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Maya Monumental "Boom": Rapid Development, Hybrid Architecture, and "Pretentiousness" in the Fabrication of Place at Alabama, East-Central Belize

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ABSTRACT

Boomtowns are the product of unique flows of development characterized by relatively rapid population growth and land conversion, and the sudden appearance of functional and place-making features, much of which may not be readily apparent in the archaeological record. While settlements may expand rapidly in the absence of these forms, and thus lie outside the boomtown definition, we propose that the process does, in fact, describe development at the ancient Maya site of Alabama, Belize. We invoke archaeological evidence in the description of the tempo and tone of development at Alabama during the Late to Terminal Classic period (ca. 700–900 A.D.): a dynamic interval of Maya civilization. If, as archaeologists, we are truly interested in understanding the social and demographic processes that drove change in prehistoric and historic human landscapes, we must take care to incorporate descriptions of the human-scale experiences of development itself.

KEYWORDS

archaeology; ancient Maya; boomtown; architectural planning; Belize; monumental architecture; spatial analyses

Introduction

Recently, a series of future "grand challenges" were outlined for the discipline of archaeology in a published forum by Kintigh and colleagues (2014). Questions related to the emergence of social complexity, many of which in turn focused on the loci of such developments and the emergence and nature of the spaces and communities in which we live, stood prominent among these challenges (Kintigh et al. 2014: 11). Archaeologists have spilled considerable ink in exploring the breathtaking variety of forms that human settlement has taken over millennia (e.g., temporary and semi-permanent encampments, villages, towns, cities, compact, gridded, strongly nucleated, dispersed, amorphous) and on the multiple motivations leading to the emergence of particular forms (e.g., seasonality, administrative, agricultural, regal-ritual, mercantile). Implicit in both interests is an emphasis on exploring those social processes attendant to such developments. Many, if not most, of these approaches, as applied in archaeology, find an analog (if not an explicit origin) in the broad multi-disciplinary literature of community and urban studies. Yet, for all the attention that archaeologists have placed on the study of settlement processes in the archaeological record, we note that relatively few have focused on the bread-and-butter of modern community and urban studies; that is, on the lived experience—the tempo and tone of development—at particular sites at the human scale (Beck et al. 2007; Bender 2002; Ingold 1993). This is completely understandable, a product of our coarse chronologies, where the human scale can be frustratingly elusive. As archaeologists, we tend to speak of growth and decline over the course of centuries, and persistence over millennia, seemingly forgetting that these patterns, developed over the longue durée (Iannone 2002), are the end result of innumerable decisions made at the scale of decades or less. In this article, while we are no less limited by coarse chronological control, we attempt to address this human scale of development, exploring one of many potential processes of settlement growth—the boomtown—at an ancient Maya site of the eastern lowlands.

Alabama and East-Central Belize

The site of Alabama (Govt. of Belize designation 33.184.002) is located in East-Central Belize: a material culture sub-region of the Maya lowlands, part of the eastern frontier of the Maya world, and roughly equivalent to the modern-day Stann Creek District (Graham 2001; Peuramaki-Brown 2017) (FIGURE 1). Despite relatively little archaeological investigation, and while often grouped with Southern Belize (Toledo District) (MacKinnon 1991), the major inland sites of the sub-region share several common features that are readily identifiable and collectively differentiate them from other lowland sites: location atop alluvial terraces with direct access (less than a day's travel) to coastal lagoons and shores via navigable rivers; low, large, non-vaulted architecture; alluvial-clay core for architecture; large pits delimiting monumental precincts; architectural facing blocks, megalithic slabs, and stelae-altars of non-limestone rock (e.g., granite, slate); a general lack of epigraphic materials; and special-context use of imported limestone (e.g., ball court markers, corner stones, and tomb walls; the specific sources of such material are currently unknown).

Alabama, which was first documented archaeologically in 1976 (Graham 1994: 4, 132, fig. 1.2), is the archetype for this regional style. It abuts the eastern slopes of the Maya Mountains—a projection of metamorphic and igneous rock (including much sought-after granites and derived clays) that forms a sharp geological contrast to the otherwise limestone-dominated landscape of the Maya lowlands (FIGURE 2). The site sits on the uppermost terrace within a fertile alluvial

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Figure 1. Map of Maya world showing location of Eastern Maya Lowlands in relation to other regions, and selected sites. Base map courtesy of NASA/JPL-Caltech.

pocket, with foothills on three sides, along the banks of the Waha Leaf Creek that runs 20 km east to Placencia Lagoon and the Caribbean coast, passing through broadleaf forest and pine savannah along the way. This places Alabama at a nexus of multiple environmental and resource zones that could have been easily exploited within a single day via water and foot travel. The north end of the pocket leads to a gap within the foothills that, if followed for roughly 10 km, brings one to the site of Pearce (Govt. of Belize designation 33.185.001) in the Cockscomb Basin along an upper tributary of the South Stann Creek (Peuramaki-Brown and Morton 2016).

Preliminary mapping and testing of the monumental core of Alabama was conducted in the 1980s by the Point Placencia Archaeological Project (PPAP), directed by MacKinnon (1987, 1988a, 1988b, 1989a, 1989b; MacKinnon et al. 1993) (accessible PPAP documentation is limited, and no bulk counts of materials recovered are currently available). Evidence from these investigations (discussed more fully, below) suggest that the site developed rapidly during the late facet of the Late Classic to Terminal Classic (ca. 700–900 A.D.) periods, and research since 2014 by the Stann Creek Regional Archaeology Project (SCRAP; www.scraparchaeology.com) has focused on further chronicling

Figure 2. Map of Central Belize showing location of major sites, including those of East-Central Belize.

the development of the site, which we now believe to have been home to approximately 600–900+ people based on recent systematic settlement survey and surface collection (following methods described by Rice and Culbert [1990]) (Peuramaki-Brown 2015, 2016a, 2016b, 2017; Peuramaki-Brown and Schwake 2014). Despite this small population, what we would normally call a "village" (Leeds 1980), Alabama is home to an impressive monumental core—remapped in 2015–2016 (for detailed description of methods see Morton [2015, 2016]) and described and assessed below—and is typically described as "urban-like" and as a small major ceremonial center of regional significance.

We may never know, precisely, what motivations led the ancient Maya to settle at Alabama, though both Graham (1994: 132) and MacKinnon (1989a) variously proposed the idea that Alabama potentially served as a form of gateway community (Burghardt 1971), based on its location within the landscape and access to nearby trade routes and coastal salt works, tied to the coastal sites of Indian Hill 1 and Pedro Rubio, and the inland site of Pearce. This idea, along with preliminary evidence for foreign in-migration, may explain why Alabama was settled and why it boomed, and is an important element of continuing investigations by SCRAP. It also lies well beyond the scope of this paper. Here, we are not so much focused on the why of settlement growth at Alabama (at least, not yet), but rather on the understanding and documenting of the where and when of development.

Boomtown: A Model for the Where and When

Boomtowns, or rapid-growth communities, are remarkable settlements that arise relatively suddenly in regions typically perceived as being severely disadvantaged or isolated, often situated at the boundaries of shifting geo-political entities (Barth 1975; Bradbury 1979; Harpelle and Beaulieu 2012; McIntyre 1993). Settlements that typify boomtown development around the world are often exemplars of rural complexity (Barnes and Hayter 1994; Guengerich 2017; Paz 2002), and flower rapidly in response to several potential factors: resources and environmental opportunities or challenges, and socio-economic or socio-political fluctuations that include the outcomes of centralizing, decentralizing, colonization, migration, and/or defense strategies (Benson et al. 2009; Hostetter 2011; Isendahl et al. 2014). Over the history of their study, many reasons have been both suggested and demonstrated to account for the rapid growth exhibited by boomtowns (Barnes 1988). Such development has been identified as far back as the Sumerian period of ancient Mesopotamia, attributed to valued resource extraction and the effects of highly constraining environments (Barbier 2011; Osborne 2014; Stone 2008). Boomtowns occurred in ancient Egypt at places such as Amarna, where rapid development was related to politico-ideological transitions motivated by individual agency and cults (Bard 2008). The phenomenon can also be suggested within the context of the ancient Roman Empire, at Ostia, where sea trade and commerce influenced sudden complex development (DeLaine 2008; Heinzelmann 2002, 2005). Clearly, while economic considerations have often been invoked to describe boomtown growth, they need not be the exclusive (nor primary) driver at any one site. Further, there is no limit on the number of boom episodes that any one center may experience, and these booms may be separated by other (non-boom) developmental processes.

