

Bridging the Gap Between Archaeological and Indigenous Chronologies: An
Investigation of the Early Classic / Late Classic Divide at Piedras Negras, Guatemala

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This dissertation is dedicated to my parents and siblings, Ronald, Peggy, Michael and Barbara Golden. They have been unfailing supporters in this strange pursuit. I also dedicate this work to my grandmother Adele Kamp. She could not be at my graduation in person, but I know she is with me in spirit as I complete this endeavor.

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ABSTRACT

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Defining chronology as an interpretive framework that structures understandings of time/place/person relationships and facilitates the integration of social action with a history selected from available historical possibilities, this dissertation uses the site of Piedras Negras, Guatemala as a case study to examine several interrelated issues. First, it explores the history of chronologies in American archaeology to clarify the interpretive implications that different chronological schema impose *a priori* on the interpretation of material culture.

Second, it explores the evidence for chronological practice among the Classic Maya to outline a method whereby archaeologists may reconstruct patterns of chronological juncture and disjuncture as they were meaningful to the Maya. An understanding of the variable ways in which different materials are ascribed chronological significance through practice is important for understanding the differential rates of change in architecture, ceramics, or other aspects of material culture used by archaeologists to define cultural historical phases. Largely because of their physical make-up and modes of production, different categories of material culture allow for

different references to the past, present or future that occur at different moments and change at different rates.

Finally, examining the data from excavations in the palace of Piedras Negras, as well as Tikal, Guatemala, Altar de Sacrificios, Guatemala, and Copan, Honduras, I offer a revised perspective on the divide between the Early and Late Classic periods based on the chronological practice of Maya rulers. In particular this work explores how Maya rulers engaged in chronological practice to guide their dynasties through an era of potentially devastating political upheaval.

This dissertation concludes that as objects that participated in chronological practice, material culture and immaterial performances together constitute important signs of the relationship between person, temporality and place. The architectural and monumental changes evident at Piedras Negras and other sites during the mid-6th Century, are attributable to the needs of rulers to locate themselves in a place and time that substantiated their right to govern. Those who successfully negotiated this tumultuous period did so by creating what we see as the Early Classic/Late Classic divide.

TABLE OF CONTENTS

Chapter 1: An Introduction to Piedras Negras and the Early to Late Classic Transition	1
1.1: Introduction: Separating Culture Change and Chronology	1
1.2: A History of Research at Piedras Negras	4
1.3: Chapter Summaries	7
 Chapter 2: Chronology as Academic and Experiential Practice	 14
2.1: Introduction	14
2.2: Chronology as an Archaeological Tool and as Lived Experience	15
2.3: The Historical Development of Archaeological Chronologies	21
2.4: Chronology as a kind of typology	25
2.5: Material Culture, Text and Chronology	27
2.6 Conclusion: The Historicity of Archaeological Chronologies	30
 Chapter 3: Archaeological Chronologies in Mesoamerica	 32
3.1: Introduction	32
3.2: Development and Definition of a Culture Area: 16 th to Early 20 th Centuries	33
3.3: Mesoamerica as an Archaeological Chronology	39
3.4: Typological Chronologies in Maya Archaeology	42
3.5: Nested Chronologies	51
3.6: Discrepancies, Homogeneity, Heterogeneity	55
3.7: Conclusions: What does It all Mean for Interpretation?	57
 Chapter 4: Indigenous Chronologies in Practice	 60
4.1: Introduction: Maya Chronologies and Archaeological Inquiry	60
4.2: Maya Calendrics and Space-Time	62
4.3: Ethnographic and Ethnohistoric Evidence for Maya Chronology in Practice	67
4.4: Maya Chronology made Material in Architecture	77
4.5: Royal Architecture, Royal Chronologies: Signs of, and in, History	85
4.6: Conclusions and Prelude to a Case Study	95
 Chapter 5: Excavations in Court 3 of the Acropolis	 104
5.1: An Introduction to Excavations in Court 3 and Court 4 of the Acropolis	104
5.2: The Acropolis of Piedras Negras: Overview of the Architectural Complex	104
5.3: Architectural Terminology	107
5.4: Provenience Designations	109
5.5: Burial and Cache Terminology	110
5.6: Ceramic Phases	111
5.7: Dating of Construction Phases in the Current Study	117

5.8: Excavations in Court 3 of the Acropolis	119
5.9: PN-11A, PN-11F: Excavations Associated with Str. J-20	123
5.10: PN-11H: Excavations in the Northwest Side of J-20	144
5.11: PN-11D: Excavations within the Superstructure of Str. J-23	146
5.12: PN-11G: Excavations at the Intersection of Str. J-20, Str. J-23, and Str. J-21	147
5.13: PN-11B and PN-11I: Excavations Associated with Str. J-18	152
5.14: PN-11J: Excavations between Strs. J-18 and J-19	168
5.15: PN-11K: Excavations at the northwestern edge of Str. J-18	176
5.16: PN-11L: Excavations at the intersection of Strs. J-18 and J-21	177
5.17: PN-11C and PN-11E: Excavations Associated with Str. J-19 and the Bedrock Outcropping	179
5.18: PN-50: Excavations at the Intersection of Str. J-18, Str. J-8 and Str. J-3	182
5.19: Conclusions: A Synthesis of Excavations in Court 3	185
Chapter 6: Excavations in Court 4 of the Acropolis and Str. J-27	234
6.1: Introduction to Excavations in Court 4	234
6.2: PN-46A through PN-46D, and PN-46F through PN-46I: Excavations Associated with Str. J-24, Str. J-25, Str. J-33 and Structure J-34	236
6.3: PN-46E and PN-46G: Excavations associated with the Staircase of Str. J-20 and Str. J-26	279
6.4: PN-54A: Excavations Associated with Str. J-27	285
6.5: A Synthesis of Excavations in Court 4 and Str. J-27	297
Chapter 7: Construction and Termination in the Acropolis as Chronological Practice	347
7.1: Introduction: Piedras Negras and the Early Classic / Late Classic Divide	347
7.2: Synopsis of the Acropolis from its Beginnings until the 7 th Century AD	350
7.3: Historicizing the Events: Building and Termination as Chronological Processes	356
7.4: Conclusion: The Politics of Chronology	370
Chapter 8: Reevaluating the Early Classic/Late Classic Divide at Tikal, Copan and Altar de Sacrificios	381
8.1: Introduction: The Regional Perspective on the Early Classic/Late Classic Divide	381
8.2: Tikal: Defeat, the “Hiatus”, Renaissance	382
8.3: Copan: Early History Lost, Broken and Buried	398

8.4: Altar de Sacrificios: Shifting Palaces and the End of the Early Classic	408
8.5: The Early Classic/Late Classic Divide at Piedras Negras in terms of Regional Events	412
8.6: Conclusion: Reevaluating the Reality and Utility of the Early Classic/Late Classic Divide in the Maya Lowlands.	415
Chapter 9: Some Concluding Remarks about the Utility and Liability of Chronologies for Archaeology	430
9.1: Archaeological Chronologies	430
9.2: Indigenous Chronological Practice: Possibilities and Problems in the Maya Lowlands, Mesoamerica and Beyond	431
9.3: Ceramic Variation and the Early Classic/Late Classic Divide	440
9.4: Multiple Chronologies at Multiple Levels	444
9.5: The Intersection of Archaeological and Indigenous Chronological Practice	446
9.6: Expanding the Scope – Chronologies elsewhere in Mesoamerica and Beyond	447
9.7: Concluding Remarks on Maya Chronology and the Nature of Cyclical Time	450
Appendix I: Preliminary Material Analysis of Data from Courts 3 and 4	452
Table 1: Gross ceramic weights and discard weights of lots in Courts 3 and 4 of the Acropolis	454
Table 2: Ceramic weights, phase, dates and context for all lots mentioned in text	467
Table 3: Preliminary artifact counts for sub-operations PN-46F through PN-46I	503
Table 4, Appendix I: Preliminary Artifact Count from PN-54A	513
Appendix II: Detailed summaries of architectural phases in Courts 3 and 4	516
Table 1: Summary of PN-11A, PN-11D, PN-11F, and PN-11H	516
Table 2: Summary of PN-11G	517
Table 3: Summary of PN-11L	518
Table 4: Summary of PN-11B, PN-11I, PN-11J, and PN-11K	519
Table 5: Summary of PN-11E	520
Table 6: Summary of PN-46A through PN-46D, PN-46F, PN-46H, and PN-46I	523
Table 7: Summary of PN-46G	524
Table 8: Summary of PN-54A	522
Bibliography	525
Index	566

Figures

Fig. 1.1: Map showing the location of Piedras Negras, in the northwest corner of the department of the Peten, Guatemala.	11
Fig. 1.2: Piedras Negras, Peten, Guatemala (digitized map by Perry Hardin with additions by Zachary Nelson, after Parris and Proskouriakoff in Satterthwaite 1944).	12
Fig. 1.3: Ceramic site chronologies in the Maya Lowlands, with associated Mesoamerican cultural phases (from Gifford 1976: 46).	13
Fig. 4.1: Tzolkin day names (from Sharer, 1994: 563)	98
Fig. 4.2: The haab months (from Sharer, 1994: 564)	99
Fig. 4.3: Diagram of the 260-day calendar (left) meshed with the 365-day calendar (right). The 365-day calendar is reduced to a wheel with just one month for the purposes of the diagram (after Sharer, 1994: 567).	100
Fig. 4.4: Example of a Long Count inscription on Monument 6 from Quirigua, Guatemala (from Sharer, 1994: 569)	101
Fig. 4.5: Petroglyph from Piedras Negras, Guatemala, with cartouche commemorating K'atun 7 Ajaw, apparently indicating a date of either 9.7.0.0.0 7 Ajaw 3 Kankin (December 5, 573 AD) or 10.0.0.0.0 7 Ajaw 18 Zip (March 13, 830 AD), although the exact reference is unclear (drawing by Zachary X. Hruby, 1999).	102
Fig. 4.6: The k'atun wheel drawn by an informant of Fr. Diego de Landa, showing the 260-year <i>u kahlay k'atunob</i> (from Sharer, 1994: 573; see also Landa, 1978: 81).	103
Fig. 5.1: Map of the Acropolis, Piedras Negras, Guatemala	192
Fig. 5.2: Map of Piedras Negras, Guatemala with detail of Court 3, plans of excavations marked in gray.	193
Fig. 5.3: Reconstruction painting of the Acropolis, Piedras Negras, Guatemala, as it appeared in the 8 th Century AD (from Proskouriakoff, 1950).	194
Fig. 5.4: Unpublished reconstruction painting by Proskouriakoff of Piedras Negras in the 8 th Century AD (from the Shook Archives of Universidad del Valle de Guatemala). View is to the north from Str. J-3, with ballcourt and Str. K-5 in the upper right (above). Photograph from 1939 showing Str. K-5 as viewed from the West Group Plaza, through the ballcourt Strs. K-6a and K-6b (below; photo field number 1939-39, University Museum Archives).	195
Fig. 5.5: Ceramic chronology as developed by George Holley (1983) for Piedras Negras.	196
Fig. 5.6: Revised ceramic chronology by René Muñoz (table by René Muñoz).	197

