and surface treatment, with incised lines and postslip-prepolish unit-stamped circular or oval designs as found at sites in the Sibun and eastern Belize Valleys (compare Figure 8e-i with Pendergast 1990:Figures 106n, 163q; Pierce 2016:Figure A.13-LA640/1; Thompson 1939: Figure 73e-f). Firsthand analysis is necessary to determine if all of these similar-style ceramics should be considered the same type.

Other special types

Like Achote Group ceramics, Daylight Orange: Darknight Variety is another special type associated with the Ik'hubil Complex. The outflaring dish form is virtually identical to Roaring Creek Red and is also comparable to the San Jose V vessels from the site of San Jose (Thompson 1939; Figure 9). What distinguishes the Daylight Orange: Darknight dishes are blocks of smudged black or dark reddish-brown blotches that form intentional decorative patterns across the interior of the reddish-orange slipped vessel. The black smudged designs consist of humanoid faces, monkey motifs, spirals, and other abstract designs. Figure 10d shows an example of a Daylight: Darknight vessel

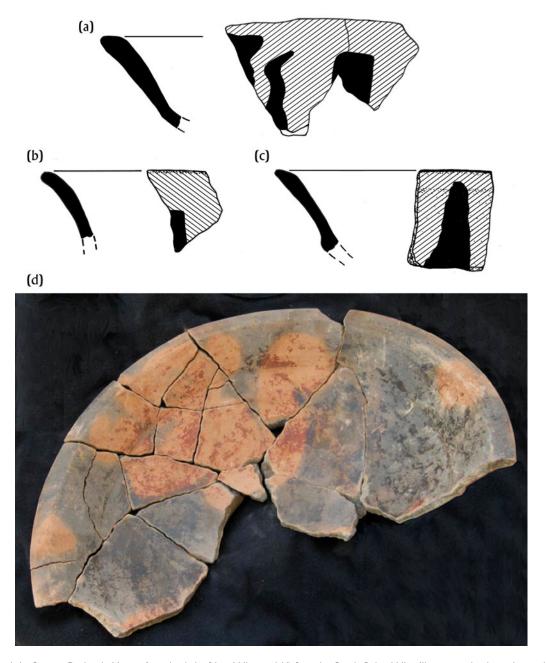


Figure 9. Daylight Orange: Darknight Variety from (a-c) the Sibun Valley; and (d) Saturday Creek, Belize Valley. Illustrations by the author and C. Cesario; photograph by the author.

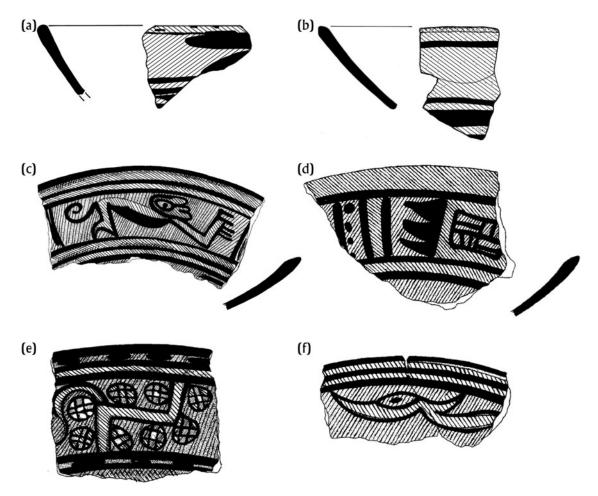


Figure 10. Terminal Classic Palmar-Orange Polychromes from (a–b) the Sibun Valley; and (c–f) Northern River Lagoon (redrawn after Mock 1997:Figures 4, 12, 15). Illustrations by C. Cesario and the author.

from a Terminal Classic burial deposit found at Saturday Creek. The Saturday Creek dish shows a pair of monkeys, which is a frequent motif found on this ceramic type and in Terminal Classic iconography, in general (Harrison-Buck 2010; Mock 1997; Rice and South 2015). At the nearby site of Chikin Chi'Ha', a similar vessel was found in another Terminal Classic burial inverted over the head of the primary interment. It was associated with an Achote Black squat bowl form with oval stamp impressions that rested on the left arm of the main interment (Harrison-Buck et al. 2017; for similar examples, see Figures 8e, 8g–8i).

In the Sibun and eastern Belize Valley, Daylight Orange: Darknight appears to be generally found in elite ritual contexts, such as burials. It does not constitute a primary ceramic type of the Ik'hubil Complex, but it appears to have been an important serving vessel like the Achote group vessels. The distribution of Daylight Orange: Darknight seems to be widespread beginning in the late Late Classic and increases in distribution during Terminal Classic times (Sagebiel 2005, 2014; Valdez 1987). During the ninth and tenth centuries, it is found across a broad area of north-central Belize and along the eastern Caribbean coast (Kosakowsky et al. 2020:27). Examples have been reported as far away as the Maya port of Vista

Alegre on the northeastern tip of the Yucatan peninsula (Jeffrey Glover, personal communication 2012).