In characterizing boomtowns, social scientists typically point to unique interwoven elements related to the associated flows of people, places, and things, including a relatively rapid pace and scale of population growth and land conversion; a unique and changing social fabric related to significant demographic shifts; the rapid introduction of functional and place-making features; and complex development in political and/or economic frontier zones. Although SCRAP research at Alabama is focused on all four elements, it is the third—the

rapid introduction of functional and place-making features—that we are concerned with in this paper. Such features include what might be termed "urban hallmarks" at larger centers: architectural elements typically associated with infrastructural and socio-ideological/politico-economic realities that are part of the process of facilitating and validating urban life. In the case of the ancient Maya, Houk (2015) and others (Hutson 2016) discuss elements of architectural inventories that could be identified as urban hallmarks in cities of the eastern Maya lowlands: plazas, ball courts, temple-pyramids, acropolises and palaces, stone monuments, reservoirs, and causeways. This suite of elements is typically limited to the largest and truly urban settlements —"cities"—of the lowlands, appearing as a result of a "long period of occupation … 1,000 to 2,500 years," and resulting in "distinctive architectural style[s] … [and] places for regional styles to be initiated" (Andrews 1975: 20–21).

Within boomtown development, the following characteristics typify functional and place-making features: rapid appearance, hybrid styles, and pretentiousness. The appearance of such features is rapid relative to other, more typical instances of development, related to necessity and the uncertainty of newly emerging local lifeways. Hybrid styles reflect multiple potential influences including foreign administration and/or weakly defined public institutions, highly competitive private/corporate economies, local environmental or physiographic factors, the re-creation of hallmarks from memory and/or shallow perceptions and understandings of such, and the aforementioned issues of hasty development (Englehardt and Nagle 2011; McDonough 1998; Ulfstjerne 2016; Woodworth 2011, 2015). Finally, these features may exhibit pretentiousness to varying degrees, where the conspicuous use of a specific material or stylistic element (or a credible fake) serves to influence the impression of the whole, generally increasing a sense of prestige or familiarity. This latter point is also visible where a practical but aesthetically undesirable construction may be disguised to look like something it is not; where formal standardized shapes are adopted to suggest a particular function; and where no small amount of effort is exerted to make the settlement look more mature than it is in reality (Heath 1989).

Overall, these functional and place-making features represent an overt search by planners/ residents for, and in reference to, organizational frameworks of society that serve as familiar touchstones (Barth 1975). These features and referenced frameworks serve to define the tempo and tone of boomtown development versus other developmental processes. Initially, despite the fact that these places were often no bigger than villages or small towns—decidedly not urban—by dint of their often compact and complex layout, they were made to look, if not act, like their big city urban counterparts, and are described as "humble, understated, and even hopelessly underscaled … compact groups of buildings" that are "at once the pretense and the reality of 'city'" (Heath 1989: 199).

As we will discuss, below, Alabama is not the product of 1000–2500 years of development. Neither could it be described as "big" or "urban" relative to many other sites of the Maya lowlands. It does not appear, however, that the builders of Alabama let these facts get in the way of their ambitions as they most certainly endeavored to deliver both the pretense and the reality of "city." In the remainder of this paper, we discuss the physical characteristics and spatial realities of the monumental core of Alabama—home to its urban hallmarks—with reference to this boomtown model.

Investigating Monumental Boom at Alabama

The treatment of monumental cores as key indicators of discrete settlement units (typically referred to as "the site") is common in Maya archaeology, as monumental cores comprise the most visible elements of a given settlement on a landscape and are often of the most concern to government authorities with regard to safeguarding and management. In cultural terms, monumental architecture often represents the seats (both literally and figuratively) of social, economic, ideological, and political power within Maya communities and/or regions. Buildings of the core were key to the communication of this power and were typically home to royal and/or elite households and their support staff (Fash 2009; Villamil 2007; von Schwerin 2011). On a planning level, the monumental core is assumed to represent the centralizing node of infrastructural and community-focused activity within a settlement.

Our re-mapping of the Alabama monumental core (FIGURE 3) has afforded us a better understanding of previous descriptions of the site; for example, in PPAP maps and reports from the 1980s, the presence of architecture over 10 m tall at Alabama is suggested, while our own survey shows that this is only true if measurements were taken from the bottom of surrounding pits as opposed to from plaza level. The previous PPAP interpretation may have been a way to conveniently fit Alabama into Hammond's (1975b) commonly applied rank order system of Maya sites in Belize, which it does not. Such non-standard reckoning typifies the difficulties involved in understanding complex rural community development—including boomtowns—within many existing rank order systems (Iannone and Connell 2003).

As mentioned, pits delimit the architecture of the Alabama monumental core to the north, south, and west, and a steady drop down to the Waha Leaf Creek, roughly 150 m distant, is immediately to the east. Only a single mound (over 2 m tall) lies between the monumental core and the creek, suggesting possible control over this corridor by residents, which would have effectively led to significant control of access on all four sides of the site.

The monumental core consists of 20 major structure platforms (the tallest, Str. 3, measuring only 7.5 m), four plazas, a *sacbe* (causeway), and 14 uncarved granite monuments. The total monumental area measures 24,285 m^2 (not including the pits, Strs. 19 and 20, or the sacbe) (TABLE 1), which is slightly larger than the monumental core of Nim Li Punit in Southern Belize and only 1/10 the size of the site core of the largest city in the eastern lowlands, Caracol (see calculation processes presented by Houk [2015: 232–237, 240–241, table 10.2]). The site of Pearce, immediately north, is estimated to be slightly larger, roughly similar in size to Lubaantun in Southern Belize. Alabama and Pearce are currently the two largest documented sites (monumental cores) in the sub-region.

Rapid appearance

If we are to demonstrate boomtown development, then perhaps the most immediate aspect to be documented is its rapidity. Based on limited chronometric dating and much