Fig. 5.7: Piedras Negras Stela 25, dated to AD 608 and found in front of Str. R-9, associated with Balche phase ceramics (drawing by John Montgomery, from Martin and Grube, 2000: 143).	198
Fig. 5.8: Piedras Negras Stela 26, dated to AD 628 and found in front of Str. R-9, associated with Yaxche phase ceramics (stela drawn by John Montgomery, from Martin and Grube 2000: 142).	199
Fig. 5.9: Piedras Negras Stela 9, dated to AD 736 and found in front of Str. J-3, associated with Chacalhaaz phase ceramics (stela drawn by John Montgomery).	200
Fig. 5.10: Piedras Negras Throne 1, found smashed inside Str. J-6, dated to AD 785 and associated with Chacalhaaz phase ceramics.	201
Fig. 5.11: Reconstruction drawing of the Acropolis, Piedras Negras. View is to the north from Str. J-3 (drawing by Heather Hurst, 1998).	202
Fig. 5.12: Revised map of Court 4 of the Acropolis of Piedras Negras, shown with original (above left).	203
Fig. 5.13: Schematic plan of PN-11A and PN-11F units, with map of Court 3 inset. Hachure in PN-11A-4 indicates the portion of the unit excavated in 1997, but not in 1998.	204
Fig. 5.14: Section showing PN-11A-1, PN-11A-2, and PN-11A-3.	205
Fig. 5.15: Dos Arroyos Polychrome dish from the termination deposit associated with Str. J-20-sub-1. Refitted fragments come from loci (PN-11A-1-3 and PN-11A-3-4) over two meters distant from one another.	206
Fig. 5.16: Polychrome, basal flange plate from the termination deposit associated with Str. J-20-sub-1 (PN-11A-3-4).	207
Fig. 5.17: Teotihuacan-style ocarina/figurine, found in the termination deposit associated with Str. J-20-sub-1 (PN-11A-4-4). Head was broken off and deposited near the body.	208
Fig. 5.18: Assortment of earspools representing an MNI of 20 such artifacts recovered in the termination deposit associated with Str. J-20-sub-1 (above). Detail of zoomorphic earspool from PN-11A-3-4 (below).	209
Fig. 5.19: Reconstruction by Heather Hurst of Early Classic structures underlying Court 3.	210
Fig. 5.20: Section of PN-11A/F trench, showing cut from chasm to Str. J-20.	211
Fig. 5.21: Plan view of PN-11A trench between J-20-sub-1 and chasm.	212
Fig. 5.22: Detail of reconstruction painting by Tatiana Proskouriakoff (1950), showing staircase of Str. J-6 with flanking staircases at landing, similar to those on J-20-sub-1.	213
Fig. 5.23: Photograph showing the plaque placed above the remains of Tatiana Proskouriakoff, Str. J-23.	214
Fig. 5.24: Section showing multiple phases of Strs. J-18, J-21, and J-23.	215
Fig. 5.25: Schematic plan of PN-11G excavations. Inset shows relative locations of (a) PN-11G, (b) PN-11D, and (c) PN-11H. Shaded area indicates irregular excavation limits.	216

Fig. 5.26: Large stucco disk and small stone disk found in PN-11G-6-3. Contrast is digitally enhanced.	217
Fig. 5.27: Schematic plan view of units comprising PN-11I.	218
Fig. 5.28: Plan view of PN-11I excavations showing three construction phases of Str. J-18-sub-2.	219
Fig. 5.29: Section of PN-11I-11 (see also PN-11B-1, PN-11B-2) and PN-11B-12.	220
Fig. 5.30: Section of PN-11I-11 and PN-11I-12, showing three construction phases of Str. J-18-sub-2.	221
Fig. 5.31: Section of PN-11I-9, PN-11I-8 and PN-11I-12.	222
Fig. 5.32: Modeled stucco façade fragment from Str. J-18, excavated in PN-11I-13-2 (drawing by Zachary Hruby).	223
Fig. 5.33: Schematic plan view of units excavated as PN-11J. Inset shows relative locations of (a) PN-11L, (b) PN-11K, (c) PN-11J, (d) PN-50A and PN-50B.	224
Fig. 5.34: Plan view of PN-11J, showing multiple construction phases associated with Strs. J-18 and J-19 (drawing by Mónica Pellecer).	225
Fig. 5.35: Section of PN-11J-1 and PN-11J-2.	226
Fig. 5.36: Section of PN-11J-6, 11J-7, and 11J-11, showing terrace façade, Court 3 (drawing by Mónica Pellecer).	227
Fig. 5.37: Section of PN-11K-1, showing platform façade of Str. J-18-sub-2-1 st (drawing by Mónica Pellecer).	228
Fig. 5.38: Northern (left) and eastern (right) sections of PN-11L-1.	229
Fig. 5.39: Section of re-excavated trench through Str. J-19 (bottom), with Satterthwaite's (1954: 87) reconstructed field drawing (top).	230
Fig. 5.40: Northern (left) and eastern (right) sections of PN-50A-1.	231
Fig. 5.41: Plan view of PN-50B-1, showing poorly preserved corner staircase at the corner of the Str. J-18 platform.	232
Fig. 5.42: Overview of known construction sequence in Court 3 of the Acropolis (see Appendix 2 for a detailed summary of Court 3 excavations).	233
Fig. 6.1: Court 4 as mapped in the 1930s.	306
Fig. 6.2: Revised map of Court 4.	307
Fig. 6.3: Profile of Str. J-24 (from Satterthwaite, 1954: 88).	308
Fig. 6.4: Overview of excavations in Court 4 and Str. J-27.	309
Fig. 6.5: Section of PN-46B-1 through PN-46-B-6 (drawing by Mónica Pellecer).	310
Fig. 6.6: Partial vessel (Pucte Brown) from PN-46B-2-6.	311
Fig. 6.7: Burial 63 (drawing by the author).	312
Fig. 6.8: Profile of PN-46D-1.	313
Fig. 6.9: Map of soil phosphate levels in Court 4 (from Parnell et al., 2001: 864).	314
Fig. 6.10: Schematic of excavation units in PN-46F and PN-46H with elevations of Court 4.	315

Fig. 6.11: Plan view of Strs. J-24, J-33, and J-34 as revealed in PN-46F and PN-46H.	316
Fig. 6.12: Metates in PN-46F-4-2 and PN-46F-2-2. Central metate is the uppermost of three such stones in a pile (above, contrast enhanced to show metates as light colored blocks). Drawings are of the two metates in the foreground (below).	317
Fig. 6.13: Burial 81 (drawing by Zachary Hruby).	318
Fig. 6.14: Burial 101. Ghosted image at bottom right shows intrusive Burial 94 (drawing by the author).	319
Fig. 6.15: Section of PN-46F-17 and PN-46F-21.	320
Fig. 6.16: Tsak polychrome plate fragment, Balche phase, from PN-46F-17-7.	321
Fig. 6.17: Section of PN-46F-19.	322
Fig. 6.18: Burial 104 (drawing by the author).	323
Fig. 6.19: Manos excavated from PN-46F.	324
Fig. 6.20: Whole vessel, excavated from PN-46F-26-1.	325
Fig. 6.21: Section of PN-46F-26, PN-46F-27, and PN-46F-28.	326
Fig. 6.22: Section of PN-46F-13, PN-46F-25, PN-46F-29, and PN-46F-28.	327
Fig. 6.23: (a) Post from tripod brazier in the form of a bat, (b) Cylindrical vessel fragment with incised death god figure, interior and lip are burned, (c) Bone rasps, (d) earspool made from conch shell, (e) Ceramic ocarina in the form of a bird.	328
Fig. 6.24: Section of PN-46F-31.	329
Fig. 6.25: Burial 83 (drawing by Zachary Hruby).	330
Fig. 6.26: Mother-of-pearl flower from Burial 83.	331
Fig. 6.27: Pendant made from the tooth of a canine, from PN-46H-1-2.	332
Fig. 6.28: Kumche phase ceramics (Trapiche incised: Tempered variety) from PN-46H-3-2.	333
Fig. 6.29: Schist metate, possibly used for grinding pigments, from PN-46F-5-2.	334
Fig. 6.30: Two partially restored whole vessels from PN-46H-7-2, Bolonchac orange polychrome (above) and Tinaja red (below).	335
Fig. 6.31: Burial 94 (drawing by the author, inked by Zachary Hruby).	336
Fig. 6.32: Burial 95 (drawing by the author).	337
Fig. 6.33: Obsidian disk excavated from Burial 95. Lateral (left), reverse (center), and obverse (right) perspectives.	338
Fig. 6.34: Section of PN-46G-12, PN-46G-10, PN-46G-6, PN-46G-1, PN-46G-2 (drawing by Fabiola Quiroa).	339
Fig. 6.35: Schematic plan view of units in PN-54A.	340
Fig. 6.36: Plan view of PN-54A, showing poorly preserved masonry of Str. J-27 (drawing by Fabiola Quiroa).	341
Fig. 6.37: Burial 79 (drawing by Zachary Hruby).	342
Fig. 6.38: Carved shell or bone plaques from PN-54A-3-2 (right), and PN-54A-3-5 (left).	343

Fig. 6.39: Burial 80 (drawing by Zachary Hruby).	344
Fig. 6.40: Bone needle from Burial 80.	345
Fig. 6.41: Overview of known construction sequence in Court 4 and Str. J-27 (see Appendix 2 for a detailed summary of Court 3 excavations).	346
Fig. 7.1: Early Classic buildings below Court 3.	374
Fig. 7.2: Aguila Orange sherds with graffiti excavated from, a) PN-11A-3-4, b) PN-11A-1-3, and c) PN-11A-3-4 (drawings by the author, not to scale).	375
Fig. 7.3: Sherd with graffito from PN-11A-3-4 (drawing by the author).	376
Fig. 7.4: Partial polychrome vessel with glyph band and painted stucco on rim, found in association with Early Classic platform below Str. J-1 (see Houston and Arredondo Leiva, 1999: 250; drawing by Stephen Houston).	377
Fig. 7.5: Stela 25, dated to AD 608, the accession monument of Ruler 1 (drawing by John Montgomery, in Martin and Grube, 2000: 143).	378
Fig. 7.6: Stela 26, depicting Ruler 1 with prisoners from Sak Tz'i' and Palenque in AD 628 (drawing by John Montgomery, in Martin and Grube, 2000: 142).	379
Fig. 7.7: Yaxche Phase sherd from Court 2 of the Acropolis bearing the name of Ruler 3.	380
Fig. 8.1: Map of the Maya area showing sites mentioned in text.	418
Fig. 8.2: Map of the major architectural complexes at Tikal, Guatemala, with the North Acropolis and Central Acropolis enlarged (from Harrison, 1999: 16, 17).	419
Fig. 8.3: Map of the North Acropolis, Tikal, Guatemala, with structures numbered in the 5D series (e.g., 5D-33; from Harrison, 1999: 74).	420
Fig. 8.4: Tikal Stela 31, with Yax Nuun Ayiin shown as a Teotihuacano on the (a) left and (c) right sides. Siyaj Chan K'awiil (b) raises a headdress containing the name of his grandfather Spearthrower Owl. The text on the reverse (d) records the arrival of Siyaj K'ak' (from Jones and Satterthwaite, 1982: Figs. 51 and 52).	421
Fig. 8.5: Lintel 3, Temple I, Tikal. Jasaw Chan K'awiil I downed the "flint and shield" of the Calakmul ruler Yich'aak K'ak' on 5 August 695, and on 14 September he conjured Spearthrower Owl (from Jones and Satterthwaite, 1982: Fig. 70).	422
Fig. 8.6: Lintel 2, Temple I, Tikal. Jasaw Chan K'awiil I is depicted as a Teotihuacan warrior, and his throne sits atop a register of war serpent imagery and cattails, perhaps intended to place the scene in Teotihuacan itself (from Jones and Satterthwaite, 1982: Fig. 69).	423
Fig. 8.7: Map of the Acropolis, Copan, Honduras, c. AD 700 – 800 (from Sharer et al., 1992: 146).	424