At Barton Ramie, Gifford (1976:300–302) suggested that Daylight Orange: Darknight was an Early Postclassic (New Town Complex) type, but scholars now widely accept that this type dates no later than the Terminal Classic (Graham 1987). At La Milpa, Caye Coco, and other sites in Belize, both Daylight Orange: Darknight and Roaring Creek Red have been identified in Late Classic contexts (Kosakowsky, personal communication July 2016; Masson and Mock 2004:387; Sagebiel 2014:126). However, these two types are usually considered strong "horizon markers" of the Terminal Classic period (Aimers 2004a:73; Gifford 1976:240; Graham 1987:78; Harrison-Buck 2007:Table 5.1; Kosakowsky et al. 2020:27; LeCount 1996:388).

Polychrome types

A distinctive polychrome type is found in the Ik'hubil Complex that appears to be equivalent to what other analysts in northern Belize refer to as Palmar Orange Polychrome (Mock 1997; Pierce 2016:414; Valdez 1987; Walker 1990). In the Sibun and eastern Belize Valleys, these polychrome dishes, plates, and platters are

considerably eroded and fragmentary, and they are not considered a primary ceramic type, but this type seems to have had a broad distribution throughout north-central Belize during the Terminal Classic (Figure 10). This type is reported at NRL and Colha in northern Belize (Mock 1997, 2005:126-128; Valdez 1987). Analysts also suggest that it occurs at Lamanai, where similar-style polychrome dishes, plates, and platters are described as "common" in the Terminal Classic period. When she visited Lamanai, ceramicist Debra Walker was able to examine these ceramics firsthand, and she noted that they are equivalent to what many analysts call Palmar Orange Polychrome (Pierce 2016:414). Given their abundance, Elizabeth Graham dubbed them "Lamanai Polychromes" (Graham 2004:235; see also Pierce 2016:84, 414). Both Lamanai and the nearby site of Ka'kabish have this distinctive local polychrome (see Graham 2004; Sagebiel and Haines 2015). It is described as having "a matte rather than glossy finish and very little red decoration, consisting mostly of black-on-orange. The decoration, which is not as finely executed as Petén polychromes, evolves throughout the Late to Terminal Classic" (Kosakowsky et al. 2020:26-27).

Like the Achote group types, the Palmar Orange Polychrome type was initially defined in Peten ceramic studies, and scholars frequently attribute them as both Peten imports and evidence of trade ties with this area in the Late Classic (Aimers 2004a:108-110; Ball 1993:260; Gifford 1976:192-193). More recently, scholars have concluded that types dubbed "Lamanai Polychromes" are a local variant in northern Belize that are distinct from the Peten Palmar Orange Polychrome types (Kosakowsky et al. 2020:26-27; see also discussion in A. Chase and D. Chase 2020:40). At Lamanai and Kichpanha, scholars use the name "Lamanai Polychrome" to distinguish them from the upper Belize Valley and Peten Palmar Orange Polychromes (Pierce 2016:129; Sagebiel and Haines 2015:364). The form of these late Terminal Classic vessels are mostly large dishes, plates, and platters, whereas the upper Belize Valley and Peten Palmar Orange Polychromes are primarily bowl and vase forms (see A. Chase and D. Chase 1987; LeCount 2005). Their surface treatment also varies.

The Lamanai Polychromes have a loose painterly style, with designs that are less refined than Palmar Orange Polychrome designs, which is why they are often described as "sloppy" or "cartoonish" (Kosakowski et al. 2020:27; Pierce 2016:126). Pierce (2016:129) notes "Lamanai polychromes' are red and black on orange, usually with encircling stripes around the rim interior. The interior base is commonly decorated with a cartoon-like jaguar or other animal" (see Pierce 2016:Figure 6.28). Other common designs rendered in this loose painterly style include floral elements, cacao, monkeys, deer, and other animals; more abstract imagery, such as "X" and mat motifs; as well as lines, dots, and triangles (Figure 10; Ball 1977:Figure 28e; Graham 2004:Figure 7; Mock 1997; Pendergast 1990: Figure 106a, 1630; Pierce 2016: Figures A.37-A.39, A.49-A.51). In sum, it is clear that the Lamanai Polychrome type takes on very different forms and surface treatments and should probably be given its own type name in the future.

At least two other polychrome types have been identified in the Ik'hubil Complex and are assigned to the Kik Polychrome group: Indian Creek Polychrome and Fat Polychrome (Figure 11). In my original ceramic analysis (Harrison-Buck 2007), I followed Shirley Mock's assignment, placing the Fat Polychrome type in the Kik group. This type was originally defined in her study of the ceramics from the site of Northern River Lagoon (NRL) on the northern Belize coast (Mock 1994:106-107, Figure 51; Mock 2005:128, Figure 7; Masson and Mock 2004:387, Figure 17.7d-e). I subsequently defined the more diminutive Indian Creek Polychrome based on my studies of the ceramics from the Sibun Valley (Harrison-Buck 2007:265-270). The Kik group, first defined by Diane Chase (1982b:495-501) as part of the Ikilik Complex at the site of Nohmul consists of a wide variety of red slipped ceramic types, including Kik Red and Campbells Red (see Chase 1982b:495-501; see also Pring 1976). These Kik Group types have a reddish-orange monochrome slip. Types such as Campbells Red are characteristic of the Rancho Sphere (see Table 1). A few possible examples of Campbells Red may be present in the assemblages from the Sibun and eastern Belize Valleys, becoming more frequent at sites farther to the north, such as Jabonche and Chulub (see Harrison-Buck et al. 2020:Figure 9g). Mock (1994) also reported some examples from NRL, but they appear to be rare. Kik Red is also present at NRL (Masson and Mock 2004). Although the form looks very similar to Roaring Creek Red, the slip is described as more of an orange color. To my knowledge, no polychrome varieties have been reported in the Kik Group at Nohmul or elsewhere in the northern Rancho Sphere, although Chase and Chase (2020:Figure 4e) report one possible example from Santa Rita Corozal. In the type-variety system, polychromes are normally placed in ceramic groups that are separate from redwares. Therefore, I have tried to distinguish these types from those of the Kik group by provisionally using the new ceramic group name Kik Polychrome.