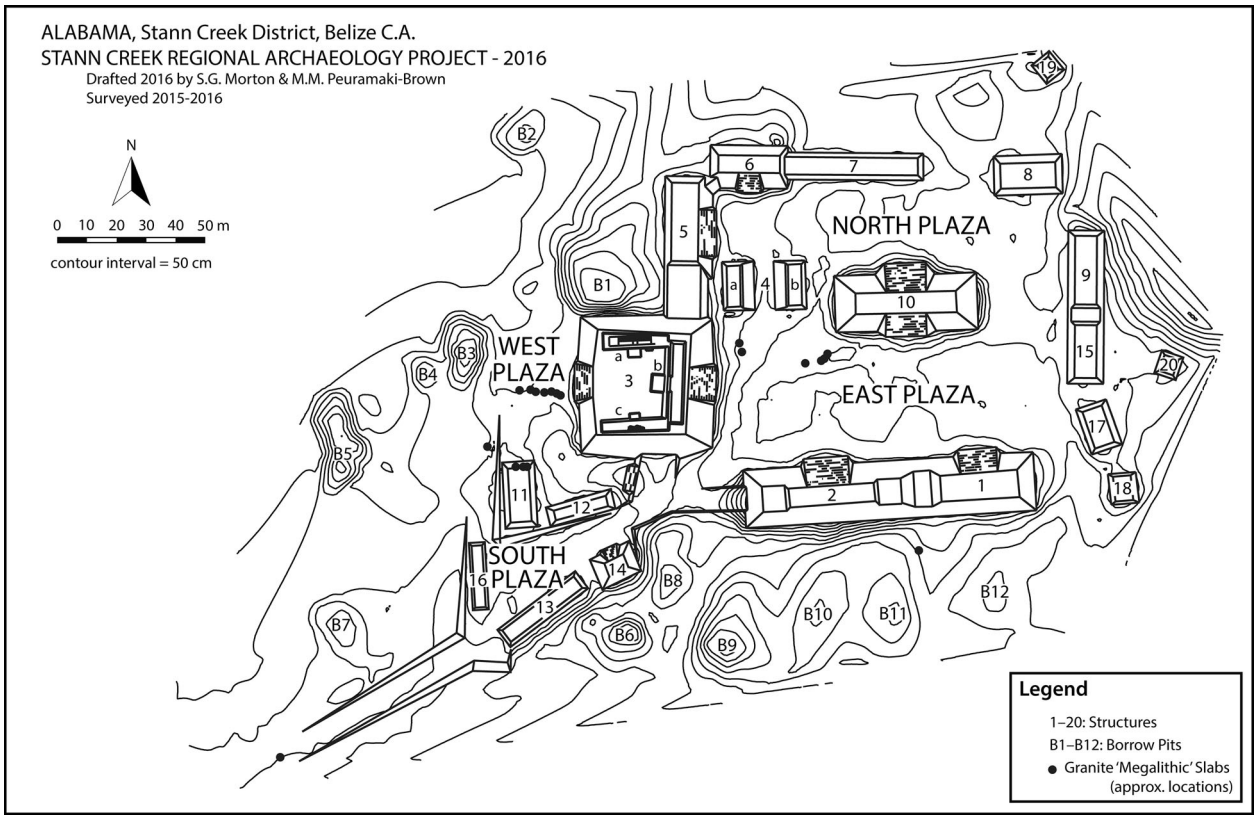

Figure 3. Rectilinear interpretations of Alabama monumental architecture overlaying topographic detail.

more extensive stylistic dating (along with other proxy data), while portions of the surrounding residential settlement of Alabama may have seen a more protracted occupation spanning the Classic Period, both the monumental core and the majority of settlement areas seem to have been established, largely, in one distinct and energetic episode toward the end of the Late Classic/beginning of the Terminal Classic Period.

Extensive chronometric dating has been problematic at Alabama, the result of only minimal refuse having been deposited in the construction core of platforms in both the monumental core and settlement zones (we use "structure" to refer to surviving construction platforms and/or building platforms of the monumental core, while "mound" refers to the surviving construction platforms and/or building platforms of the settlement zone); poor preservation conditions of materials due to acidic soils; chronologically ambiguous or overlapping artifact types/styles between the Late and Terminal Classic periods; and the well-attested difficulties in constraining the carbon calibration curves for this particular period of time (Culleton et al. 2012). Nonetheless, we believe the general chronology outlined below adequately captures the overall period of growth and habitation at Alabama.

Material collected from the monumental core in the 1980s was stylistically assigned to the late facet of the Late Classic period (ca. 700–800 A.D.) or overlapped with the Terminal Classic period (ca. 800–900 A.D.). This material included sherds from both molded-carved vases and post-fire incised Belize Red vessels, and a clear lack of typical earlier types and forms (e.g., thick basal-flanged bowls, z-angled bowls, globular jars with grooved and/or incised rims [MacKinnon 1989a: 498]). A Late Postclassic pedestaled base censer fragment was also recovered from the surface of the East Plaza, beneath a fallen monument, as was an obsidian blade that was hydration dated to 1340 ± 44 years A.D. (MacKinnon et al. 1993: 2) and may indicate that the site was revisited after its initial abandonment (MacKinnon 1988a) (see summary of all available obsidian hydration and ^{14}C dates in Table 2).

The best documented (in terms of available reports) of the PPAP excavations were those at the Str. 3 "acropolis," and consisted of horizontal clearing along the faces of all three buildings (masonry platforms) atop the primary construction platform (MacKinnon 1987, 1988a, 1988b). An additional trench was placed running roughly east-west across the eastern platform and into the courtyard area. The horizontal excavations exposed building platforms of large cut stones of granite. Perishable superstructures were indicated by the presence of daub. Excavations down into the main construction platform of the acropolis also provided data on construction and occupation, and to a minor degree on function. Limited ^{14}C and obsidian hydration dating results confirmed the aforementioned temporal assignment of artifacts (MacKinnon 1989a: 544, 548). A radiocarbon date from charcoal material recovered from beneath the thinly plastered surface of the courtyard returned a date of 760 ± 80 years A.D., and a date of 850 ± 70 years A.D. was returned from charcoal material recovered atop the same surface. A hydration date from an obsidian blade also recovered from below the plastered surface returned a date of 874 ± 77 years A.D.. These dates further support a Late/Terminal Classic construction and occupation date, with an overlap range of 797 to 830 A.D. PPAP crew then sunk a "ten-meter shaft" through the intact floor of the courtyard, "which encountered nothing" (Walters 1988: 1), suggesting a single phase of construction for the entire Str. 3 platform. We would introduce a modicum of caution on this last point, as it seems unlikely

Table 1. Comparative values for Alabama monumental core and other sites of the Eastern Maya Lowlands (adapted from Houk 2015).

			Stelae		Plazas					Other Hallmarks					
Site	Region*	Monumental Area (m^2)	Stelae	Stela Density†	Plazas	Stela Plaza	Main Plazas	Open Plaza Area (m^2)	Percentage of Monumental Area‡	Ball courts	Causeways	Acropolis	Palaces	Reservoirs	Processional Architecture
Alabama	ECB	24,285	14	5.8	2+	X	North and East Plazas	8347	34.4%	1	1	X?	X?	X?	X
							East Plaza	*5011*	*20.6%*						
							All plazas§	*11,058*	*45.5*						
Altun Ha	NB	46,423	0	0.0	2+		Plaza A	5390	11.6%	0	2			X	X?
Caracol	VP	236,955	24	1.0	4+		B (Caana plaza)	8220	3.5%	2	36	X	X	X	X?
Chan Chich	NWB	68,469	1	0.1	4		Plaza A-1	12,490	18.2%	1	2	X	X	X?	X
Dos Hombres	NWB	47,014	3	0.6	3+		Plaza A-1	11,650	24.8%	2	1	X	X		X
El Pilar	BV	74,206	0	0.0	4+		Plaza Copal	12,240	16.5%	2	1	X	X	X?	X?
La Milpa	NWB	82,156	23	2.8	3		Great Plaza	17,710	21.6%	2	1	X	X	X	X
Lamanai	NB	109,385	9	0.8	4+		High Temple plaza	6600	6.0%	1	0	X	X		
Lubaantun	SB	32,306	0	0.0	4+		Plaza V	1950	6.0%	3	0	X?	X		
Minanha	VP	32,916	8	2.4	1+		Plaza A	6700	20.4%	1	1	X	X		X
Nim Li Punit	SB	23,161	21	9.1	3+	X	Stela Plaza	1840	7.9%	1	0		X		
Nohmul	NB	86,393	0	0.0	4+		Giant Plaza	13,460	15.6%	1	1	X	X		X?
							Great Plaza	4540	5.3%						
Pusilhá	SB	51,741	22	4.3	3+	X	Moho Plaza	7050	13.6%	3 or 4	1	X			X?
							Stela Plaza	2560	5.0%						
Uxbenka	SB	35,855	23	6.4	4+	X	Group E Plaza	3700	10.3%	2	1				
							Group B Plaza	2260	6.3%						
							Group C Plaza	2120	5.9%						
Xunantunich	BV	73,690	9	1.2	3		Plaza A-I and A-II	9550	5.4%	2	3	X	X	X	X
							Plaza A-I	5010	13.0%						

*Region key: NB, northern Belize; NWB northwestern Belize; BV, Belize Valley; VP, Vaca Plateau; SB, southern Belize; ECB, east-central Belize
†Stela density is number of stelae per 10,000 m^2 of monumental area.
‡Percentage of monumental area by plaza is calculated by dividing open plaza area (the space between the front bases of buildings around the plaza, minus the footprint of any structures within the plaza) by monumental area
§North Plaza (3336 m^2), East Plaza (5011 m^2), South Plaza (878 m^2), West Plaza (1833 m^2)

Table 1. continued: Comparative values for Alabama monumental core and other sites of the Eastern Maya Lowlands (adapted from Houk 2015).