- Fig. 8.8: Rollout drawing of the sides of Copan Altar Q, showing the 16th dynast receiving a staff of office from Yax K'uk' Mo' (from Baudez, 1994: 96). 425
- Fig. 8.9: Map of Altar de Sacrificios, Guatemala (from Willey, 1973: 8). 426
- Fig. 8.10: Perspective drawing of Str. B-1, and plan view showing the location of Early Classic monuments (from Graham, 1972: Fig.2). 427
- Fig. 8.11: Emblem glyphs of Altar de Sacrificios, (a) in the Late Classic, and (b) the Early Classic (from Houston, 1986: Figs. 3 and 5). 428
- Fig. 8.12: Inscribed wooden box, recently discovered in a cave near Panhale, Tabasco, Mexico. Wite'naah ajaw glyph is evident at L2, the name of Tajoom Uk'ab' Tuun appears at L1 – K2, and again at U1-T2. Och'kin kaloomte' title is reconstructed from V1-W1 (from Anaya et al., 2001). 429

Chapter 1: An Introduction to Piedras Negras and the Early to Late Classic Transition

1.1: Introduction: Separating Culture Change and Chronology

Located in the karst and broken topography of the Middle Usumacinta River valley, Piedras Negras was once the dynastic seat of a large Maya polity that included not only the urban center itself, but numerous smaller centers located throughout the region (Fig. 1.1, 1.2). Although there is evidence of occupation as early as 500 BC, it was from approximately AD 450 to 810 that the site reached its greatest size, both in terms of the extent of its settlement and the sheer monumentality of its architecture. By the 5th century AD, the rulers of Piedras Negras were major figures in the power politics of the Usumacinta drainage, involved in conflict, marriage alliances, and the control of client lords. By AD 808, however, the fortunes of the local dynasty had run their course, and the grand architecture of Piedras Negras ceased to serve as a seat of royal power. An ever-dwindling group of people continued to live amidst the remains of the dying city, with the last significant population abandoning the area before the end of the 9th Century. Though visiting Maya continued to venerate the ruins through the centuries, leaving god-pots and burials amidst the crumbling buildings, Piedras Negras largely passed out of living memory until the end of the 19th Century.

During the period of greatest growth from AD 450 to 810, however, there occurred a short but dramatic period of socio-political disruption at Piedras Negras. Between approximately AD 550 and 600, royal architecture was torn down, ceramic styles changed dramatically, and the dynastic record was left with a gap of more than

sixty years. From a traditional archaeological perspective, all of these changes are easily encompassed by the chronological break understood to occur in the Maya lowlands at about AD 600, which forms the divide between the Early and Late Classic periods (Fig. 1.3).

It is this brief period of transition that provides the temporal focus of this dissertation. Such points of dramatic chronological disjunction are of interest because they confront archaeologists with the seemingly simple question “How do I know this is indeed a point of chronological divide?” Certainly those traces of past human events that archaeologists rely upon to build chronologies seem to point to a divide that would have been socially meaningful in the past. But modern archaeological chronologies are just that – they are modern. These analytical models have a social history of their own, built upon the work of several generations of archaeologists over the past century. Such chronologies are as much a result of the historical development and social environment of professional archaeology as they are the result of observable patterns of material culture.

Yet, analysis and reanalysis of the artifacts and textual evidence invites the same conclusions: there was a dramatic change in the material culture of the Southern Maya Lowlands at about AD 600. Would such changes have gone unnoticed by the Maya? Would they have reacted to and related to these materials with some sense of their place in time? If these materials served as temporal referents for people in their social lives, was the divide between the Early and Late Classic Periods a socially meaningful rupture for the Maya themselves?

But our archaeologically chronologies can do little more than recognize this as a point of disjunction. They say almost nothing about indigenous conceptions of

chronological continuity and discontinuity. Like our own archaeological chronologies, developed in social practice within the culture of academia, the indigenous chronologies of the Maya were part and parcel of practices that made them meaningful within a specific social setting. Realized in practice, these indigenous understandings of time/place/person relationships left a discernible imprint on the material culture of sites like Piedras Negras.

Using Piedras Negras as a case study, I examine issues in several interrelated domains. The first of these is the social history of chronologies as they are used in American archaeology, and in particular the history of chronologies in the Maya area. In so doing I hope to illuminate at least some of the interpretive implications that these archaeological tools impose *a priori* onto the remains of the cultures that we study. Second, I explore the evidence that we have for the social history of indigenous chronologies among the Maya.

I do so with the intent of outlining a method whereby archaeologists may reconstruct patterns of chronological juncture and disjuncture as they were socially meaningful to the Maya. I offer a perspective on the Early to Late Classic divide that is based on indigenous understandings of how this period was meaningful to the Maya, and in particular explores how Maya rulers engaged in chronological practice - how they located themselves as people in relation to time and place - to guide their dynasties through an era of potentially devastating political upheaval. I present this research not only as a case study on the Maya, but also as an example of how *all* people create for themselves and others appropriate places in time through the lamination of immaterial performance and material culture.

1.2: A History of Research at Piedras Negras

Though Lacandon Maya continued to occupy the area well into the 20th century (Houston et al. 2001: 84-85), the earliest published mention of Piedras Negras is in the travel writings of Ludovic Chambon (1994 [1892]: 89 - 92), who was the first to name the site after a nearby woodcutting station. Chambon's description is cursory, and he provides his impressions of only two monuments and one building, although others were surely visible.¹ The site remained unknown to archaeologists, however, until brought to the attention of Teobert Maler (1901) by loggers in 1894. Maler's initial reconnaissance and photography were not followed up until Sylvanus Morley's (1937-1938) documentation of the monuments of Piedras Negras in the 1910s and 1920s. On Morley's recommendation, the University Museum of the University of Pennsylvania embarked upon a long-term archaeological project that lasted from 1930 until 1939 (Mason, 1933).

J. Alden Mason directed the project from 1931-1932 followed by Linton Satterthwaite, Jr., who directed research through its conclusion in 1939. The University Museum project focused its excavation efforts on the monumental architecture of the site, documenting building sequences in the site's palaces, ballcourts, temples, and sweatbaths. The results of the University Museum's excavations, along with contemporary work at sites such as Yaxchilán (Morley, 1931a), Chichen Itza (Morley, 1931b, 1936, 1937, 1938, Morley et al., 1934) and Uaxactun (e.g., Ricketson and Ricketson, 1937; Smith, 1950; Wauchope, 1934), played an important role in the development of modern archaeology in the Maya area. Satterthwaite's own attempts to

¹ He accurately describes the legs of Altar 3, the "Sacrificial Stone" at the river's edge, and the largely

wrestle with issues of building function and stylistic development sequences were, in many ways, groundbreaking works for their day (e.g., Satterthwaite, 1939, 1940).

Though Satterthwaite and his associates never published fully the results of their project, the material they excavated provided the basis for several important pieces of work. William Coe's (1959) doctoral dissertation on the caches and burials uncovered during the 1930s at Piedras Negras represents a groundbreaking attempt to provide a coherent typology of burials and caches in the Maya lowlands, as well as providing insight into the meaning of these remains in their cultural context. Several other doctoral and master's theses followed (Bachand, 1997; Holley, 1983; Schlosser, 1978). Most important among these for later work at Piedras Negras is George Holley's dissertation (1983). Building on foundations laid by Mary Butler (1935) and Robert Rands (e.g., Rands, 1973), Holley developed a type-variety ceramic chronology for Piedras Negras (see also Bachand, 1997). It is Holley's chronology, slightly modified by more recent research, which provides the basic cultural-historical framework for interpretation the archaeology of Piedras Negras.

Perhaps the most important piece of work to be yielded by the University Museum's project at Piedras Negras came not from excavation, but from the epigraphic work of Tatiana Proskouriakoff. Proskouriakoff was a trained architect, and her role during the course of the project had been to assist in the completion of the site-map, and to make reconstruction drawings of the buildings that were excavated. Though it was through her work as an artist, first with the University Museum and later with the Carnegie Institution, that Proskouriakoff initially made her mark on the field (see

buried façade of the P-7 sweatbath, which he supposed to be a tomb.

Proskouriakoff, 1963), she had developed an interest in epigraphy relatively early on in her career (e.g., Proskouriakoff, 1944). It was her recognition that a series of dates on stelae at Piedras Negras referred to the birth, death, and accession of Maya rulers that fundamentally changed Maya archaeology (see Proskouriakoff, 1950, 1960, 1961). Not only did her work represent a breakthrough in decipherment, it also represented a profound change in the thinking of archaeologists who could no longer deny that Maya hieroglyphs recorded, among other things, events in the lives of historical figures.

Though the excavations of the 1930s resulted in these and other important works, no further research was conducted at Piedras Negras for the next 58 years.² The logistics of mounting a project at the site were enormous, and with the outbreak of a thirty-year civil war in Guatemala (Jonas, 2000; Schirmer, 1998; Stoll, 1993) the Usumacinta River basin became a region of banditry and full-scale combat. With the cessation of hostilities and the official end of the Guatemalan civil war in 1996, however, a project at Piedras Negras became possible once again. After a complex series of negotiations with both the Guatemalan government and the leadership of the guerilla forces that still occupied the area around Piedras Negras, Stephen Houston of Brigham Young University and Héctor Escobedo of the Universidad del Valle de Guatemala initiated the Proyecto Arqueológico Piedras Negras, a four-year project of archaeological research at the site (Golden et al., 2000; Houston et al., 1997).

Beginning in 1997, a binational team conducted excavation, mapping, and soil chemical research at the site of Piedras Negras itself (Houston and Escobedo, 1997, 1998,

² An unpublished letter in the Shook Archives of the Universidad del Valle de Guatemala reveals that during the 1940s Linton Satterthwaite did, in fact, propose a new Piedras Negras project to the director of the University Museum. This project, never realized, was intended to focus on the regional settlement of

1999, 2000; Houston et al., 1998, 1999, 2000a, 2000b; Wells et al., 1999; Parnell et al. 2001), while reconnaissance of peripheral sites explored the boundaries of the Piedras Negras polity (Golden, in press; Golden et al., 1998; Golden et al., 2000). Research included a strong focus on monumental architecture, but this was complemented by the excavation of smaller household-groups within the site core (e.g., Urquizú et al., 1999), as well as settlement survey in the near-periphery of the site (e.g., Kovak and Webster, 1999; Webster and Kovak, 1999), producing a more complete picture of the range of variation in site use through time. Although this current research built upon and reaffirmed many of the findings of the University Museum's project, many details (e.g., dates, construction sequences, ceramic chronology) have been refined, and entirely new insight into the social history of the site has been gained.