Both Indian Creek Polychrome and Fat Polychrome are found in moderate frequencies at sites in the Sibun and eastern Belize Valleys, although the former type (at least in the Sibun Valley) has a somewhat higher frequency than Fat Polychrome. The paste and surface decoration of Fat Polychrome is very similar to Indian Creek Polychrome, but the polychrome designs around the exterior vary somewhat between the two types. In both cases, the rounded bolster rim and interior of the vessels contain a hard, waxy, deep red slip that is generally well preserved, but rarely does the polychrome paint on the vessel exterior survive. On the best-preserved examples, a reddish-orange paint is found on the exterior just below the rounded lip and is covered with black and red polychrome painted designs. On the Fat Polychromes, faint traces of bold, black and red painted designs include lines; dots; s-, u-, and c-shaped designs; spirals; and other abstract motifs (Figure 11c-f). On a larger, better-preserved example from the Cara Blanca site in Belize, Joanne Baron recorded a jaguar and a sky band element with possible ak'bal ("darkness") and k'an ("yellow" or "precious") signs (Lucero and Kinkella 2015:171). On the Indian Creek Polychromes, designs include

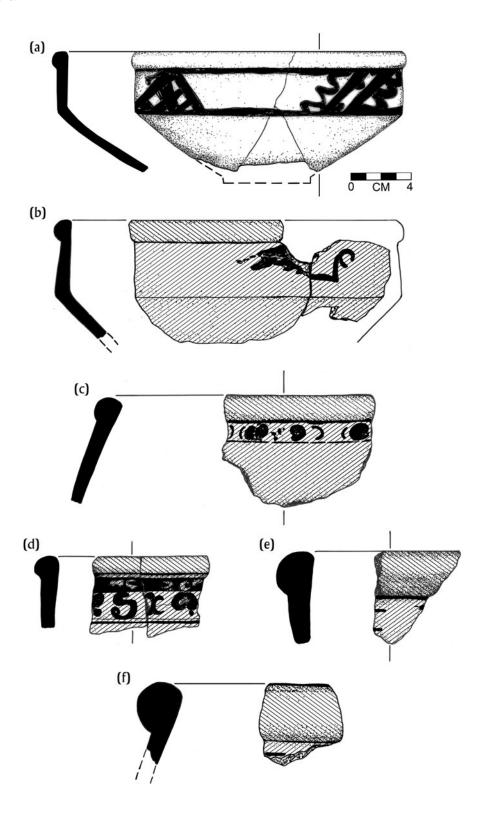


Figure 11. Kik Polychromes from the Sibun Valley, Belize: (a–b) Indian Creek Polychrome; (c–f) Fat Polychrome. Illustrations by C. Cesario and the author.

human, deer, and monkey imagery, as well as triangles and crosshatched areas separated by panels with angular and curvilinear vertical elements (Figure 11a-b).

No complete vessels of Indian Creek Polychrome bowls were recovered from the Sibun and eastern Belize Valley

excavations. However, I have been able to reconstruct several partially reconstructable vessels from both the Sibun and eastern Belize Valley excavations (Figure 11). Other similar examples may be found at Altun Ha (Graham 1987: Figure 2g) and Lamanai (Pierce 2016:Figure A.54e), which

show similar diminutive basal-break bowls with polychrome designs that contain ring bases. No complete Fat Polychrome basins were found in the assemblages that I studied, but the large, bulbous rim fragments are easily identifiable. The thick bolstered rim of the Fat Polychrome basins can vary significantly in size, but they are consistently larger than the rounded P-shaped lip of the Indian Creek Polychrome bowls (see Figure 11).

I have observed ceramics illustrated in various reports that bear a strong resemblance to Fat Polychrome and Indian Creek Polychrome types at a number of sites in north-central Belize, including Lamanai (Howie 2006, 2012; Pierce 2016: Figure A.54e), San Jose (Thompson 1939:124-125, Figures 5 and 65a, b, d-h), Cara Blanca (Lucero and Kinkella 2015:171), Altun Ha (Graham 1987:Figure 2g; Pendergast 1990:Figure 46c, f), and along the coast of Belize at the sites of NRL, Saktunja, and the Salt Creek sites (Mock 1994:106-107, Figure 51; Mock 2005:128, Figure 7; Masson and Mock 2004:387, Figure 17.7d-e [refer to Figure 1]). Kik group Polychromes also bear a strong resemblance to Thompson's (1939:124-125, Figure 65) San Jose IV Red-and-Black-on-Orange polychrome "craters." Firsthand analysis and quantification are needed to determine type assignments and how prevalent such polychrome types are across north-central Belize.