	Planning								Petén Template							
Site	Core Area Rank	Primary Orientation (Degrees East of North)	Secondary Orientation (Degrees West of North)	% of Buildings Following Primary Orientation	% of Buildings Following Secondary Orientation	Coordination	Monumentality	Formality	Primary Site Axis	North-South Axis in Site Organization	Plaza**	Dualism	Triangle	Ball Court Transition	Causeways	Fit
Alabama	10.25%	0.5	1.5	33%	28%	High	Low	High	E-W	Strong?	Center	Strong?	Unclear	Strong	Weak	Moderate-Strong?
Altun Ha	19.58%	-6	-18	25%	14%	Low	Medium	Low	~N-S	Moderate	North	Moderate	Moderate	None	Moderate	Moderate
Caracol	100.00%	7	0	51%	34%	Medium	High	High	N-S	Strong	North	Strong	Unclear	Moderate	Strong	Strong
Chan Chich	28.90%	1		64%		High	Medium	High	~N-S	Moderate	North	Strong	Moderate	Strong	Unclear	Strong
Dos Hombres	19.83%	0	9	62%	32%	High	Medium	High	N-S	Strong	North	Strong	None	Strong	Strong	Strong
El Pilar	31.31%	-3.5		82%		High	High	High	~N-S	Moderate	South	Strong	Unclear	Weak	Weak	Weak
La Milpa	34.64%	1	16	33%	23%	Medium	High	High	N-S	Strong	North	Strong	None	Strong	Strong	Strong
Lamanai	46.16%	19		32%		Low	High	Medium	N-S	Strong	South	Unclear	None	Unclear	None	Weak
Lubaantun	13.63%	0	8	21%	21%	Medium	Low	Medium	N-S	Strong	South	Strong	Moderate	Unclear	None	Weak
Minanha	13.88%	15	-10	45%	19%	Medium	Low	High	N-S	Strong	South	Strong	Unclear	Moderate	Strong	Weak
Nim Li Punit	9.79%	-3	-7	13%	7%	Low	Low	Medium	~N-S	Moderate	South	Strong	Unclear	Strong	None	Weak
Nohmul	36.46%	13	3	27%	10%	Low	High	Medium	~N-S	Moderate	South	Strong	None	Weak	Strong	Weak
Pusilhá	21.81%	-16	-8	59%	10%	Medium	Medium	Medium	~N-S	Moderate	North	Strong	Unclear	Strong	Strong	Weak
Uxbenka	15.15%	10		36%		Low	Low	Medium	~N-S	Moderate	Unclear	Unclear	Unclear	Unclear	Unclear	Weak
Xunantunich	31.10%	-8	-14	37%	13%	Medium	High	High	N-S	Strong	Center	Moderate	Strong	Strong	Strong	Moderate

**Location of main public plaza relative to rest of site core

Table 2. Summary of ^{14}C and obsidian hydration dates recovered from Alabama.

Sample Location	Context	Date(s)	Details	Technique	Lab Reference	Reference
Alabama Monumental Core						
	Sealed construction core, Str. 3	760 ± 80 A.D.	1190 ± 80 B.P.	^{14}C (radiometric)	WIS-1914	MacKinnon 1989a: 544
	Sealed construction core, Str. 3	874 ± 77 A.D.	hydration rim 3.72 ± 0.13 μm	Obsidian hydration	MOHLAB 407-AL52-1043	MacKinnon 1989a: 548
	On floor material, Str. 3	850 ± 70 A.D.	1100 ± 70 B.P.	^{14}C (radiometric)	WIS-1915	MacKinnon 1989a: 544
	East Plaza	1340 ± 44 A.D.	unknown	Obsidian hydration	Diffusion Labs	MacKinnon et al. 1993: 2
Alabama Settlement Zone						
	Habitation debris, ALA-047C	CAL A.D. 655–720 CAL A.D. 740–765	2σ, 95% probability	^{14}C (AMS)	Beta-457817	Peuramaki-Brown 2016b: 8
	Daub feature, habitation debris, ALA-047B	CAL A.D. 675–780 CAL A.D. 790–870	2σ, 95% probability	^{14}C (AMS)	Beta-457818	Peuramaki-Brown 2016b: 8
	Habitation debris, ALA-045A	CAL A.D. 885–995	2σ, 95% probability	^{14}C (AMS)	Beta-457819	Peuramaki-Brown 2016b: 8
	Construction core, ALA-045A	CAL A.D. 895–1020	2σ, 95% probability	^{14}C (AMS)	Beta-457820	Peuramaki-Brown 2016b: 8

that a ten-meter-deep shaft would have been excavated into a six-meter-tall unconsolidated construction platform, and no profile plans or photos of the excavation are currently available.

Similar temporal and construction patterns were noted during SCRAP surface collection and test excavations at mounds (domestic platforms) in the settlement zones surrounding the monumental core. Over 150 mounds were identified and surface collected, resulting in 209 diagnostic ceramic sherds (3095 sherds total), only 55 of which were identifiable and assigned temporal designations based on form, paste, and/or surviving surface treatment. These included 67.3% Late to Terminal Classic materials, including British Honduras ash wares (later forms and Belize Red when slips survive), a single Mt. Maloney LCII bowl sherd, and molded-carved materials identified as Ahk'utu' and possibly Pabellon; 12.7% Terminal Classic to Early Postclassic materials, including censer bowl fragments and appliqués; and 20% possible Early Classic sherds (a possible z-angle bowl and grooved, everted rim jar fragments [Peuramaki-Brown et al. 2017]). From test excavations at seven mounds in the Block C1 settlement zone, material recovered from humus, fall, habitation debris, and construction core contexts amounted to 236 diagnostic ceramic sherds (7065 sherds total), only 82 of which were identifiable and assigned temporal designations based on form, paste, and/or surviving surface treatment. These included 73.1% Late to Terminal Classic materials, 19.5% Terminal Classic to Early Postclassic materials, and 7.3% Early Classic sherds (all of which were found in association with Late to Terminal Classic materials). AMS dating of charcoal from both construction core and habitation debris contexts confirmed dating assignments (TABLE 2). This chronology accords well with broader developments in this area of the sub-region, including the Late-Terminal Classic dating of associated salt works of the Placencia Lagoon (Graham 1994; MacKinnon 1989a; Sills 2016).

Other evidence allows us to break this general chronology apart and suggests one distinct period of rapid development within the monumental core of Alabama, followed by later additions. Based on the available data from PPAP test excavations at 30% of the total monumental platforms at Alabama (including Strs. 3, 4, 6, 11, 14, 17, and 18), as well as our own assessment of existing looters' trenches, we currently believe that most structures were single-phase constructions, built of hewn granite block facings and loosely consolidated sandy-clay cores with some alluvial cobble/boulder inclusions. The cores of the monumental platforms at Alabama were found to contain few or no artifacts, including no cached deposits, despite excavations in the 1980s along centerlines (where such deposits may commonly be found elsewhere in the Maya area). When similar atypical construction has been encountered elsewhere—"atypical" in the sense that Maya construction normally incorporates both refuse and intentionally cached items—this is often interpreted as evidence for only limited (less intense) occupation in the area prior to monumental construction or unconventional construction methods and refuse disposal practices (Hutson et al. 2007). We will return to this latter consideration, below, in the context of "hybrid styles."

Perhaps more significantly, we can look to site layout. Based on our current survey, structure orientations within the monumental core generally fall within two broad categories. The largest structures, making up 61% of all monumental construction, conform to an orientation within 3° of true north. A glaringly visible inconsistency is associated with the causeway extending off the southwest corner of the site core. Walking in this direction, through the South Plaza and into the settlement zone, one is struck by the sharp break in the surrounding architectural style, orientation, and scale. From the strict orthogonal layout of the North and East Plazas, one is suddenly walking past low platforms flanking the causeway and defining the South Plaza, oriented more-or-less to the causeway and flanking terraces. It seems reasonable to suggest that these structures, along with the associated causeway that threads awkwardly between pits on the west and south periphery, are the product of construction efforts following the initial construction of the site core. The similarly non-orthogonally arranged Strs. 17 and 18 off the east flank of the site core are perhaps suggestive of a longer history of core construction than suggested by the structures of the North and East Plazas, though current artifact analyses cannot provide chronological distinctions sufficient for making this assertion definitive (still Late to Terminal Classic).