1.3: Chapter Summaries

The first step needed to investigate any questions about the nature of chronological practice is an exploration of archaeological chronologies, their intellectual origins, and their interpretive implications. Chapter 2 offers a critical look into the historical development of archaeological chronologies. An understanding of any field of inquiry can only be achieved through an understanding of the intellectual context within which that field developed. The chapter, therefore, begins with an exploration of chronology as an archaeological tool, and compares this with chronology as a quotidian experience, presenting a working definition of *chronology as an interpretive framework that structures understandings of social relationships that exist between time, place and*

person. This chapter represents an effort to make transparent the assumptions and consequences inherent in the use of archaeological chronologies as they are currently understood and as they have developed during the history of the discipline. In so doing, it provides a prologue to Chapter 3.

Chapter 3 focuses on the historical development of chronologies within Mesoamerican archaeology, positing the concept of Mesoamerica itself as an archaeological chronology, where the development and definition of time-space boundaries has fundamentally affected interpretations of various societies. Subsequently the chapter focuses on the development of archaeological chronologies in the Maya Lowlands, and in particular on the idea of a chronological break between the Early and Late Classic Periods. By examining the development of Mesoamerican chronologies, my intent is not only to achieve a better understanding of the interpretive implications of this aspect of archaeological method and theory, but also to understand where - if anywhere - the bases of our chronology building intersect with the notions of time, place, and person of the people that we study.

Chapter 4 is an exploration of the indigenous chronological concepts of the Maya. Examining the evidence from ethnographic, ethnohistoric, epigraphic and archaeological sources, I outline our current understandings of the various chronological schemas that would have been available to Classic Maya rulers. These include, among others, the multiple calendars that define the significance of each day, historical prophecies associated with 20-year periods, and the life-cycles of people and houses. Each of these chronologies intersects in ways that are not pre-defined, but rather realized as part of social practice. This chapter concludes with an exploration of how social practice both

structures and is structured by these chronological possibilities, and how otherwise ephemeral practices such as dance, sacrifice, dedication and termination rituals may result in material evidence available to the archaeologist. The chapter looks particularly at the significance of royal architecture and monuments, such as in the Acropolis at Piedras Negras, as examples of the material correlates of such chronological practice.

To more fully elucidate the issues that I raise in Chapter 4, Chapters 5 and 6 offer a case study in the form of excavations in the Acropolis - the royal palace - of Piedras Negras. I present the results of four field seasons (1997 - 2000) of excavation that I conducted as a member of the Proyecto Arqueológico Piedras Negras. These data are integrated with published and unpublished data from the University Museum's project of the 1930s.

Chapter 7 presents the interpretation of excavation data in light of the issues and interpretations of indigenous chronological practice as presented in Chapter 4. A temporal focus is maintained here on the period spanning the 6th Century AD, an era that encompasses the traditionally defined divide between the Early and Late Classic. I will outline the political machinations of the dynasts of Piedras Negras during this time of political turmoil that had their bases in Maya understandings of the relationship between the ruler, time and place.

Chapter 8 expands upon the local interpretation of data from Piedras Negras by looking at contemporary events at three other Maya sites: Copan, Tikal and Altar de Sacrificios. All three sites were embroiled in the political turmoil that gripped the Southern Maya Lowlands in the Late 6th Century, yet, as at Piedras Negras, the rulers of each polity reacted in distinctly local ways that closely involved chronological practice.

By providing a regional perspective that compares the actions of rulers at these sites with those of the lords of Piedras Negras, I am able to provide a new understanding of the reality and utility of the Early Classic/Late Classic divide in archaeological chronologies.

In Chapter 9, I conclude by widening the perspective of this work and looking at chronological practice at all levels of settlement. Moving beyond the architecture of Maya royalty, with its associated historical texts, I examine the possibility of applying similar interpretations to spatial units on smaller-scales, such as non-monumental households. Finally, I look at the implications cross-culturally for understanding how people act to combine immaterial practice with material culture to locate themselves in a place in time.

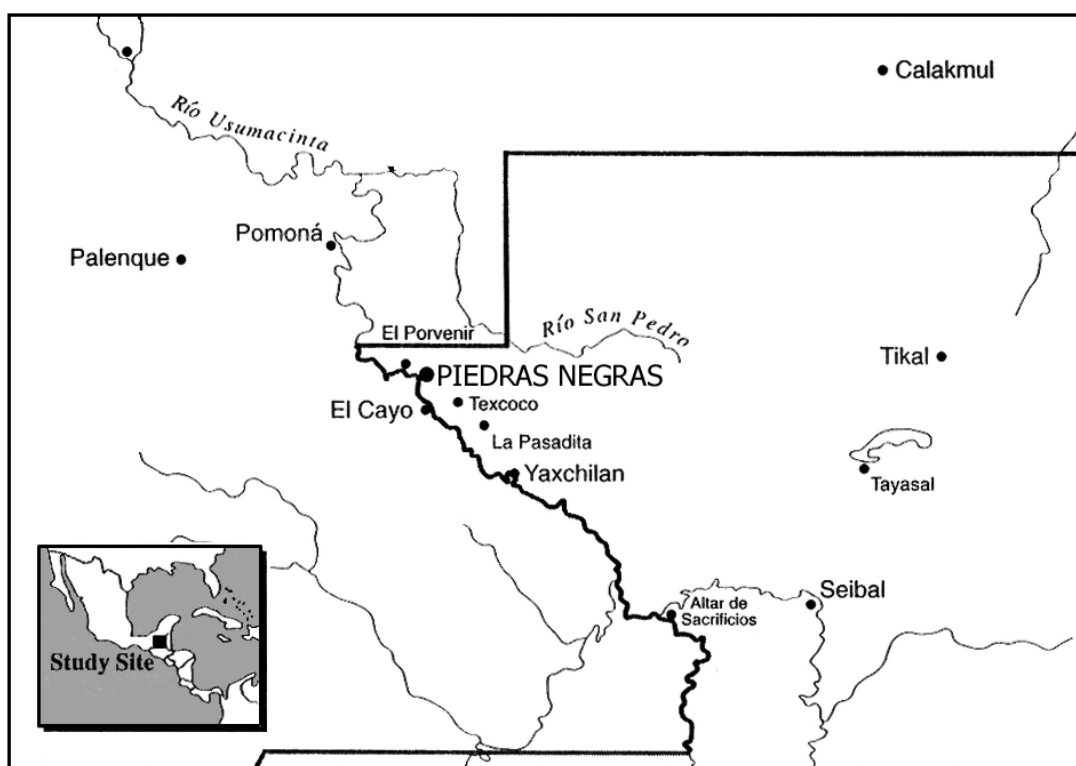

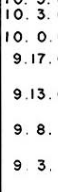




Fig. 1.1: Map showing the location of Piedras Negras, in the northwest corner of the department of the Peten, Guatemala.



Fig. 1.2: Piedras Negras, Peten, Guatemala (digitized map by Perry Hardin with additions by Zachary Nelson, after Parris and Proskouriakoff in Satterthwaite, 1944).

MAJOR PERIODS	11.16.0.0.0 correlation	TIME	BARTON RAMIE	UAXACTUN	TIKAL	ALTAR DE SACRIFICIOS	SEIBAL	CHAL-CHUAPA
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		1300	late facet					Ahal
		1200	New Town -?-					
		1100						Matzin
		1000	early facet					
C L A S S I C	<i>terminal</i> 	900			Caban	Jimba		
					Eznab	late facet	Bayal	
		800	Spanish Lookout	Tepeu 3	Imix	Boca early facet	transition	Payu
		700			Ik	late facet	Tepejilote	
		600	Tiger Run	1		Pasion early facet		
		500				Chixoy		
		400	Hermitage	Tzakol 2	late facet	Ayn late early facet		Xocco
		300			Manik			
		200						
		100						
P R E C L A S S I C	<i>proto-classic</i> 	A. D.	Floral Park		Cimi			
			Mount Hope	Chicanel	Cauac	late facet	late facet	late facet
		100				Plancha	Cantutse	Caynac
		200	Barton Creek		Chuen	early facet	early facet	early facet
		300						Chul
		400	late facet	Mamom	Tzec	late facet		
		500				San Felix	Escoba	Kal
		600	Jenney Creek			early facet		
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		800	early facet ?		?	Xe	Real	Colos
	<i>from Copan after Catherwood</i> 	900						
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* Veremos

Fig. 1.3: Ceramic site chronologies in the Maya Lowlands, with associated Mesoamerican cultural phases (from Gifford, 1976: 46).

Chapter 2: Chronology as Academic and Experiential Practice

2.1: Introduction

Before turning to an exploration of the chronologies of Mesoamerican archaeology and indigenous Maya chronologies, I first wish to define what I mean by chronology, and present a general overview of the historical development of archaeological chronologies. For even as archaeologists increasingly attempt to reconstruct fluid social identities and dynamic social interactions on the basis of material culture, we continue to employ chronologies that are normative, static, and derived from cultural-historical interpretations of the past. These interpretive frameworks are not necessarily incorrect or without their uses, but because they were not developed to answer such dynamic questions they are unable to address many of these new issues (Binford and Sabloff, 1982: 151; Fabian, 1993; Gell, 1996; Leone, 1978; Thomas, 1996; Trigger, 1989; Sabloff, Binford and McAnany, 1987: 205). This problem is significant, for as Tim Murray (Murray, 1999: 2) notes, "Archaeological time not only orders human history, but also has a fundamental importance in creating the phenomena which are the subject of our inquiry."

Subsequent chapters discussing indigenous Maya perceptions of the relationships between time, place and person will necessarily incorporate current chronological terminology terms. These terms continue to provide one of the bases for modeling a great part of the archaeological data. In order to build upon the extant body of knowledge, it becomes obvious that these concepts are incorporated even as we seek to provide new directions in archaeological thought. In this chapter I will examine many of

the assumptions and interpretive implications of archaeological chronologies as they are currently understood and as they have developed throughout the history of the discipline. This does not eliminate the problems and issues associated with the use of our professional chronologies,¹ but it does open up my interpretation of the archaeological data to a wider discourse on time and temporality.

2.2: Chronology as an Archaeological Tool and as Lived Experience

Time as a subject of inquiry crosscuts many fields (e.g., Baert, 2000). But despite the fact that much has been made of the subject of time in the discipline of archaeology, the philosophical or physical nature of time in and of itself has not been the subject of archaeological inquiry. It is not the goal of archaeologists to pursue any sort of proof of time (e.g., McTaggart in Gell, 1996: 149 - 155; Teichman, 2000). Nor even is archaeology necessarily concerned with temporality per se, at least as it has been interpreted from Heidegger, Kant and Husserl to be time as experienced (Sanbothe, 2000; McGlade, 1999).² In archaeology as an anthropological discipline, the concern is rather with people's "time-use and time-talk" (Gell, 2000: 260), what people do as a result of their relationship to time, and more specifically with time use in space (see also Squair, 1994). Fundamental to this concern, is what Barrett (1988) calls "fields of discourse," or

¹ By professional chronologies I simply mean those chronological frameworks typically conceived of as being developed as an outcome of the analyses of archaeological data, and which in turn are used to locate subsequently excavated archaeological materials within a space/time framework. As will be developed in this and subsequent chapters, I argue that these ideally objective and professional analytical devices are little different from the way we know the world more generally as a result of our interactions with material culture.