The Kik group type name did not exist when James Gifford (1976) originally defined the Spanish Lookout Complex at Barton Ramie, but Thompson's (1939) study of the San Jose ceramics was well known, and there is no mention of ceramics at Barton Ramie that resemble his San Jose Red-and-Black-on-Orange polychrome Moreover, subsequent ceramic studies have been carried out at sites in the upper Belize Valley since Diane Chase (1982a) defined the Kik group types and Shirley Mock (1994) defined the Fat Polychrome type, but none mention any types that resemble these large red-slipped and polychrome-style bolster-rimmed basins (e.g., Aimers 2004a, 2004b; LeCount 1996). The pronounced P-shaped lip of the Kik Polychromes is very distinctive and is not easily missed even in circumstances of exceptional erosion, as was the case with the ceramics from Pechtun Ha. It is notable that although I identified Kik Polychromes at sites in the middle and lower reaches of the Sibun Valley, I did not find any of these ceramic types in the assemblages of Terminal Classic deposits at the Hershey site in the upper reaches of the Sibun Valley (Table 2). This site has relatively high quantities of Belize Red and Mount Maloney Black and comparably low quantities of Sibun Red Neck and Roaring Creek Red types, suggesting a stronger affiliation with the Spanish Lookout / Tepeu Spheres to the west.

Overall, the larger Fat Polychrome basin forms represent a smaller percentage of the Ik'hubil Complex compared to the more diminutive Indian Creek bowls (Table 7). The basins also represent a smaller percentage when compared to other wide-mouthed storage vessels, such as the Sibun Red Neck jars; the latter were eight times more prevalent at sites across the Sibun Valley (refer to Table 2). The relatively low quantity of Fat Polychrome basins combined with the presence of polychrome paint on the exterior of these pots suggests that these containers were probably not used for general-purpose storage but that they may have held a more specific purpose. The distribution patterns in the Sibun Valley suggest that the polychrome basins are more often associated with elite midden deposits, circular shrines, and other special ritual contexts, although they are notably absent in cave contexts (Peterson 2006). Based on their distribution, it is possible these vessels played a role in the presentation of bulk foods and/or public feasting and hosting events, as opposed to individual household consumption.

Stylistic and technological changes in the Terminal Classic

Stylistically, the Kik Polychrome ceramics present a marked disjunction from earlier materials, exhibiting new forms and painterly styles that have no known Late Classic precursors in the Tepeu 2 / early facet Spanish Lookout ceramic tradition that characterizes the Late Classic II ceramics from the upper and lower Sibun and Belize Valleys. The basin form and pronounced P-shaped bolster rim of the Fat Polychrome type are uncommon features in the ceramics of the southern Maya Lowlands, but they have a long history in the northern Maya Lowlands and are common forms in the Cehpech and Sotuta Ceramic Complexes, namely the Puuc and Chichen slate wares (Brainerd 1958:52-53, Figures 41d, 41f, 43a-c, 73d; Smith 1971:Figures 16d, 16g, 27h-i). Both Diane Chase (1982b:72) and Shirley Mock (1994, 2005) observed that the basin form and pronounced bolster rim of the Kik group types bear a strong resemblance to the Florescent Medium Puuc and Chichen slate ware basins from northern Yucatan. The quantity and distribution of the northern-style Kik Polychrome ceramics, coupled with petrographic and chemical studies of the paste characteristics, suggest that most were produced locally (Harrison-Buck et al. 2013; Mock 2005:128). The surface finish of the Kik Polychrome ceramics found in Belize differs from the distinctive "soapy" slip of the Yucatecan slate wares. The Fat Polychrome and Indian Creek Polychrome

Table 7. Total percentages of ceramic types from the Kik Polychrome Group from sites in the Sibun Valley^a

		Sib	oun Valley		
Kik Polychrome Types	Oshon	Obispo	Pechtun Ha	Pakal Na	Hershey
Indian Creek Polychrome	3.4	1.9	0.9	3.7	0.0
Fat Polychrome	1.1	1.2	9.7	1.0	0.0

^aPercentages generated from Harrison-Buck 2007.

are red slipped and usually contain a bichrome or polychrome design. The loose painterly style of the black painted motifs (abstract s- and u-shaped elements, cross-hatching, and monkey motifs) of the Kik Polychromes, as well as the Lamanai Polychromes, bear some resemblance to the motifs and loose painterly style found on some of the painted ceramics from Chichen Itza and Uxmal in northern Yucatan (Brainerd 1958:Figures 72e and 72i, 76c, 9-10; Smith 1971:Figure 20h).