A final inconsistency in the regularity of the Alabama site plan can be seen in the North and East Plazas, and likewise bears on our interpretation of the site's construction history. Specifically, these spaces are unusually long and narrow for a Classic Maya site center. Looking at the site plan, a potential explanation for this arrangement is suggested. While the truth of the matter must await future excavations, it is difficult not to make comparisons between the central placement of Alabama Str. 10, effectively bisecting an otherwise conventional plaza space in a similar manner to that of Str. A1 at

Xunantunich in the Mopan River Valley of western Belize (LeCount and Yaeger 2010). As at Xunantunich, it seems reasonable to suggest that this structure was added during a later phase of monumental construction within the Alabama site core. The awkward (and somewhat intrusive) placement of Str. 4, Alabama's ballcourt, may similarly be the product of secondary construction efforts. Given these observations, we nonetheless suggest that the very strict and relatively consistent orientation of buildings comprising the monumental core is reflective of a short planning and construction program—that is, one that was highly planned and coordinated, following Smith (2007), with minimal additions being constructed over an indeterminate period afterward.

The construction methods utilized represent our final piece of proxy evidence for the rapid development of the site core. The pits surrounding the Alabama monumental core have been proposed to represent quarry areas for platform construction, based on macroscopic visual comparisons of associated matrices. A coarse quantification of all material found within the various platforms (both stone and earth; calculated as truncated pyramids) yields a total volume of approximately 21,560 m^3 (TABLE 3). In contrast, a similar quantification of the earthen material removed from the various pits (calculated as truncated cones) yields a total volume of approximately 5949 m^3. We can expect this latter calculation to be significantly lower than it should be due to subsequent infilling through erosion, particularly following the clearing of the jungle in construction of the surrounding modern orange orchard. Regardless, the material removed from the pits appears to be far less than that ensconced within the granite faces of the platforms.

If we only include those structures that we, above, argued were part of the original site construction (i.e., those that conform to an orthogonal orientation within 3° of true north: Strs. 1–9 and 15, excluding Str. 10), they only account for a total volume of approximately 12,638 m^3, still a far cry from being equal to the volume removed from the pits, but much closer than the total for the core as a whole. If the Alabama Maya were interested in building quickly, using material excavated from the pits would have been a more viable option than seeking out perhaps more desirable material from further afield. We suggest that the pits were initially excavated as part of the original orthogonally oriented building plan, with the later, more haphazard structures to the east of the monumental core, Str. 10, and those surrounding the causeway added later. It may even be suggested (though far from demonstrated) that the orientation of the causeway and its associated structures and spaces is at least partially the product of spatial limitations imposed by the pits.

Table 3. Volumetric calculations for platforms and features of the Alabama monumental core.

Structure/Pit No.	Area At Ground Level (m^2)	Max. Height/Depth (m)	Approx. Volume (m^3)
First Phase of Construction			
1	765.68	3.00	1421.22
2	1244.23	5.00	3785.79
3	2029.15	6.00	9233.79
3.a	104.28	1.00	96.03
3.b	155.99	1.00	122.49
3.c	92.85	0.50	38.55
4	465.50	1.00	384.05
5	558.55	3.00	1150.05
6	409.51	3.00	772.52
7	414.27	0.50	169.83
8	307.99	1.50	349.98
9	358.08	0.50	126.09
15	271.42	1.00	195.18
		Subtotal	*12638.28*
Later Phases of Construction			
10	947.96	5.00	2858.69
11	263.70	1.00	189.10
12	131.99	0.50	49.00
13	211.61	0.50	86.08
14	169.99	2.00	183.99
16	126.85	0.50	52.17
17	180.94	1.50	206.13
18	97.42	0.50	36.13
19	74.66	0.50	26.62
20	74.66	0.50	26.62
		Subtotal	*8921.54*
		Total	*21559.82*
Pits			
1	1225.47	3.50	2071.35
2	269.27	1.50	190.77
3	278.32	2.00	261.34
4	138.30	0.50	43.10
5	366.50	2.00	478.90
6	356.11	2.00	315.49
7	527.76	1.00	272.18
8	316.12	1.00	179.54
9	689.33	3.00	813.86
10	633.08	1.50	415.46
11	703.76	1.50	439.39
12	1006.46	1.00	467.25
		Total	*5948.63*

Hybrid styles

Boomtowns are often founded along political and economic frontiers, and their citizenry largely (though by no means exclusively) derive from a diverse set of those less-tethered, less-established, or otherwise more mobile segments of society. Thus, among the various concessions to rapid development and competing interests that we may expect of any rapidly established community, boomtowns are also apt to exhibit characteristics betraying a relatively shallow understanding of architectural conventions, or a distinctive mixture of features derived from more established, heartland centers. While the architectural features of a boomtown may be typical, their execution is likely to be anachronistic or otherwise atypical. Alabama is no exception, and in addition to those features noted in the introduction that define East-Central Belize as a unique material culture sub-region, other elements of Alabama's architecture and spaces serve to emphasize its hybrid nature.

Overall site orientation at Alabama runs east-west, as is also the case at Pearce, and Alabama is considered to be an "integrated" site based on Houk's (2015: 255–256) definitions. While by far the weakest of our observations, it is nonetheless worth pointing out that this east-west orientation is relatively rare in the eastern lowlands, where north-south is the norm; exceptions include Buenavista del Cayo, Pacbitun, Lower Dover, and Tipan Chen Uitz in the Cayo District. Despite the east-west orientation of the site as a whole, there appears to be a strong north-south emphasis in some individual structures/spaces, reinforced by the North and East Plazas, Str. 10's north- and south-facing stairs, and the ball court.

Perhaps a stronger line of evidence applies to the general proportions of the site. The monumental architectural assemblage of Alabama is remarkable for such a small community and includes the aforementioned plazas—the main North and East Plazas representing a whopping 34.4% of the total

monumental area—and sacbe, as well as Str. 3 described as an "acropolis" by PPAP or "simple palace complex" by SCRAP, a temple-pyramid-like structure (Str. 14), and a possible reservoir (B1). None of these terms are completely appropriate for the Alabama examples, however, which appear out of scale and lack the clear associations between form and function that one sees in the neighboring districts of Toledo and Cayo.

Testing of many of the monumental structures at Alabama in the 1980s was too minimal to secure the function of most buildings, though the shape and placement of structures may be used to provisionally infer such. Hammond (1975a: 74) notes that the functions of structures are deduced by simple visual discrimination based on dimensions and morphology:

> From the time of the first Spanish intrusion into Aztec Mexico, we have been aware that buildings on high pyramidal substructures, especially those at the centers of complex sites, were the major religious buildings. In the same way we have been aware that the small low platforms in site centers and scattered in small groups beyond them were the substructures for houses and ancillary domestic buildings. In both cases ethnohistoric and ethnographic evidence confirm what a common-sense assessment based on the morphology, number, and distribution of the structures would predict to be their function.

Accepting the premise that form follows function, at Lubaantun, Hammond expressed this in graphic form by relating the height of a structure to its basal area, noting that structures, when plotted, fall into three distinct groups: basal area exceeding 500 m^2 and height exceeding 5 m, basal area not exceeding 100 m^2 and height not exceeding 1.2 m, and an intermediate group with basal area between 150 m^2 and 330 m^2 and height between 1.3 and 3.6 m. Plotting the data for Alabama, three distinct groupings based on basal area of structures and structure height are likewise apparent (FIGURE 4). Group 1 consists of Strs. 2 and 10, both having a basal area exceeding 900 m^2 and height at or exceeding 6 m from the surrounding plaza. Group 2 consists of Strs. 1, 5, and 6, each of which has a basal area between 400 m^2 and 770 m^2, and a height around 3 m from the surrounding plaza. The majority of structures fit within Group 3, with basal areas not exceeding 470 m^2, and more significantly, heights not exceeding 2 m above the surrounding plaza (note that the building platforms atop Str. 3 are considered individually, as the main construction platform is for the associated courtyard).

The particular metrics defining each group differ significantly from Lubaantun. More importantly, while at Lubaantun there was a strong correlation between each group and the assumed function of the buildings included, at Alabama this is not the case. Group 1 can be associated with structures of a possible religious/ritual or ceremonial/para-ritual character, Group 2 can be associated with structures of a possible ceremonial/para-ritual character, and Group 3 can be associated with structures of possibly either a ceremonial/para-ritual or residential/domestic character. Interestingly, there are no clear/obvious pyramidal platforms (temple-pyramids) in the center, though Str. 14 (one of the shorter structures and located in the South Plaza) may be a candidate.