² As will be discussed in Chapters 7, 8, and 9, we cannot truly access the full range of temporal experience of the subjects of our inquiry. Instead, we can reconstruct from the material record some of the representations of temporal experience left to us by people in the past. None of these representations can possibly include or transmit the full range of temporal experience and chronological possibility to the

more simply put: specific human relations as they result in the production of material culture. This, in part, structures the patterns of those materials that we excavate.

As Tilley has stated, “time and space . . . are recursively related to the social and cannot be divorced from it” (Tilley, 1991: 78). Archaeologists rely on chronology to help define the time-space of social discourse and practice, just as the peoples that anthropologists study - both living and past - rely on chronologies to define the time-space of their discourse and practice. They are not simply devices to place events in serial order, but are instead fundamental to the creation of the archaeological record as an object of inquiry (Bailey, 1983; Murray, 1999: 2; Ramenofsky, 1998: 83). Despite the arguments of some that chronology is not a necessary component of interpretation (e.g., Dowson, 1998; Yates, 1990), there can be no interpretation of material culture as the product of social practice unless we have some understanding of the chronological perspectives of either, or both, the archaeologist and the people studied. Moreover, the finer the chronological resolution available to us, the more facets of social practice available for our study (Cowgill, 1996: 326; Hare and Smith, 1996: 281).

There is no escaping the use of chronology in archaeology, nor is it possible to avoid the implications of the chronologies we choose. Again, all social activity, by all people - archaeologist or otherwise - is structured by an understanding of how time, place and person are recursively related.³ This is the definition of chronology that underlies this entire work: chronology at its basis is an interpretive framework that structures

modern interpreter.

³ Notions of self, individuality and personhood are themselves complicated and much debated issues in anthropology. I use the term “person” here to mean individual biological entities. This does not mean that individual biological entities were, or are, always considered as individual social entities in all cultures at all times. How this triad is constructed socially is, therefore, extremely plastic. The relationship between

understandings of these time/place/person relationships. Chronology is not merely the measurement of time and, conversely, research into temporality has no necessary relationship to chronology (Cowgill, 1996: 325; Ramenofsky, 1998: 75, 82). Neither is chronology history. It is a framework that facilitates the integration of social action with a history selected from available historical possibilities.

For the archaeologist, chronology is a kind of typology, reducing heterogeneity in favor of homogenous and synchronic categories that are useful because they facilitate descriptions of the relationship between people, archaeological materials, and time (Chazan, 1995: 464). This point is more complex than it may at first appear, because the “people” variable in this equation may be either: 1) the archaeologist, 2) the subject being studied or a 3) recursive combination of the two. It is in this way that archaeological chronology appears at first to differ from chronologies as part of lived experience.

McGlade contends that until recently archaeologists have ignored experiential time, the “multiplicity of temporal rhythms which make up social life, foregrounding also the importance of human bodily involvement with the world following the work of Husserl and Heidegger” (McGlade, 1999: 146; although see, for instance, Cowgill, 1996: 325; Gero, 1991; Hodder, 1990). While his focus on the “multiplicity of temporal rhythms” is perhaps to be applauded, he does not distinguish between the way that the past is experienced by the people who archaeologists study, and the way the past as the subject of professional inquiry is experienced by archaeologists. Archaeologists cannot experience events in the past, and cannot participate in the activities that created the material signifiers of chronological practice. What we *can* do is reconstruct some notions

of personhood, temporal rhythms and place, and create from our models and the available data plausible reconstructions that take into account some of the chronological possibilities of the people that we study.

Perhaps more importantly, only recently have archaeologists begun to make explicit the role that our own multiple lived chronologies play in the development of our professional archaeological chronologies.⁴ We cannot separate our personal perceptions of space and time from our professional reconstructions of space and time in the cultures that we study, for the two are one and the same (Johnson, 1994: 176; Murray, 1999: 3). In all cases an object, actor or interaction has a perceived past history, presentness and future. This defines its/their meaning, and (in relation to this thesis) its/their chronological significance – a significance which is not singular, but multiple. One need only think of a family heirloom for a simple example: An eighteenth century vase is reacted to and acted upon as a thing out of the past with a particular history; as a constituent of the present whose history is being continually re-made and which helps to structure present social action; and as an object with an anticipated future to be engaged with by generations to come.

Archaeological chronologies as typically developed can define only one potential state of temporal significance for a given social situation or situations, and this is almost exclusively defined in terms of events past. In this sense they deny our own lived experience of chronologies, and cannot possibly be articulated with chronological concepts of the people we study. The introduction of epistemologies, especially those

⁴ Although archaeologists have long recognized explicitly that professional chronologies are modern constructs, as is discussed below (e.g., Ball, 1985; Childe, 1956; Gifford, 1960, 1976; Price 1976; Rands, 1973; Sharer, 1974, 1978; Smith, 1940; Willey and Phillips, 1958).

based upon the works of Braudel (1972, 1980) and other members of the Annales school, which consider the past to be defined by multiple rhythms hint at this situation and its possible solution (e.g., Baert, 1992, 2000; Bintliff, 1991; Gero, 1991: 129; Knapp, 1992; Smith, 1992). Such approaches, however, are still problematic in that they focus only on the past and therefore cannot engage with the concept of chronology as a lived experience that includes present and future states of being.

Chronologies are also multiple in the sense that any one chronology is constantly engaged with a constituent of, or defined in regards to, one or more other chronologies. Turning to our daily experience in the United States, this becomes an obvious fact. It is the year 2001, and the date is a given day in a given week of a given month. On that date we divide time up into minutes and hours. Certain times are deemed appropriate for work or meals. We have named meals – breakfast, lunch, and dinner - in a certain order. A given day may be understood as the occurrence of a celebration, whether national or personal.

Other chronological terms are more obviously politically loaded. Thus, the political rhetoric of our society is often phrased in terms such as “Baby Boomers,” “Reagan Era,” “the Cold War,” and countless others that locate such discourse in space and time. These chronological terms may be intended to be merely descriptive of extensive periods of time, as with Belle Époque or Renaissance, but their significance is interpreted and redefined in social action.

These chronologies are not randomly nor concretely integrated, but are constantly manipulated and navigated as a means to achieve social or political ends that may be as simple as a passing greeting between two people on the street, or as complex as the

exchange of gifts between heads of states. The way these different concepts of chronology overlap and nest, one within another, allows for a great deal of flexibility and ambiguity in the way that we act and react socially. More often than not we do not consciously recognize the choices we are making, and may even perceive our choices as being natural and uniquely appropriate to the moment.

Yet, we can easily imagine ways to alter minimally the names of our day-to-day chronological markers to significantly alter the social import of the moment. Such would be the case if we were to substitute lunch for the more traditional supper for instance. When is bedtime? When is it time to work? We are constantly negotiating, and often struggling, with the social flux inherent in the nested chronologies of our daily lives. This provides a great deal of room for ambiguity in social relations. We should expect nothing less from our professional chronologies and we should search for this kind of flux in the societies that we study, for it is fundamental for understanding the social behaviors that are the basis of our field of inquiry.

This situation provides more than ample reason for a self-reflexive archaeology that attempts to dissolve the “distinctions between professional and personal opinion and public and private knowledge” (Moore, 1994: 45). The maintenance of the dichotomy between chronologies as an archaeological tool and chronology as a socially experienced and defined phenomenon, accessible through discourse and embodied in material culture, hampers the advancement of archaeological theory and practice (Murray, 1999: 3).⁵ Archaeological chronologies are as much lived and discursive as any other chronology. They, too, incorporate components of past, present, and future.

⁵ This does not mean that the distinction between emic and etic with regards to the particularities of

Yet, the history of the development of archaeological chronologies has led to the emphasis of their “past-ness.” It is, of course, always unfair to make sweeping generalizations about the history of an entire discipline, and Squair’s (1994: 94) contention that chronology is something that has not been problematized by archaeologists is simply untrue. Many archaeologists have been explicit about their awareness that the chronologies they were building were modern constructs, and have engaged with the interpretive issues raised by this situation (e.g., Ball, 1985; Childe, 1956; Gifford, 1960, 1976; Price 1976; Rands, 1973; Sharer, 1974, 1978; Smith, 1940; Willey and Phillips, 1958). However, I do believe that our definition of chronology as a more or less serial ordering of events has been self-limiting. What has been lacking in archaeology is a recognition that there is little or no distinction between the professional and personal, quotidian construction of chronologies.

2.3: The Historical Development of Archaeological Chronologies

This discussion requires a brief overview of the historical development of chronologies within the field of archaeology. Archaeologists, of course, did not create the notion of chronologies.⁶ But with the turn of the 20th Century, archaeologists were beginning to develop seriation techniques (Petrie, 1901; Pitt-Rivers, 1906[1874]; Spier, 1917) as well as stratigraphic methods of relative dating (Gamio, 1913; Kidder, 1915; Nelson, 1914; Uhle, 1903, 1907), and these were heralded as holding out the promise for

chronologies in practice should or can be dissolved.

⁶ In Renaissance Europe chronology was considered a science in and of itself, and innumerable court chronologers restructured the framework of history to relocate themselves and their patrons in order to achieve elevated social status (Grafton, 1985; see also Appadurai, 1981; Cohn, 1961; Davis, 1989).

unalterably *true* and *scientific* chronologies. Stratigraphy and seriation were seen to be a reconstruction not just of the excavation, but also of history itself (Vaillant, 1935: 16).

As archaeologists, we hope and anticipate that accurate relative dating provides a certain level of control to our study of the circumstances under which change took place (Rowe, 1959: 317). The use of computer modeling and other statistical techniques is often seen to validate the objectivity of seriation; just as chronometric dating techniques lend authority to stratigraphic sequences (e.g., Blackham, 1998; Cassen, 1993; Hatch, Whittington, and Dyke, 1982; Hodder, 1993; Zucchi, Tarble, and Vaz, 1984).

But despite arguments to the contrary (e.g., Brainerd, 1951: 303), it has long been noted that chronologies are neither linear nor purely quantitative.⁷ Chronologies are the flexible and subjective creations of archaeologists and can change because they overlap with, and are nested within, other shifting chronologies. Archaeological chronologies are most definitely not the exact and unchanging tools we would like them to be. They are the products of an active discourse and, as with all lived chronologies there is an inherent ambiguity derived from the multiple chronological references that may be made by any single chronological setting assigned to an archaeological deposit (for a recent discussion of these issues see Cowgill, 1996: 325 - 326).

Thus, to use a much-simplified example from the Maya Lowlands, a given deposit might be said to be Late Classic. This may refer to a time period defined by many to be

⁷ Many chronological indicators (e.g., stylistic variation, carbon ratios) are *temporally* precise within a range of error. But temporal precision provides only one element of the time/person/place relationship that is chronology. Furthermore, the temporal axis and the spatial axis rarely overlap entirely, with some defining chronological characteristics lingering for longer periods in one or another area. The definition of the time-space unit, therefore, requires that subjective choices be made.

approximately from AD 650 to 900. It may also refer to the ceramic styles evident in that deposit, styles whose temporal boundaries of production appear to be roughly coterminous with the period designated Late Classic. Alternatively, reference may be made to generalizations about political organization within a polity, or to known political interrelationships between polities (Pasztor, 1978: 5). Other interpretations determined by the combination and recombination of chronologies, conceived of here as the selective of chronologies nested one within another, are not only possible but are fundamental to interpretation.