The basin and bowl forms of the Kik Polychrome ceramics found in the Terminal Classic Ik'hubil Complex reflect vessel forms and painterly styles characteristic of northern Yucatan (Harrison-Buck 2007; Harrison-Buck et al. 2013). Beyond a merely stylistic emulation, however, the basin form may have been functionally significant and indicative of specific changes in foodways. The basin form is reminiscent of the large tureens or soup dishes that were predominantly represented in the archaeological assemblage of San Pedro Siri, a colonial Caste War Maya site in the middle Belize Valley occupied by refugees from Yucatan. Jason Yaeger and colleagues (2004:8-9) concluded that dish forms represented only 10 percent of the ceramic assemblage, and bowl forms comprised the majority of the historic pottery, likely indicative of their suitability for Yucatec Maya cuisine, which traditionally includes stews, brines, and chilmole-a soup made of black mole-type sauce traditionally served with turkey roasted in a subterranean pib, or pit oven. It is notable that a subterranean pib dating to the Terminal Classic was identified at Nohmul in association with Yucatec-style architecture, including a circular shrine dating to the same time period (Chase and Chase 1982). Additionally, an influx of ladles are reported from Terminal Classic deposits in the southern Maya Lowlands, which Flynn-Arajdal and colleagues (2023) argue is indicative of a shift in cooking assemblages that derives from the Gulf Coast lowlands and shows influence from the north (see LeCount 1996:Figure E4b for an example from Xunantunich).

This influx of ladles, bolster-rimmed basins and small bowl forms of the Kik Polychromes during the Terminal Classic period may be congruent with increased feasting using more forms of traditional Yucatecan cuisine, including soups and stews. It is important to note that during this period of time, we also see *comales*—round pottery griddles for cooking corn tortillas-introduced in north-central Belize and elsewhere in the Maya Lowlands (Aimers 2004a; Bill 2014:96; Fry 2013:89; Harrison-Buck 2007:322-323; LeCount 1996:Figure 7.4; Rice 2007:24; Taube 1989). Although comales originally derived from Central Mexican cooking traditions, tortillas are a common accompaniment with Yucatecan cuisine. The introduction of these utilitarian wares in the Maya Lowlands signal marked changes in the habits of food preparation traditionally made by women in the domestic sphere.

Although the comales, ladles, and basin and bowl forms could be interpreted as merely local emulation of "foreign" styles (Fry 2013:89), alternatively, they could point to the physical migration of "foreigners" from northern Yucatan and/or the Gulf lowlands into places such as north-central

Belize at this time, intermarrying with local individuals and bringing their foodways with them—what anthropologists characterize as core elements of social identity. Anthropologists have long argued that foodways (and their associated utilitarian wares) can often serve as core markers of "ethnic" or social identity because they relate to "central value orientations" (Barth 1969:120)—certain social conventions or ways of doing things (Hegmon 1998:272; see also Stark, ed. 1998). Whereas emulation implies intentionality and often embodies politically informed action, the construction, maintenance, and negotiation of social identity is not a "self-conscious process of communication" (Gosselain 2000:188) but a socially informed action, often embodying the mundane "every day" choices (Stark 1998, 2003).

Other northern traits introduced during the Terminal Classic period include distinctive Yucatec-style architectural structures, which have been interpreted elsewhere as wind shrines associated with the Mexican feathered serpent cult, where feasting as well as collective male bloodletting and ceremonial initiation took place (Harrison-Buck and Pugh 2020; Harrison-Buck et al. 2018; Ringle et al. 1998). Terminal Classic circular shrines are found at sites in the eastern Sibun and Belize Valleys, including Pechtun Ha, Oshon, Obispo, Hum Chaak, and Ik'nal (Figure 1). These buildings bear a strong resemblance to one another and also to others found across a broad area of the Maya Lowlands, found as far apart as Lamanai, Nohmul, Chichen Itza, Uxmal, El Tigre, Ucanal, and Seibal (D. Chase and A. Chase 1982; Halperin and Garrido 2019; Harrison-Buck 2012a; Harrison-Buck and McAnany 2013; Harrison-Buck and Pugh 2020; Pendergast 1986:11; Pierce 2016:179-180, Figure 5.7).

Local and regional spheres of interaction: Trading diasporas and intermarriage

Yucatec and Gulf lowland traits, including circular architecture and marked changes in foodways, strongly suggest more than just local emulation and trade. They point to the possibility of northern migrants entering places such as north-central Belize during the Terminal Classic. Yet the hybridized ceramic forms and maintenance of certain local ceramic traditions do not suggest a wholesale population replacement as a result of colonization. Elsewhere, I have suggested the possibility of trading diasporas and more intimate social relations such as intermarriage to explain this mix of local and hybrid forms of material culintroduced during Terminal Classic times (Harrison-Buck and McAnany 2013; Harrison-Buck and Pugh 2020; Harrison-Buck et al. 2013). Trading diasporas may have involved the circular migration of northern merchants who intermarried with the local inhabitants in places such as north-central Belize. A trading diaspora model helps to explain the sudden influx of Terminal Classic settlement across the Maya Lowlands with circular architecture, which appears to be positioned at strategic points along the coast and rivers and connected to both the Gulf Coast and the Caribbean Sea (Harrison-Buck

2012a:Figure 1). The distribution pattern of settlement suggests an important connection between shrine centers and the movement of goods and people, either on foot or via canoe, and it may be tied to a long-distance trade network fueled by northern Maya groups during this time (Harrison-Buck and McAnany 2013; Harrison-Buck and Pugh 2020; Harrison-Buck et al. 2013).