Following the logic of Hammond, and more recent discussions about plaza spaces in Mesoamerica (Inomata 2006a; Low 1995), plaza use at Alabama seems generally mixed, particularly focused on a combination of residential and ceremonial/para-ritual uses. There is no strongly (perhaps "exclusive" would be a better descriptor) religious/ritual space or residential space (other than the Str. 3 courtyard), as can be seen at other more typical Maya centers (Ashmore 1989: 274). Following the tenets of the theater-state model and given the commonly accepted Classic period institution of divine rulership (Inomata 2006b), we would expect religious structures to have prominence of place within the site core, as at Lubaantun; however, as noted, this is not the case at Alabama. Does this perhaps suggest completely different forms of architecture associated with a religious function, or perhaps even a different basis for rulership and/or the rise of controlling elements at Alabama and the associated boom—perhaps related more strongly to issues such as resource and commerce control (Hutson 2017)? Dunham (1996: 331), in his discussion about the sudden appearance of Late/Terminal Classic (700–900 A.D.) sites in southern Stann Creek District and northern Toledo District, notes, "An unusually extreme primate distribution of architecture may reflect atypical structure of authority perhaps associated with production. It may indicate the presence of a highly distinct leadership and local population."

Other elements of Alabama's architecture also stand out as atypical. Alabama possesses one of only two ball courts (Str. 4) known in the sub-region (FIGURE 5) (MacKinnon and May 1991)—the other being at Pearce (Dunham et al. 1995). Possessing a ball court has long been considered an indication of the regional importance of a site, and ball courts may have served functions related to community integration, ritual, and political competition (Ashmore 2014: 47–48; Fox 1996; Scarborough and Wilcox 1991). The unique use of massive granite slabs, some as big as 2 m wide × 2.75 m tall × 0.22 m thick and weighing over 900 kg, in the construction of the sloped surfaces of the aprons, as opposed to more typical small masonry block or veneer construction seen throughout the Maya world, once again highlights the hybrid nature of architecture at the site and may form an important component of the "processional architecture" (Houk 2015: 246) at Alabama, along with the sacbe. During the 1980s excavations of the playing alley, limestone markers were uncovered; excavators were surprised to find that these were not carved, and echoed sentiments similar to those of Wanyerka (1999) with regard to the petroglyphic elements of the region as possibly reflecting only semi-literate people(s) or perhaps even non-Maya populations.

The sacbe at the southwest end of the site is an elevated (in general < 0.5 m tall) construction measuring approximately 3 m wide by 70 m long. A terminus shrine consisting of a standing granite slab monument was excavated in the 1980s, and a small cache of jade and limestone beads, a limestone pendant, small clay spheres, and a *mano* grinding stone was recovered at its base (MacKinnon 1988a, 1989b). This causeway likely served as architecture associated with ritual processions, but also connected the monumental core with surrounding settlement areas. We do not currently believe that the causeway relates to intentional water management in the monumental core, given that its western end represents a higher surface level than that of the main plazas (2 m difference in elevation) and would only serve to funnel water into the plaza areas—not typically desired; however, water management and general transport functions have been previously proposed for such features (Shaw 2001).

Including the roughly hewn granite slab monument found at the end of the causeway, 14 such slabs have been found

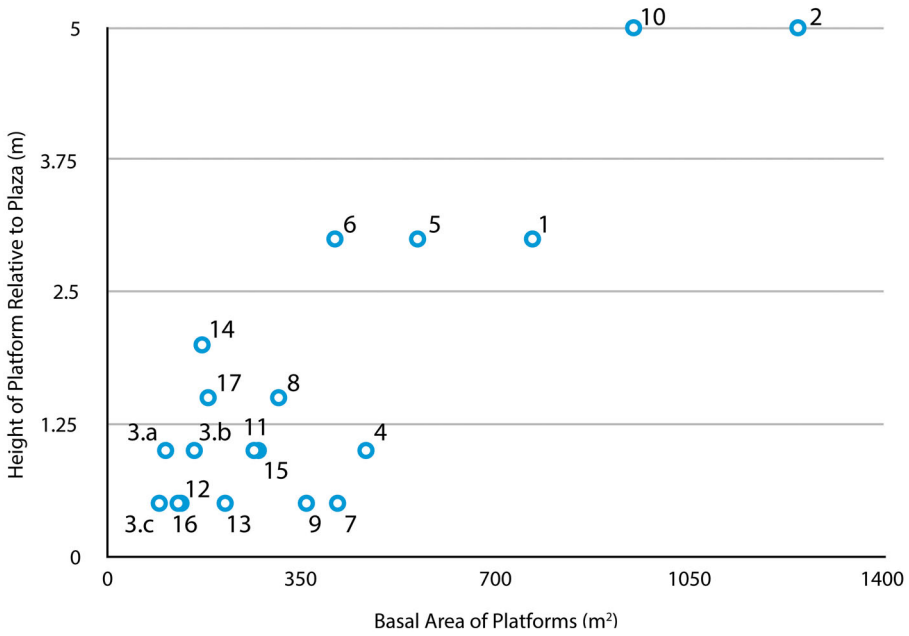

Figure 4. Bivariate plot of the basal areas of building platforms by height with respect to plaza level.

throughout the site. The use of the term "monument" is applied with care, as we are uncertain whether these massive granite slabs functioned as stelae, altars, or were otherwise used, such as the possible West Plaza "granite path" where seven slabs were first documented in the 1980s, laid end-to-end atop small boulder pedestals leading to the Str. 3 west staircase and with cached materials immediately beneath (MacKinnon 1988a, 1989b). The prominent and public locations from which these slabs have been recovered—in groupings and at the bases of structures in the West and East Plazas—suggest that they did serve a monument-like function regardless of their minimal degree of artistic elaboration and are similar to those uncovered in situ at Mayflower and T'au Witz in the northern end of the sub-region (Graham 1994: 108, 112, fig. 4.30 and 4.32). The density of such monuments is 5.8 per 10,000 m^2 of monumental area, comparable to sites in Southern Belize. Compared to the rest of the eastern lowland cities, those of Southern Belize were "much smaller cities with equally high numbers of monuments and dramatically higher stela densities (4.3–9.1)" (Houk 2015: 243) that nonetheless have been suggested to have stood as small regional polities (Braswell and Prufer 2009; Braswell et al. 2004; Prufer et al. 2011). At other sites in Belize, most stelae are present in the largest public plaza (typically designated as the "main plaza" by archaeologists), while in Southern Belize they are grouped in smaller stelae plazas; Alabama appears to have both.

Alabama differs in significant ways from Southern Belize sites; not least among these is the location of the site core itself within the alluvial valley. This valley-bottom location stands in sharp contrast to other prominent southern sites such as Lubaantun and Nim Li Punit, where restricted hilltops served to limit lateral core expansion, and presumably encouraged the development of a relatively dense monumental fabric that conformed to a significant degree with natural topography. This is particularly interesting when one considers Thompson's (1988 [1972]; 1990 [1970]) observations of early historical Mopan and Kekchi Maya communities in Southern Belize and their different preferred geographic locations on the landscape (alluvial bottoms versus hilltops), a pattern still observed today (Toledo Maya Cultural Center and Toledo Alcaldes Association 1997: 15). Could it be that we are observing a different ethnic group at Alabama, and perhaps in East-Central Belize in general, compared to Southern Belize, and/or a different cultural/ethnic group from earlier groups in East-Central Belize? Issues of foreign or diverse ethnicities bring us to discussions of population identities that are being pursued through ongoing work in the settlement by SCRAP researchers, subsumed under the why and how questions of boom development.

Finally, recalling the lack of dedicatory caches along the center lines of buildings at Alabama, these observations challenge conventional understandings of the use of features such as architectural caches in the creation of place. At other sites, their ubiquitous presence has been interpreted as illustrating their importance in defining architectural space and playing a critical role in the definition of a "territory wide sacred space," not only as an afterthought but often incorporated into buildings by design and prior to construction (Chase and Chase 1998: 326; Houk and Zaro 2011). This is interesting to think of in terms of the place-making functions of the architectural assemblage at Alabama (see below) and what were believed or known to be proper procedures by associated planners.