This kind of ambiguity will be further discussed in the next chapter, but it is important to consider it briefly. This chronological manipulation is how we understand the archaeological record. It is not the result of an error in methodology or theory; it simply reflects in microcosm how people – both archaeologists and the people that we study - know the world chronologically. To ignore it is to continually recreate the disjunction between these two ways of knowing, and to discount the possibility of finding possible intersections between indigenous and archaeological concepts of chronology.

When we choose a chronological situation, or situations, for our research, we are necessarily removing some of that ambiguity in order to structure interpretation. Again, this reflects the lived experience of both the archaeologist and the cultures that we study. People can only engage with other people by assigning a chronologically specific role for both object and subject chosen from all of the ambiguous possibilities. In so doing socially (or archaeologically) salient social identities are created (Schortman and Nakamura, 1991). To choose another chronological perspective is to fundamentally

change the nature of the engagement between object and subject, between the archaeologist and the data.

We thus act as archaeologists to create the setting, and therefore meaning, of that which we study through the application of chronological frameworks (Murray, 1999: 2; Rush, 1994: 73). This does not lead to the conundrum of terrible subjectivity feared by some and embraced by others. It may be true that archaeological theory cannot be applied to an ideally objective data set (Rush, 1994: 74). Yet, just as there are a limited number of appropriate and inappropriate social/chronological identities for people in their daily lives, there are a limited number of appropriate chronological settings for the people and social behaviors studied by archaeologists as defined by the materials that we excavate (Appadurai, 1981; Murray, 1999; Wylie, 1989, 1992).

Furthermore, even once we have chosen the chronological situation appropriate to a given discourse, ambiguity is provided by the nature of the archaeological record as it is created both by past action and current archaeological practice. The excavated unit is always a time-trajectory segment (Clarke, 1978: 162), and artifacts entered the archaeological record at different rates, causing time lag (Adams and Gaw, 1977; Olivier, 1999: 112). This confuses the issue of precision and, therefore, interpretation.

The context of the deposit from which dated remains are recovered may also vary tremendously, and so affect the nature of the time lag. Artifacts are often picked up and reused in new contexts that in no way reference their makers (e.g., Horne, 1983), and sites may thus appear to be older than they actually are (Adams and Gaw, 1977; Ingersoll, 1993: 346). The nature of deposition within a midden where (*ideally*) materials are discarded accretionally and sequentially, for instance, is not the same as that within

architectural strata which may contain materials from any time-period contemporary with or anterior to the point at which they were built (Gifford, 1976: 21). Largely synchronic deposits, such as the contents of a grave, a cache or a site buried quickly by a natural disaster, offer fundamentally different perspectives on chronology, although these too involve “time lags” of greater or lesser length. We can take into account some of these fundamental issues only by including in our understanding of chronology an understanding of both the cultural and non-cultural taphonomic processes that affect the archaeological record (e.g., Cameron, 1991; Binford, 1981; Schiffer, 1985, 1987; Sterner, 1989; Webster, Gonlin and Sheets, 1997).

2.4: Chronology as a kind of typology

Digging a little deeper, chronologies are necessarily typological, and it is therefore important to understand the issues associated with such analytical devices (McGlade, 1999). Typology has long been viewed as the primary tool of the archaeologist in interpreting changes across both space and time (see Brainerd, 1951: 302; Krieger, 1944: 271; Sears, 1960: 326). Because they provide analytically convenient units, typologies are used to explore similarity and variability in many categories of human behavior and material culture, including architecture (e.g., Becker, 1982; Flannery, 1976; Kniffen, 1986; Lawrence and Low, 1990: 454; Smith, 1961; Ruppert and Smith, 1957), lithic industries (e.g., Binford, 1966; 1973; Bordes, 1969, 1970; Dibble, 1987) and social organization (e.g., Coe, 1961; Feinman and Neitzel, 1984; Willey and Phillips, 1958; Sahlins and Service, 1966; Service, 1962), among others.

In developing typological understandings of artifacts or of chronologies, the simplest conceptualization of practice is simply the building of the typological framework and the actual process of fitting artifacts into the categories so defined (Read, 1989; Whittaker, Caulkins, and Kamp, 1998). A type must consist of at least two attributes that distinguish it from all others bearing at least one of those attributes (Krieger, 1944; Rouse, 1960). At first glance, it would seem that there are an infinite number of attributes in every artifact (Clarke, 1978: 155). A typological framework requires, therefore, identical discriminatory categories.

The determination of exactly what constitutes equivalent attributes, however, is not always clear (Binford, 1989; Read, 1989). At one end of the interpretive scale, types and the attributes that make up types are taken by the archaeologist to represent both the material manifestation of regularities in human behavior, as well as the ideals of the artifact makers themselves (Binford, 1973; Bordes, 1969, 1970; Gifford, 1960; Hodder, 1986; Krieger, 1944: 272; Sabloff and Smith, 1972; Smith, Willey and Gifford, 1960). At the other end, classification schemes are derived from theory and there is no obligation to attempt to understand ancient categories (Shanks and Tilley, 1988: 84; see also Eggert, 1977). Though Hodder (1979, 1986, 1992) claims that the archaeologist's classifications have at least some validity as a result of certain inherent and universally obvious characteristics of material culture, the ambiguity in this position can result in widely varying interpretations of exactly the same material (e.g., Binford, 1968, 1973; Bordes, 1969, 1970; Dibble, 1987).

This room for flux is very important when considering the "truth" value of interpretive frameworks, such as chronologies, that are used to understand material

culture. Though the interpretations of archaeologists are modern, we often perceive them to be structured solely by the past as data (Hodder, 1986: 152). There is perceived to be a minimal set of constraints on infinite variation of substantive traits that regulate the narrative of material culture and allow cultures to talk about themselves both in the present and the past (Appadurai, 1981: 203). This is important because for a study based in material culture to have some validity, the significant characteristics under scrutiny must in some sense be what we think they are (Prown, 1996: 21).

It must, however, also be remembered that any material object, and the types used to describe them, can be polysemous and any single trait may permit the coexistence of multiple interpretations rather than the dominance of any single interpretation (Miller, 1987: 107; Tilley, 1989: 191). Furthermore, the reality of how people react to the rhetoric of an object may be a very different thing from how they are supposed to act (Shanks and Tilley, 1988: 84).

The irony in all this talk of typologies is that their creation encompasses nothing new that was not already there to be found. However, as they are products of analysis (Sears 1960: 325), the implication is that something new has indeed been discovered (Miller 1987: 190). The result is that typologies, and thus chronologies as a variety of typology, are sometimes inappropriately dealt with as data in and of themselves (Smith, 1979; see also Ball, 1979; Ramenofsky, 1998: 83).

2.5: Material Culture, Text and Chronology

How, then, are choices made in constructing archaeological chronologies more specifically? There are four fundamental facets of chronological significance for any

artifact or group of artifacts: (1) the loci of extraction of raw materials and production of the artifact (2) the intents in manufacturing the artifact (including form and function), (3) the variable significance of the artifact during its use life (including the processes of deposition), and (4) the significance of recovery and interpretation for the archaeologist.

The interaction of people with material culture at all of these stages changes the social biography of the material such that the significance of the materials is fundamentally altered. Each stage is chronologically limiting in some ways, even as new chains of signification are opened up. As a very simple example one need only think of the transformation of ore to iron to a cast-iron skillet to metal scrap. A rock, raw iron, a cooking utensil, and recyclable resource - each of these opens up new chronological possibilities. Is a stack of iron ingots, or a beloved skillet from one's grandmother's kitchen more likely to figure into the chronology of familial discourse and practice? However, if one trades in iron ingots, then the chronologies of work life may be more significant for economic social interactions.

How have archaeologists dealt with these different possibilities for chronological signification? For many, the processes of manufacture and usage are in no way implicit in the artifact itself (Ford, 1961: 244). The archaeologist is left with only a modern interpretive framework based upon context.

However, material culture has come to be viewed by many in recent decades as a text that can be read in some sense by the archaeologist (e.g., Hodder, 1979, 1986, 1992; Prown, 1996: 26; Shanks and Tilley, 1992; Tilley, 1990, 1991). From this perspective, objects are imbued with a social meaning that supplements their purely material fabric.

They are an act unto themselves, and in turn act to structure how we are to respond to them (Richardson, 1989: 174).

With this understanding, the material content of an object does not necessarily define its meaning, but does limit the options of communicative content (Fletcher, 1989: 38). In this sense, when speaking of change over time the concept of an individual acting according to set and static ideas about the world is replaced by the concept of a person – however socially constructed - who actively chooses their material output based upon a bounded set of options and for intended social purposes (Schortman and Nakamura, 1991; Schortman and Urban, 1987; Wobst, 1977).

The significance of this textual interpretation of material culture is important for a discussion of typology and chronology in that it references a chronological-narrative experience as defined by the maker of the object (Hodder, 1993). As such, Hodder (1993: 279) infers that any chronological narrative that the archaeologist attempts has some foundation in reality. It is the interpretation of the content of the narrative and its expression, and how the content and rhetoric of material culture change, that is the important subject of interpretive chronological frameworks (Hodder, 1995: 168).

However, it must be remembered that objects have multiple meanings even within the same society, based upon the individual's associations with that object (Parmentier, 1985; Keane, 1997, 2001; Kopytoff, 1986; Rogan, 1992). Material culture is more than the record of one set of past social processes and may express multiple narratives and therefore participate in multiple chronologies. It is continually reincorporated, reinterpreted and acted upon differentially as “memory, trace, or tradition” (Thomas, 1995: 210-211). Interpretation, then, should be structured by the understanding that

artifacts have a life history that include both past(s) and present(s) (Schiffer, 1999: 53), as well as perceived *future(s)*.

2.6 Conclusion: The Historicity of Archaeological Chronologies

Interpretation of the archaeological record is, therefore, not bounded only by the limited range of meanings embodied in the potsherd, architectural ruin, or other facet of material culture. Data in archaeology is doubly determined by the actions of people in the past and by the archaeologist who exists in the present, working in a field that is not only guided by larger social movements within the society of which it is a part, but more specifically by the historically contingent development of the field of archaeology. This is, of course, one of the fundamental tenets of the postprocessual critique of empiricism in archaeology.

However, though the implications of the historicity of archaeology have been fruitfully addressed for achieving a better understanding of social identities and relationships in the past, little has been done within this critique to address the fundamental archaeological and social building block of chronology. As some examples, Hodder's (1990) "Domestication of Europe", an alternative history of the development of domesticity in Europe, or Bender's (1989) re-evaluation of the social development of gender roles, and even Thomas's (1996) explicitly time-centered "Time, Culture and Identity", do little to examine the implications of the tried and true terms of archaeological chronologies which do so much to structure their interpretation. In the case of Thomas's work, people still "are" Mesolithic, and "become" Neolithic.

One way of understanding the construction of our data more clearly, therefore, is to make more explicit the historical factors that structure archaeological method and theory and decisively influence interpretation. What historical baggage do we carry, how does it limit us, and can we begin to move beyond it? It brings us to a conundrum evident many places in the writings of postprocessualists.

As archaeologists we are constantly guided in our interpretation of the past activities of the societies we study by the actions and interpretations of earlier archaeologists whose work provides the academic social structure that we react to and change. In so much as this is true, we cannot remove ourselves and put our interpretations outside or above the work of others. Whether we agree or disagree with the interpretations and social reconstructions of other archaeologists, we nonetheless react to them and in so doing are influenced by them. We can never be aware of all of our academic influences, just as we can never be fully aware of all of the forces within society at large that affect our daily lives. This should not, however, cause us to ignore those factors that we can know. An exploration of the historicity of archaeological chronologies offers significant, if incomplete, insight into new ways of disentangling the modern from the ancient in our interpretation. I will, therefore, continue this discussion in the next chapter by exploring the particular history of archaeological chronology in Mesoamerica.