Jeff Kowalski and colleagues (1994:7-8) suggest that "the round structure form was disseminated by the Itzá," a branch of Chontal-speaking Maya people who appear to have their origins in the Gulf lowlands (Harrison-Buck and McAnany 2013; Scholes and Roys 1968:23-24). Kowalski (1989:173-177) and others have suggested that Chontal-Itza factions established themselves at Chichen Itza and developed a long-distance, circum-peninsular trade network that stretched from the Gulf Coast around the Yucatan peninsula, running along the east coast of Belize as far south as the Bay of Honduras and into the Guatemalan highlands (e.g., Ball and Taschek 1989; Kowalski 1989; Sabloff and Willey 1967; Vargas 1997, 2001). The archaeological evidence cited in support of this long-distance trade network includes the widespread appearance of certain "horizon markers" often described as "non-Classic" or "Mexicanized-Maya" elements found in the epigraphy, iconography, molded-carved ceramics, and new types of architecture, including circular shrines (e.g., Ball and Taschek 1989; Chase 1985; Kowalski 1989; Proskouriakoff 1950; Sabloff 1973, 1982; Sabloff and Willey 1967; Thompson 1970; Vargas 2001).

Circular shrines have been found as far inland as the Peten at the Terminal Classic center of Ucanal and possibly also at Jimbal (Halperin and Garrido 2019; Simon Martin, personal communication April 2023). In addition to this "foreign" architecture, there is evidence for physical migration of select elite individuals as marriage partners in the hieroglyphic record at both Ucanal and Jimbal. In texts from the latter site, the mother of the ninth-century ruler is named 8 Alligator, which is written with a Mexicanized, square day sign and suggestive of a Gulf lowland origin (Carter 2014:202). She is also the wife of Olom Jaatz', who

is the ochik'in kaloomte'-or "western overlord"-in the eastern Maya Lowlands during the ninth century, according to inscriptions on monuments from Jimbal (Stelae 1 and 2), Ceibal (Stelae 10 and 11), and Uaxactun (Stelae 7 and 13). Olom Jaatz' is also referenced on numerous mold-made Ahk'utu' ceramics (see Helmke and Reents-Budet 2008: Figures 1 and 3). It is significant that the hieroglyphic dates for all references to Olom Jaatz' span the ninthcentury Terminal Classic, between A.D. 830 and 889 (Carter 2014:203; Helmke and Reents-Budet 2008; Simon Martin, personal communication 2019). At Ucanal, Simon Martin (2020:295-296) has observed that the name of the ruler Papmalil derives from a Chontal naming practice. It is noteworthy that this ruler and Olom Jaatz' had achieved superior status in the Peten by the first decades of the ninth century, which suggests that intermarriage with the Chontal-Itza nobility from the north had occurred in the southern Maya Lowlands right at the transition from the Classic to the Terminal Classic (see Harrison-Buck and Pugh 2020 for further discussion).

Although no carved glyphic monuments have been found in the Sibun and eastern Belize Valleys, Terminal Classic circular architecture and mold-made Ahk'utu' ceramics are present (see Figure 12). These traits and other rarer northern imports (Figure 13) signal that these sites were actively participating in this long-distance, circum-peninsular interaction sphere with the Chontal-Itza, which Kowalski (1989) has dated to the Terminal Classic (A.D. 790–909) based on the extant epigraphic data. Cacao, honey, jade, and bird feathers —commodities highly sought after by the Chontal-Itza merchants, according to ethnohistoric documents-were also prized as gifts in the petitioning of marriages (Harrison-Buck 2017, 2021). These products were readily available in the subtropical environments of Belize and may have been what stimulated regional interaction and the population movements that may have involved intermarriage among groups in this part of the eastern Maya Lowlands during the ninth century.

Joseph Ball (1974:87–88) describes an "intrusive tradition" at Becan in southern Quintana Roo, Mexico, during

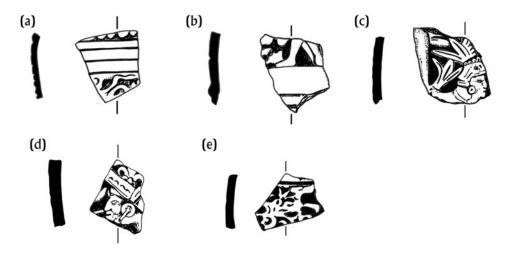


Figure 12. Ahk'utu' Molded-carved ceramics from the Sibun Valley, Belize. Illustrations by the author.

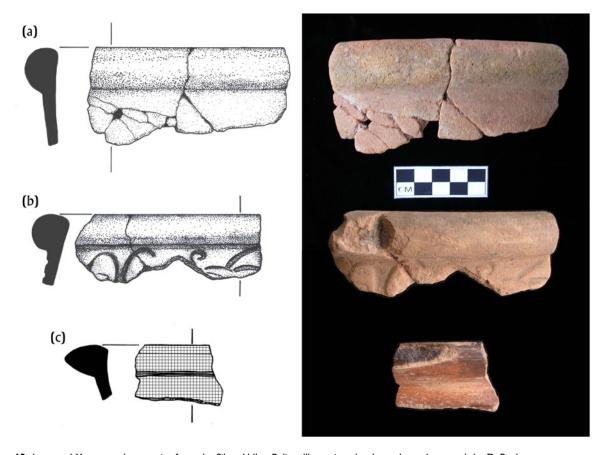


Figure 13. Imported Yucatec-style ceramics from the Sibun Valley, Belize. Illustrations by the author; photograph by D. Buck.