Pretentiousness

Those familiar with the classic image of the American West from movies and television can picture what we are referring to when we say that boomtown architecture exudes a certain pretentiousness. There appears to be a drive to elevate the aesthetic impression of architecture, whether through the conspicuous use of exotic or otherwise expensive materials; through the emphasis on scale over quality; or through the intentional adoption of complex decorative elements that defy underlying similarities of form or the needs of function (picture the various façades of banks, hotels, saloons, etc., despite their structural similarities). The so-called McMansions of today similarly satisfy this requirement as middle class and newly established elite homeowners strive to

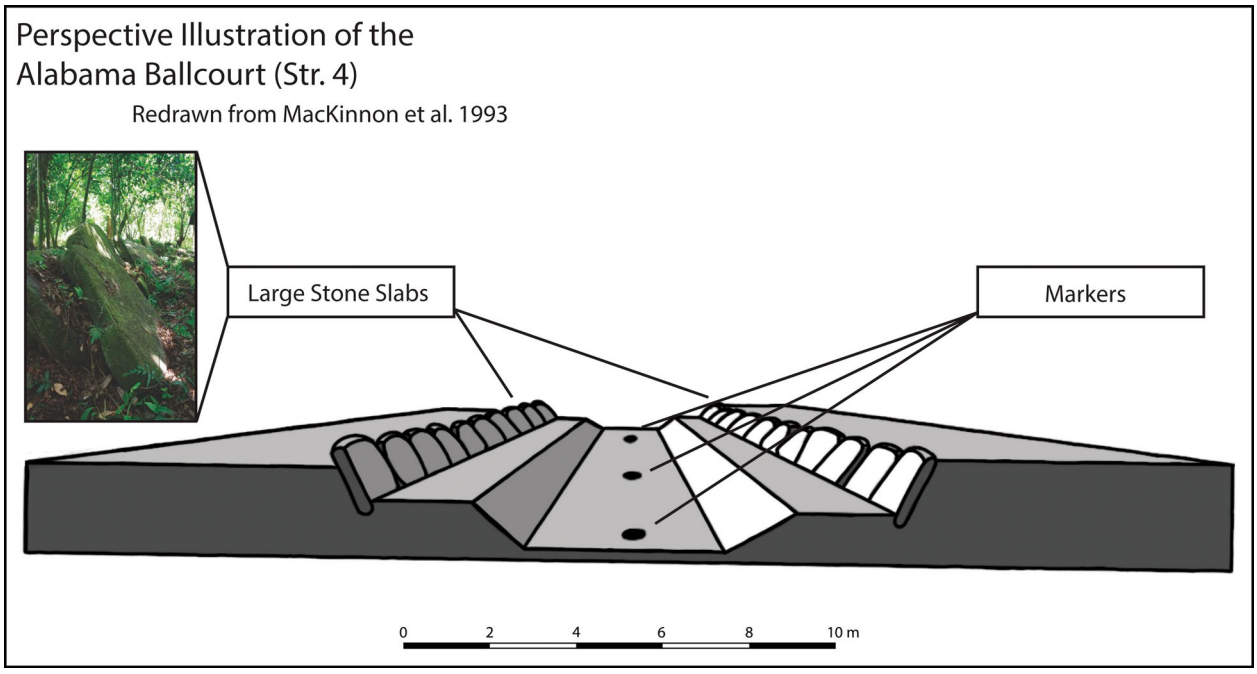

Figure 5. Alabama granite slab ball court apron and reconstruction drawing.

demonstrate their wealth and power (Miller 2012). The architecture of Alabama's monumental core certainly seems to exhibit similar traits.

When we think of exotic, presumably expensive, material use in the Maya area, most of us would likely conjure images of jadeite, quetzal feathers, or shells from far-off coasts. Limestone would probably not feature highly on any compiled list. Nonetheless, in East-Central Belize, limestone was a rare and apparently coveted commodity, afforded pride of place in the region's monumental architecture. Given the obvious challenges of transporting a heavy material like limestone, despite its ubiquity across much of the Maya area, its use may well represent an extravagance at Alabama. As previously mentioned, the structures of the Alabama monumental core were single-phase constructions built of facing blocks of well-hewn local granite and loosely-consolidated sandy-clay cores with some alluvial cobble/boulder inclusions. Large, roughly hewn granite slabs are also used in architecture, such as the aforementioned ball court aprons. Additionally, the almost revered use of limestone within the architecture may be similar to the use of foreign materials for portions of important buildings (e.g., corner stones and façades) in the early western boomtowns of North America, often sourced from important or famous quarries and workshops (Wilson 1997). MacKinnon's excavations in Str. 3 demonstrated that, while largely constructed of granite with sandy-clay core, "points of interest" (e.g., stairways, cornerstones) incorporated what must have been considered highly valued, imported limestone (MacKinnon 1987, 1988a, 1988b). As noted above, limestone was also the material of choice for the site's ball court markers and found its way into caches as beads and pendants. Not only does this expand our perceptions of coveted materials within the Maya lowlands, it might also suggest that if Alabama's rapid development was, in fact, related to rapid in-migration from other parts of the Maya world or beyond, we might be comfortable suggesting that people were arriving from areas where limestone was a typical construction material.

Size—or the perception of size—is also of importance. MacKinnon and colleagues (1993) suggested that the pits, in particular B1 adjacent to Str. 3, may have served as a type of optical illusion, making buildings appear taller. This is reminiscent of the aforementioned boomtown false fronts, as well as the Hollywood set construction style of Southern Belize, consisting of the flattening of natural hilltops and the facing of a hillside with a façade and large staircase to create the appearance of a monumental construction (Leventhal 1992: 147). Test excavations in the 1980s showed no clear evidence for the pits' use in water management, although local residents today have mentioned to us that they do hold water in times of significant rainfall and flooding, particularly following a hurricane, and may additionally or alternatively represent a form of disaster management. This latter possibility does not, however, take away from the former point.

Overt Place-Making: Goal and Consequence of Boomtown Development

In theory, the establishment of a new community is an opportunity to express innovation and independence, but in boomtowns the opposite is often the case. There appears to be a drive to effuse an apparently deep history to otherwise new constructions; in many ways, this drive is an extension of those same influences that drive pretentiousness in boomtown architecture. Even in small centers, such as Alabama, this means that builders early on and intentionally incorporate spatial and stylistic touchstones within their architecture that both provide a sense of familiarity and continuity for their inhabitants and facilitate top-down control.

Hammond (1975a) can be credited with the first truly synthetic spatial analysis of a Maya site in the eastern lowlands, and our current work both references and develops his analyses presented for Lubaantun in Southern Belize. One of our primary goals was to evaluate movement and control within the monumental core, which might hint at the aforementioned organizational frameworks adopted by boomtown

planners. The seemingly rapid development of the Alabama monumental core makes it an ideal candidate for planning studies in contrast to site cores that developed over a span of 1000 years or more.

We have taken a slightly different approach at Alabama from that of Hammond at Lubaantun, one drawn from a body of method-theory known as space syntax. The specifics of the technique have been discussed extensively elsewhere and lie beyond the scope of this paper (for thorough overviews see Hillier [1996] and Hillier and Hanson [1984]; for its application in addition to more general agent modelling in Mesoamerica see Morton [2012; Morton et al. 2012, 2014] and Peuramaki-Brown and colleagues [2015]). Here, it is sufficient to note that one of the most fundamental building blocks of such analyses are convex spaces: a space within which all locations are mutually visible. At Alabama, most plazas can be described as individual convex spaces, with additional smaller spaces constituting the connections between. The foundational assumption is that there is some sort of cognitive price to move from one convex space to the next. With the exception of the particular theoretical ties that we invoke, the methodology of exploring movement through the site core of Alabama (and identifying the relative degree of control embodied in the architectural plan) is broadly similar to that used by Hammond at Lubaantun (Hammond 1975a: 81).