Chapter 3: Archaeological Chronologies in Mesoamerica

“I have found it extremely easy, for years, simply to ditch terms like ‘Terminal Preclassic,’ ‘Classic,’ and ‘Middle Horizon’ . . . No one seems to have minded. In fact, so far as I know, no one has even noticed . . . try using them as little as possible and see if it doesn’t feel fine and actually sharpen your thinking and communicating.”

George Cowgill (1996: 326)

3.1: Introduction

As discussed in the previous chapter, chronologies provide the temporal and spatial boundaries for the archaeological interpretation of social interactions. They are not only the products of empirical data, but also of the history of archaeological practice. This chapter builds upon the last by focusing on the historical development of archaeological chronologies in Mesoamerica and, more specifically, on the Maya Lowlands. As with Chapter 2, the development and implications of these chronologies are not explored in order to condemn the cultural-historical chronologies that provide much of the foundation of archaeological interpretation. Rather, it is only by exploring this disciplinary history that we can see how archaeologists have constructed the relationship between material culture and notions of time, place, and person. It is only by making clear the historical development and the choices of archaeologists that we can begin to see where the points of overlap between archaeological and indigenous chronologies can have developed from such vastly different conceptions of the relationship between person, place and time.

3.2: Development and Definition of a Culture Area: 16th to Early 20th Centuries

The concept of the culture area is at first glance not coterminous with chronology. Yet, I begin with an exploration of Mesoamerica as a culture area because this model of culture is interwoven with notions of how people – entire societies in this case – are located in space and time, and it continues to structure the development of other, more local, chronological boundaries in archaeological practice. Though in past decades many archaeologists have publicly disavowed the culture-area concept, it has nonetheless become thoroughly internalized in archaeological discourse (Pailes and Whitecotton, 1995:16). The “reality” of Mesoamerica is so ingrained in archaeological method and theory that it is often not defined as a subject, even by those articles or books that are explicit examinations of it (e.g., Linares, 1979: 25; Santley and Hirth, 1993; Willey, 1974).

When Kirchoff (1943) formulated his list of cultural traits as a definition of Mesoamerica, he was building on the foundation laid by conquistadors, explorers, and earlier archaeologists. Though Graham (1993: 9) may technically be correct in arguing that there was no “Mesoamerica” as such before 1943, the field was already defined in practice by archaeologists working in Mexico and Central America by the early 1930s (Litvak King, 1985: 374). In fact, the notion that Mesoamerican civilization represented a unique area of “high culture”, in comparison to those cultures that had been contacted previously in the Americas, was emphasized as early as the 16th century by Spaniards who remarked upon the grandeur of the region’s cities and people (de las Casas, 1986; Diaz del Castillo, 1996; Cortes, 1992; Landa, 1978; Lizana, 1988; Motolinía, 1985; Sahagun, 1969). Indigenous elites furthered this interpretation through the production of

documents intended both to preserve their history as well as to support their social position (e.g., Alva Ixtlilxóchitl, 1985; Chimalpahin, 1978; Muñoz Camargo, 1986; Recinos, 1999; Restall, 1997, 1998; Roys, 1967; Tedlock, 1985; Tezozomac, 1949; see also Gillespie, 1989: xii-xli).

Though many of the Spaniards who had seen the ruins of pre-contact period civilizations (e.g., Garcia de Palacio, 1983; Landa, 1978) correctly attributed their origin to indigenous populations, by the 19th Century this insight had largely been lost. Lacking the ability to effectively locate archaeological remains in time, many antiquarians of the early 1800's attributed the ruins to lost tribes of Israel, Romans or other fanciful civilizations (e.g., del Río and Carrera, 1822; Kingsborough, 1830; Le Plongeon, 1881). The 19th Century, however, also saw the appearance of important new conceptions of time, change, and development embodied in the works of Darwin (1859) and Lyell (1830-33) that set the stage for a renewed interest in the native origins of Mesoamerican sites (Trigger, 1989: 92-94; Willey and Sabloff, 1993: 14-15). Explorers began to rediscover and embrace the *indigenous* origins of these ruins (Dupaix, 1834; Stephens and Catherwood, 1963 [1841], 1963 [1843]).

The reports of Stephens and Catherwood's travels (1963[1841], 1963[1843]), with their vivid descriptions and paintings sparked an interest in the ancient cultures of Mexico and Central America. Photography soon began to supplement drawing and painting as a recording technique, further stimulating interest in the lost cities of the Americas (Charnay, 1887; Maudslay, 1883, 1886, 1889). Within the first two decades of the twentieth century, there was a proliferation in the study of art and hieroglyphs (Bowditch, 1910; Morley, 1915, 1920; Spinden, 1913, 1917; Tozzer, 1911, 1913).

Evolutionary chronologies entered into Mesoamerican archaeology even before firm absolute dates could be applied to archaeological remains. Although questions about the correlation of Long-Count inscriptions and indigenous histories with the Christian calendar created ambiguity regarding the precise age of most Precolumbian cities, the recording of hieroglyphic texts in the Maya lowlands (e.g., Maler, 1901, 1908; Maudslay, 1883, 1886, 1889) seemed to place the cultures of the area at the “pinnacle of tropical culture in world history” (Huntington, 1917:150). They were thus seen to be on evolutionary par with the cultures of the Old World (e.g., Morley, 1913). Spinden (1917) explicitly makes the equation of the Classic (“First Brilliant Period”) Maya with Classical Greek culture, the Aztecs with the Romans, and the Toltecs with the Etruscans. Morley (1917: 140), for his part, states that “the Maya civilization would appear to be the most notable expression of the Native American mind”, and uses terms such as “Renaissance” to describe their historical development.

This early focus on monumental architecture and inscriptions at a time when anthropological theory held that a culture’s evolutionary development was directly related to its most “advanced” material correlates (e.g., Morgan, 1871, 1877; Tylor 1889, 1913[1871], 1964[1865]) conceptually excluded those areas that did not exhibit such monumentality. In conjunction with the contemporary work of archaeologists at areas both within and without what would become the boundaries of the culture-area (e.g., Bandelier, 1881, 1883, 1884, 1890a, 1890b, 1911; Boas, 1913; Gordon, 1896; Uhle, 1922a, 1922b, 1923a, 1923b), the stage was set for the unfavorable evolutionary comparison that resulted in the creation of a cultural core in the form of Mesoamerica, and a periphery in the American Southwest, and Lower Central America (Joyce, 1993).

The development of Mesoamerica as a chronologically bounded concept was assured with the advent of the cultural-historical approach by Boas and his students. This approach called for an understanding of how regionally specific historical processes led to the development of a culture (Boas, 1896, 1924, 1931, 1932; Lowie, 1937, 1940; Kroeber, 1917, 1928, 1946; Murdock, 1949). Archaeologically, the evolutionary development of a culture was perceived to follow a historical trajectory that could be traced in the material record (Kroeber, 1946; Murdock, 1949). It is no surprise, therefore, that this was a period in archaeology marked by chronology building, which was perceived not only as placing events in serial order, but as describing cultural change (Willey and Sabloff, 1993: 96)

In conjunction with the advent of stratigraphic/chronological methodology developed in the Old World, stratigraphic methods were developed in many parts of the Americas for the determination of regional chronologies (Gamio, 1913; Uhle, 1903, 1907). Ultimately, this process provided the basis in great part for the development of the standard Lithic/Archaic/Preclassic (Formative)/Classic/Postclassic (Willey and Phillips, 1958)¹ sequence that dominates Mesoamerican archaeology; a sequence which calls to mind images of Spinden's (1917) equation of Classic Maya and Classical Greece (Quilter, 1996: 304).² By the 1920's George Vaillant (1927, 1935) was able to make the first attempt to unify the ceramic chronologies of the Maya areas with that of Central Mexico. As excavations were carried out following these developments, data could be

¹ It must be noted that Willey and Phillips (1958) developmental framework was advanced as a cultural typology describing social evolution. As with many other typological frameworks there was no necessary temporal scale attached to the progress through these stages.

² As Pendergast (1985) has pointed out, the development of such a regional sequence leads implicitly to the interpretation that if Classic is the pinnacle, then all that follows is substantively decadent or "feeble". This

compared against these developmental sequences and either included or excluded from a related historical development.

The end of the 19th century had seen an initial proliferation of institutionally sponsored research in Mesoamerica (e.g., Gordon, 1896, 1898, 1902; Maler 1908, 1911; Thompson, 1904), but this was minimal compared to what followed in the “classificatory-historical” period (Willey and Sabloff, 1993: 96-213). While Mexican archaeologists initiated large-scale excavations of pre-Columbian sites in Central Mexico including Monte Alban, Xochicalco and Teotihuacan (e.g., Armillas, 1944; Caso, 1932; Dosal, 1925; Gamio, 1922; Linne, 1934), American institutions predominantly focused on the sites of the Maya area (Bernal, 1980; Willey and Sabloff, 1993). Excavations sponsored by institutions such as the Carnegie Institution of Washington, the Peabody Museum, and the University of Pennsylvania Museum continued for decades, and covered the area from Yucatan to Honduras (e.g., Burkitt, 1924, 1930a, 1930b; Kidder, Jennings and Shook, 1946; Longyear, 1952; Mason, 1933; Morris, Charlot, and Morris, 1931; Ruppert 1931, 1935, 1943, 1957; Ricketson and Ricketson, 1937; Ruppert and Smith, 1952, 1954, 1957; Satterthwaite, 1933-1954; Stromsvik, 1941, 1952). The central concern of archaeologists during this period of exploration was the development of site-specific and regional chronological sequences (Willey and Sabloff, 1993: 96; e.g., Satterthwaite, 1938; Vaillant, 1927, 1935, 1937).

Though cultures and civilizations within Mesoamerica might be studied independently, they were perceived to be more intimately tied to one another than to cultures outside the boundaries of the culture-area, regardless of geographic distance.

Often, in an approach clearly related to the diffusionist models of Spinden, Vaillant and others, one civilization in particular has been taken to dominate the nature and direction of Mesoamerican interaction during a given period. Thus, for the Preclassic the Olmec “sphere of influence” has often been seen as coterminous with incipient Mesoamerica (Bernal, 1971; Benson, 1981; Coe, 1965, 1968, 1977; Coe and Diehl, 1980; Covarrubias, 1946; Flannery, 1968; Heizer, 1971; Henderson, 1996; Joralemon, 1971; Lathrap, 1974; Meggers, 1975; Proskouriakoff, 1968; Reilly, 1991; Stirling, 1942, 1946; cf. Grove, 1974, 1989a, 1989b, 1993; Sharer and Grove, 1989). In current interpretations Teotihuacan seems to conceptually (as well as politically, economically and ideologically) frame Mesoamerica during much of the Early Classic period (Baird, 1989; Bove, 1991; Cobean, 1971; Cheek, 1977; Coe, 1972; Coggins, 1979, 1983, 1993; Cowgill, 1976; Demarest and Foias, 1993; Diehl and Berlo, 1989; Fash and Stuart, 1991; Marcus, 1983; Michels, 1977; Millon, 1989; Paddock, 1983; Price, 1976; Sanders and Webster, 1988; Santley, 1983; Stone, 1989; Winning, 1948). Tula and Chichen Itza have served a similar role in analyses of the Early Postclassic (Acosta, 1940, 1941, 1942, 1945; Armillas, 1950; Caso, 1941; DiPeso, 1966, 1968, 1974; Ekholm, 1941; Jones, 1993a, 1993b; Kubler, 1961; Ruz Lhuillier, 1962).