the Terminal Classic period that resembles the patterns described in the eastern Belize and Sibun Valleys. Becan has a circular structure and also evidence of ceramics that are "clearly of northern derivation, blended with the indigenous to produce a new, 'hybrid' ceramic expression" (Ball 1974:87). At Becan, Ball reports that nonlocal forms were accompanied by imported types, such as Thin Slate, Balancan, and Altar group Fine Orange. In the eastern Belize and Sibun Valleys, we see the introduction of locally produced ceramics with northern attributes, but only a select few northern imports (Figure 13; Harrison-Buck et al. 2013; Harrison-Buck et al. 2016:144; see also Fry 2013:88-89). Scholars have long argued that Ceibal's Bayal phase and Altar's Boca-Jimba phases experienced a similar coeval disjunction in the ceramic assemblages with "new, northern-derived forms, but without the large quantities of "slate ware" that characterize Becan's Xcocom phase and other assemblages from the Northern Lowlands (Ball 1974:88). According to Ball (1974:88), the "northern forms were transferred via central-southern types," blending local and foreign stylistic and modal attributes.

In more recent ceramic studies in northern Belize, at the site of Chau Hiix, Fry (2013) has made a similar observation, noting that imported slate wares appear alongside local variants. These imitations "successfully integrate local shape classes and modes with the pastes and slip characteristics of northern slate wares" (Fry 2013:89). Fry (2013:89)

concludes that local potters in northern Belize may have emulated these "foreign" styles after acquiring "production secrets or recipes" of paste and slip characteristics of slate wares from Yucatan. Alternatively, he suggests the possibility that some northern craftspeople were physically present in north-central Belize, resulting in the hybrid mix (see also Harrison-Buck et al. 2013).

I suggest that trading diasporas may help to explain the select imports and hybrid mixing of local and foreign traits in the Sibun and eastern Belize Valleys during this time. If trading diasporas did occur in this area, small groups of northerners may have entered parts of north-central Belize, intermarried with locals, and established settlements along the waterways, perhaps becoming permanent or semipermanent residents. In the case of trading diasporas, individuals tend to "[maintain] a distinct social identity for an extended period of time" (Stein 2002: 28; see Abner Cohen's [1971] "trading diaspora" model). Through a pattern of circular migration, perhaps involving regular longdistance trading activities, the "foreigners" in places such as north-central Belize may have retained strong ties with their northern homeland and perhaps ultimately returned. That these were two-way engagements explains the hybrid mix of local and "foreign" Yucatec influence in ceramics and architecture during the Terminal Classic. Both Fry (2013) and Ball (1974) conclude that these ongoing movements of people and goods impacted local (subregional or

microregional) spheres of interaction not only in northcentral Belize but across a broad area of the Maya Lowlands during this time.

Concluding thoughts: Interpreting new spheres of interaction in Terminal Classic times

In this study, I have defined the Ik'hubil Ceramic Complex in the Sibun Valley of Belize using type-variety analysis. Comparative analysis suggests that the Ik'hubil Complex is not a member of the neighboring Spanish Lookout Sphere but may represent its own discrete ceramic sphere in an area of north-central Belize (see Figure 1). Attempts to define discrete ceramic complexes and spheres offer useful analytical and comparative tools for the archaeologist to determine the degree of chronological overlap and the extent of interaction among groups. In this case, sites in the mid-to-lower Sibun Valley (e.g., Oshon, Obispo, and Pechtun Ha) suggest full membership in the Ik'hubil Ceramic Sphere, indicating that they shared a sphere of interaction that involved some degree of social integration.

Ceramicists have long struggled with how to interpret ceramic spheres. The type-variety system is analytically useful, but as a standalone approach, it is somewhat limited from a theoretical perspective. It runs the risk of creating fixed culture histories and bounded spheres of interaction that were, in reality, probably much more complex, fluid, and fuzzy than this idealized model allows. The "interaction sphere" model, first introduced by Joseph Caldwell (1959, 1964), was introduced to replace the notion of a fixed "culture area" (Freidel 1979). This paradigm considers both local and regional networks of interaction as integrative mechanisms that further promote innovation (Matthews 1998:5). The strength of the interaction sphere model is its emphasis on reciprocal relationships between groups and its ongoing formation. Rather than a fixed entity, spheres of interaction are mutually constituted and constantly forming at multiple scales. The interaction sphere approach emphasizes the trade of goods and exchange of information as the key to solidifying a relationship of mutual need and controlling the integration of local and regional exchange networks (Freidel 1979:50). Despite its strengths, the interaction sphere model still suffers from the implicit assumption that "pristine" states ever existed in the first place. Although the notion of a defined sphere of interaction is useful from an analytical perspective, the boundedness of this model-like the type-variety approach—in many ways gives the false impression that these categories were consciously maintained and are somehow fixed and unchanging through time, which we know is simply not the case (Bill 2013:30).

A relational perspective may be useful for further conceptualizing both local and regional interaction spheres involving material culture such as ceramics. From a relational perspective, the social and economic are never distinct spheres of interaction, and influence is never unidirectional (Harris and Cipolla 2017; Harrison-Buck 2021). Rather than static entities, interaction sphere networks are perhaps best understood as an ongoing "meshwork" of entangled relationships that "become

comprehensively entangled with one another" (Ingold 2006:13). In this way, interaction spheres—whether they involve trading partners ("formal friendships" [Brightman et al. 2016:12]) or marriage partners—invariably conjoin aspects of material possession and acts of nurturing in such a way that ownership or "belonging-to" something or someone always co-occurs through multiple relationships rather than as a single act of individualized possession (Brightman et al. 2016:19).