The site layout of Alabama suggests a significant and presumably intentional concern on the part of the site planners with controlling movement through the spaces of the monumental core. Our depth analysis shows, unambiguously, that the areas of lowest total depth (or highest integration) are those to the south of Str. 3, at the interstices of the West, South, and East Plazas (FIGURE 6). The analysis does not seek to interpret specific paths of movement per se, but rather predicts how busy or quiet any individual convex space is likely to be. This analysis highlights the degree of spatial control exerted by this central space, effectively dividing the site in three (north, south, and west portions) while serving as a natural and effective path through the site. While attractive to movement, the restricted nature of the West, South, and East Plaza intersection area of the site would have served as a natural control point for pedestrians moving along the site causeway and/or the granite path of the West Plaza (a pattern also noted at other sites [Andres et al. 2010; Awe 2008; Awe et al. 1991; Hammond 1975a]), and could have been closed off with little trouble allowing for easily controlled space and the regularized and regulated interactions typical of boomtowns. In this way, such integrative features can serve to both limit and/or simplify access at any given time ("to channel access," [Ashmore 2004: 264; Hutson 2016: 104]).

Recalling the inconsistent orientations of some buildings noted above, a question emerges: if Strs. 13, 14, 16, 17, and 18 represent later additions to the monumental site core, and if Str. 10 likewise represents a later phase of construction, then are the orientation, scale, and placement of Str. 10—notably in harmony with Strs. 1 through 9 and 15—anachronistic, or do they represent specific planning concerns or historical developments? Is this an attempt by Alabama planners to adopt the so-called Petén Template and associated processional architecture at Alabama (term adopted by Houk [2015: 16], based on observations by Ashmore [1989, 1991; Ashmore and Sabloff 2002])? As previously mentioned, the placement of Str. 10 creates a clear north-south division in the east-west

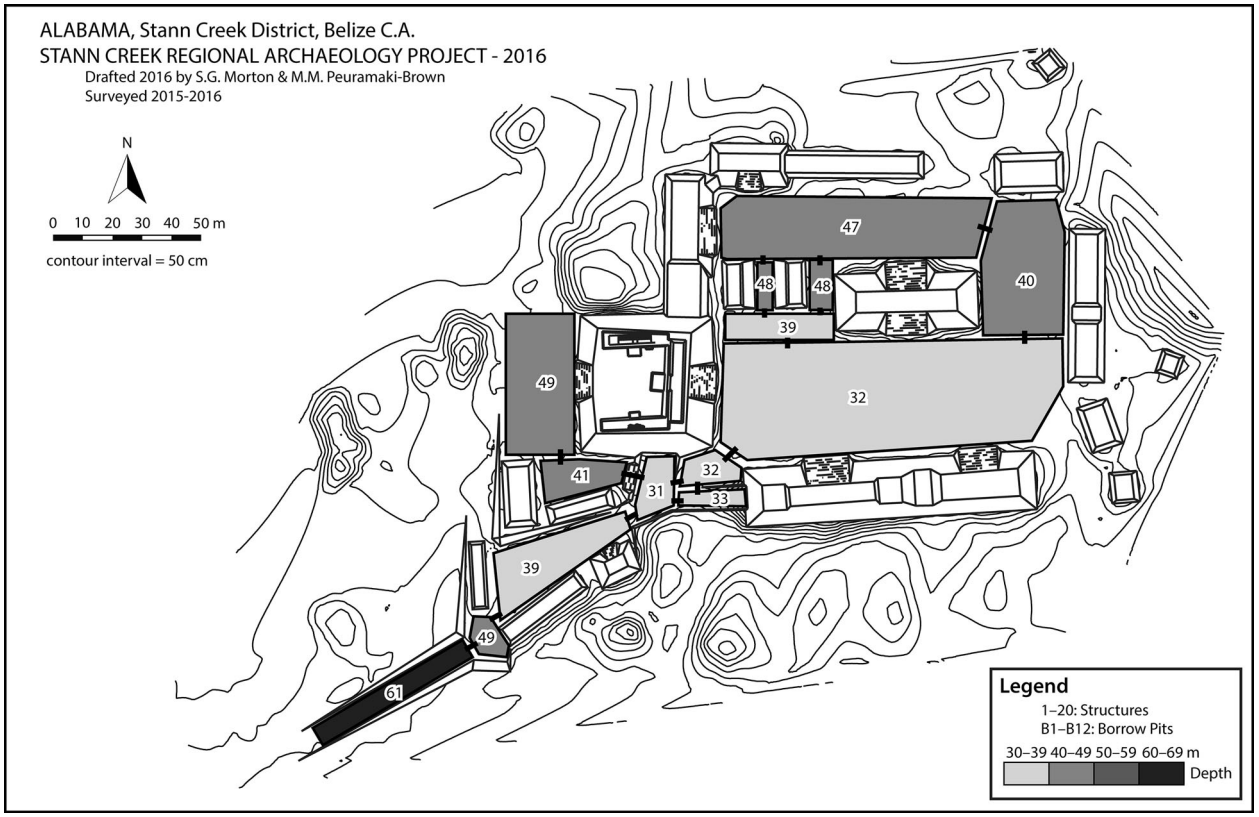

Figure 6. Depth analysis of Alabama's monumental core. Shaded boxes represent convex spaces (spaces in which all points are inter-visible), the building blocks of a space syntax analysis. Black lines indicate connections between spaces. The specific depth of any one space relative to all others in the system is indicated, both, by the number in the box and its shade. Lower numbered and lighter shaded boxes represent shallower spaces that would be attractive to pedestrian traffic. Note that the shallowest space (and hence, least controlled in terms of its position within the system) is the most physically restricted architecturally.

oriented site and, along with the strong north-south ball court transition, creates a compact and awkward illusion of this type of regulatory framework/template that is typically the result of a millennium or more of development at other lowland sites.

Final Thoughts and Future Directions

The re-mapping and testing of the Alabama monumental core have allowed us to begin systematically addressing the appearance and organization of functional and place-making features at this small yet complex frontier community. Going back to the architectural and spatial qualities of boomtown architecture highlighted at the start of this paper—rapid appearance; incorporation of unusual and hybrid styles; pretentious constructions, including efforts to create the illusion of maturity; compact yet complex organization; and overt references to known organizational frameworks—we believe that all are apparent at Alabama and support our boomtown model as such. Additional planned testing of the monumental core will hopefully allow for further refinement of associated chronologies and understandings of function for such developments, along with the why and how of boom development. Are we dealing with royal manor houses embedded in a rural framework, as has been suggested for monumental cores of similar size in Southern Belize, or is this a different scenario altogether related to place-making and legitimization requirements specific to boom development? Why did this boom occur, particularly at the time when other centers were beginning to wane in other parts of the Maya world, and how might Alabama further our understandings of the complex and diverse processes—including migration—involved in the development of ancient Maya communities throughout the lowlands of the Late and Terminal Classic periods? Additionally, how does Alabama relate to the nearby site of Pearce, where preliminary reconnaissance has hinted at similar boom patterns (Dunham et al. 1995; Joyce 1931; Peuramaki-Brown and Morton 2016), and the coastal sites of the Placencia Lagoon (e.g., resource exploitation, trade, control)? If, as archaeologists, we are truly interested in understanding the social and demographic processes that drove change in prehistoric and historic human landscapes, then we must incorporate descriptions, not just of the motivations behind this change or of its form at any one point in time, but of the human-scale experiences of development itself. This article has presented our call for and potential approach to such research in our particular sub-region of the Maya lowlands, and in archaeology in general.

Archaeologists are well equipped to bring a long-term outlook to bear on contemporary issues (Smith 2010; van der Leeuw and Redman 2002). Typically, this has meant that we focus on the long timespans and slow-moving processes that often underlie community development—both urban and non-urban—forgetting that short-term, human-scale development is also important. Focusing on the nature of boomtown development and the question of its resiliency or sustainability, or subsequent loss of both (bust), as it existed in the past, will provide examples from a deep historical narrative to enhance larger, modern-day discussions (e.g., contemporary social impacts of our quests for energy and natural resources, along with issues of demographics, migration, and interconnectedness); in particular, it can demonstrate the importance of context to understanding issues of social, geo-economic, and political development. Residents of the Maya village located adjacent to the Alabama site are extremely interested in our when, where, why, and how questions of boomtown development, as their own community was rapidly established in the 1970s by migrants from the Toledo District seeking employment opportunities and land availability; thus, they are invested in how such earlier communities survived and might offer intriguing modern-day parallels. In so doing, this research addresses the "grand challenges" of archaeology (Kintigh et al. 2014), where understanding dynamic cultural processes and the entanglement of human and natural systems are of central concerns.

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No potential conflict of interest was reported by the author(s).

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