Through such ongoing relationships involving two-way exchange, often shared or hybrid material forms occur (Card 2013). For the archaeologist, determining whether such forms represent trade, local emulation, or the coexistence of multiple groups with distinctive identities poses an interpretive challenge (see Cecil 2004). Scholars seeking to explain shared or hybrid material forms must consider models of interaction beyond a simple one-way diffusion and engage in the possibility of migration and the formation and/or maintenance of group identities. In archaeology, migration as an explanatory process has a long-standing bias as an external model (Braswell 2003:15-18). Bernard Knapp (2008:51) observes, "Continuing skepticism about using migration to explain cultural change...is clearly part of the processual legacy that rejects diffusionism and migration as hallmarks of cultural history" (see also Rowlands 1994). As Susan Alt (2006:290) notes, previous models dealing with culture change often suffered from an all-or-nothing approach, proposing either local evolutionary development or wholesale population replacement as a result of colonization. More recent migration models in archaeology are concerned with explicit methods, and they view migration as a process that frequently involves multiple variables and produces latent and long-term effects (Braswell 2003:18; Knapp 2008:51). Christopher Beekman (2019:3) suggests that greater attention should be given specifically to the processes of incorporation, not just the migration itself.

Building on these ideas, I argue that intermarriage played a key role in such incorporation processes in the Maya area during the ninth-century Terminal Classic period. Intermarriage is surprisingly underrepresented in current archaeological discussions of Mesoamerican migration. Yet across Mesoamerica, both indigenous and ethnohistoric accounts indicate that intermarriage is what made integration possible among various ethnic groups from Classic to Postclassic times, even in the midst of hostilities (e.g., Byland and Pohl 1994; Diel 2014; Megged 2023; Pohl 2003; Spores 1984; Townsend 2014). I conclude that the hybrid mix of local and "foreign" Yucatec influence in ceramics and architecture that appear in north-central Belize during the Terminal Classic is perhaps best understood as the result of multiple relationships that were mutually constituted through ongoing two-way movements, which included migration and trading diasporas that relied on intermarriage as an important means of social integration. This would explain why the changes taking place include an influx of not only Yucatec architecture and trade goods but also new foodways and other domestic practices that signal the movement of groups and the formation of new social identities in northcentral Belize. These two-way exchanges formed economic

and interpersonal relations simultaneously and generated new spheres of interaction in the eastern Maya Lowlands during Terminal Classic times.

Thinking about ceramic spheres as one part of a complex meshwork of nurturing social and economic relations helps to better understand the shared and hybridized forms of material culture and the fuzziness of sphere boundaries. These material signatures reflect the ongoing movement of people, goods, and ideas. From a relational perspective, shared "commodities"—such as ceramics and similar architectural styles—are not strictly material property, but they embody "nurturing relations" (sensu Brightman et al. 2016), where social and economic spheres of interaction are ongoing formations that are mutually constituted among groups.

Acknowledgments. This work is the result of over 20 years of analysis between 1999 and 2020, which began with my doctoral research as a member of the X'ibun Archaeological Research Project (XARP), directed by Dr. Patricia McAnany. During the 2004 summer lab season, Dr. Jim Aimers patiently sat with me in the lab and pointed out all the Early and Late Facet Spanish Lookout types. I am truly grateful for all his help and sage advice, all the while scratching his head wondering why there were not more Belize Red types! Although the Sibun assemblage turned out to be starkly different from the Spanish Lookout assemblage, this process of elimination was a crucial first step in my subsequent ceramic analysis over the next two years, during which I was able to tease out the primary ceramic types of the Ik'hubil assemblage. Following the completion of my Ph.D. in 2007, I wanted to continue tracing out the aerial extent of the Ik'hubil Sphere to the north and decided to initiate my own archaeological project in the eastern half of the Belize Valley. In preparation for this project, Dr. Lisa Lucero kindly provided me with access to her Saturday Creek ceramic collections and offered me the opportunity to incorporate this site in my Belize River East Archaeology (BREA) project. Since 2011, BREA has been generously funded by the Alphawood Foundation. I am grateful to Kristin Hettich, the former Alphawood program officer, for all her unwavering support of the BREA project. I also wish to thank all the project staff, field school students, and local villagers who conducted the fieldwork reported in this article. The Belize Institute of Archaeology (IA) as part of the National Institute of Culture and History issued permission to conduct field work in Belize. I thank the past and present staff and directors at IA-particularly Dr. Jaime Awe, Dr. John Morris, and Dr. Melissa Badillo-for their encouragement, support, and collegiality over the years. Three anonymous reviewers provided invaluable comments that have served to strengthen this article and I am grateful for their feedback; any errors or omissions here are solely my own.

Funding. Financial support for the Xibun Archaeological Project (XARP) was provided by National Science Foundation grants awarded to Patricia McAnany (BCS-0096603) and Eleanor Harrison-Buck (BCS-0638592). Financial support for the BREA Project was provided by grants from the Alphawood Foundation that were awarded to Eleanor Harrison-Buck.

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