It is interesting to note here the direct influence that archaeological chronology has had on the interpretation and definition of centers and peripheries of cultural diffusion in Mesoamerica. Despite its enormous size Teotihuacan was, for decades, viewed as a Postclassic settlement, neither part of the Classic period florescence, nor part of the glories of the Aztec empire. Chronologies within the basin of Mexico were largely

where the rise of apex empires such as Rome was “inevitably” followed by a fall into dark ages.

based upon post-Conquest ethnohistorical documents that made no mention of Teotihuacan as a central place in the Toltec past.

It was only after links could be made with the Lowland Maya chronological sequence through the association of Teotihuacan-style ceramics and Long-Count dates that the Central Mexican site was accorded its archaeological significance, in which it is seen to culturally dominate and in many ways define the nature of the Classic Period and its subdivisions. Here we can see a central interpretive problem: The Maya sequence came to define the Classic Period through the primacy accorded the Long-Count inscriptions,³ and it was originally accorded cultural dominance of the period. Today, although the temporal boundaries of the Classic Period are still largely provided by the Maya sequence, this same era is perceived to be culturally and politically dominated by the waxing and waning of Teotihuacan (see Carrasco et al., 2000; see also Chapter 8 in this volume).

3.3: Mesoamerica as an Archaeological Chronology

Chronologies devised for understanding the history of Mesoamerica are thus bound up in the development of the discipline. As with all chronological practice they offer insight into only one small set of Mesoamerican histories, selected by archaeologists from among innumerable possible histories. Some of the interpretive implications of this disciplinary history were discussed briefly in the preceding section, but I want to expand upon these here. In particular I want to look at the question of when and where is Mesomerica as defined by the chronological practice of archaeologists?

³ See Chapter 4 for a description of Maya long-count dates.

The original definition of Mesoamerica as a culture-area (Kirchoff, 1943) is based on a list of traits seen to be indicative of the region in the 16th century at the time of conquest (Healy, 1988; Litvak King, 1985: 385; Piña Chan, 1960: 37). This raises the question of whether Mesoamerica pre- and post-dates this period as well.

What is clear is that almost all archaeologists view the boundaries of Mesoamerica as fluid in time and space (Andrews, 1977; Baudez, 1970; Brown, 1985: 219; Carmack et. al, 1996; Diehl, 1976; Lothrop, 1939; Schortman and Urban, 1986; Thompson, 1970). Mesoamerica must have a beginning it would seem. This is generally attributed to that period when the first permanent, agriculturally based settlements appeared (Flannery, 1976; Hirth, 1984: 4, 1992; Carmack et. al, 1996), or with the widespread acceptance of pottery (Gasco and Smith, 1996: 49). For some, it is not simply the development of sedentary agriculture that is indicative of Mesoamerica (Coe and Flannery, 1964; Flannery, 1968; MacNeish, 1972, 1981; Mangelsdorf, MacNeish and Galinat, 1964; Pearsall, 1977), but rather the concomitant development of socio-political complexity (Adams, 1996; Grove and Gillespie, 1992; Piña Chan, 1960: 38). There is, however, no agreed upon moment when any of this occurs, be it a stage called the Middle Formative (e.g., Grove and Gillespie, 1992), the appearance of a culture called the Olmec (e.g., Coe, 1965), or an era whose estimated starting dates range from 1650 BC to AD 200 (e.g., Adams, 1996; Clark, 1991; Coe and Flannery, 1964; Piña Chan, 1960:38).

If Mesoamerica began around 1500 BC, then when might it have ceased? Certainly the cultural influence of pre-Columbian Mesoamerica persists today within the framework of modern nation states (Gossen, 1986; Léon-Portilla, 1988; Minelli, 1976). Both archaeological and historical evidence indicate that throughout the colonial period,

and continuing until the present, identity, debate, and resistance have often been framed in terms of an enduring indigenous cultures versus a dominant foreign culture (Clendinnen, 1987; Farriss, 1984; Graham, Pendergast, and Jones, 1989; Jonas, 2000; Jones, 1990, 1992; Jones, Kautz and Graham, 1986; Joseph, 1995; Lambert et al., 1994; Low 1995; Pendergast, Jones, and Graham, 1993; Reed, 1964; Restall, 1997, 1998; Ross, 1995; Schirmer, 1998; Scholes and Thompson, 1977; Sullivan, 1989; Todorov, 1992). If, however, the definition used is based on the nature of the elite power structure, then Mesoamerica cannot have survived the sixteenth century.

Part of the difficulty of tracking the chronological development of Mesoamerica arises from the conception of the culture area chronology with its divisions into Preclassic (or Formative)/ Classic / Postclassic (Willey and Phillips, 1958; cf. Millon, 1976; Price, 1976). The Classic period that forms the crux of this arrangement is bounded broadly by a range of dates during which the Maya inscribed a Long-Count date on their monuments, from about AD 250 to 900 (Price, 1976; Diehl and Berlo, 1989), while other bases for this chronology include changes in ceramic style and radiocarbon dating (Diehl and Berlo, 1989; Switsur, 1979).

Such broad chronologies fail to account for differential pacing of change, both in various regions and in different aspects of the material record (Cowgill, 1996: 326). Furthermore, it is not entirely clear whether the chronology defines developmental stages or temporal periods (Pasztor, 1978; Kubler, 1970; Millon, 1976; Price, 1976). There continues to be a conflation of complexity, Mesoamerica, and contemporaneity, and in this sense, Mesoamerica can be understood as an area that incorporates cultures as part of a shared “historical evolutionary process” (Kowalski, 1999: 2). The result is the

production of chronologies that assume equivalence of social development and relative cultural content at a given period based on assumed participation in Mesoamerica (e.g., Hoopes, 1993).

With regard to ceramics in particular, commonly used type-variety based ceramic chronologies bind up time, ceramic development, and cultural development over broad geographic areas (Coe, 1990: 8-9; Kubler, 1970; Sharer, 1974: 184, 1978: 5). This is an unfortunate byproduct to a valuable analytic device, and is discussed in greater detail in the following section. The application of these Mesoamerican chronologies to areas identified as peripheral to the culture-area (e.g., Cornejo, 1993; Kelley, 1971) implicitly includes the periphery as an aspect of Mesoamerica, although the development of a given society may be quite distinct (Lange, 1993). To summarize, then, I turn to George Cowgill's (1996: 326) succinct description of the pluses and minuses associated with the use of phase "meta-terms":

In their aspects of capturing clock time, phase time, or both, the value of meta-terms like "Early Postclassic," . . . is that they have relatively wide, perhaps pan-Mesoamerican, applicability . . . They are much less cumbersome than having to name all of the local phases that are included. However, in practice, there are several persistent problems. . . most Mesoamericanists appear startlingly comfortable with discrepancies of up to two centuries in the segment of clock time that . . . "Classic" refers to. . . A second problem is that these meta-terms often slide back and forth between referring to clock time and referring to phase time, which creates much confusion and impedes clear thinking and clear communication.

3.4: Typological Chronologies in Maya Archaeology

Now that the history of archaeological chronologies in Mesoamerica has been problematized and their intellectual history traced out, I turn more specifically to the history and methods of chronology building in the Maya Lowlands. The chronology of

the Maya area is both a product and a producer of this culture-area's various regional chronological schemes and therefore bears independent analysis. The chronology of the Maya area provides one of the central pieces of the Mesoamerican framework, and it is the correlation of the Maya Long-Count dates, as inscribed on dynastic monuments, with the Christian calendar that largely defines the temporal boundaries of the Classic period.

Chronologies in the Maya area, as in much of Mesoamerica, have long been influenced by ethnohistoric documents, in particular native histories such as the Books of Chilam Balam of Chumayel (Gubler and Bolles, 2000; Makemson, 1951; Roys, 1967; 1949), the Popul Vuh (Goetz et al, 1950; Tedlock, 1985), and the Annals of the Cakchiqueles (Recinos, 1999) among others. In addition to these indigenous chronicles, the works of Spaniards such as Bernal Diaz del Castillo (1996) and Diego de Landa (1978) provided supplementary histories of the Maya area. As Smith (1987, 1991) has pointed out for Central Mexican chronology building, although these documents have been used critically, they have often been taken to provide a historical sequence decipherable in modern archaeological terms. From this perspective, documentary history and archaeologically excavated material culture were perceived to be part and parcel of the same data set, and to provide checks and balances one upon the other.

Historical documents, especially those of the Books of Chilam Balam, Landa's *Relación*, and the few remaining Maya codices allowed scholars to begin to correlate dates in the Christian calendar with those of the Maya system. In particular, the Maya count of the *k'atunob* (periods of roughly 20 years organized into a cycle of approximately 260 years, discussed in detail in Chapter 4.2) could ideally be extended back in time and connected with Long-Count dates recorded on monuments erected

hundreds of years before the conquest (Sharer, 1994: 574-575). The breakthrough of being able to correlate the “absolute” dates of the Christian calendar with the “absolute” dates of the long-count of the Maya was seen to provide the archaeological chronologies with a firm temporal basis.

By associating datable stelae with construction phases, absolute dates could be assigned to ceramic sequences. Though there has been recognition by archaeologists from the beginning that this sort of correlation was problematic (e.g., Spinden, 1917), it nonetheless provided a useful tool for chronology building. In this way the chronology of the Maya Lowlands was given pride of place as the baseline for the Classic period.

Not only could sites without monuments be integrated into a regional chronology on the basis of stylistic similarities of ceramics as compared to sites with monuments (as with Uaxactun, Guatemala in particular), but the chronological links could also be extended throughout Mesoamerica. Once Teotihuacan-style ceramics were encountered in tombs at Uaxactun – tombs that could be assigned absolute dates using stelae – the two sites were seen for the first time as contemporaries. Teotihuacan style pottery found in tombs at Kaminaljuyu in the Guatemalan highlands (Kidder, Jennings, and Shook, 1946), along the south coast of Guatemala in Oaxaca and elsewhere made it possible to subsequently integrate these areas into the Classic Maya sequence. Though no one today would be likely to argue that the Maya Classic Period was the cultural pinnacle of Mesoamerican *history*, the predominance of the Maya in the Mesoamerican *chronology* centered on the Classic period has thus been maintained.⁴

⁴ Returning again to the concept of Mesoamerica as a culture area, it is worth considering that despite the well attested Preclassic and Postclassic connections of “Mesoamerican” societies outside the generally accepted boundaries of the culture area, the limits of the area are largely the same as the distributional

In the 1950s, chronometric dating techniques began to be introduced that were seen to provide other sorts of “absolute” dates (e.g., Cassen, 1993; Libby, 1955; Braswell, 1992; Freter, 1992, 1993; Webster, Freter and Rue, 1993; Zucchi, Tarble and Vaz, 1984), allowing for checks on the ceramic and monumental chronologies. Ceramic variation, however, continues to provide the greater part of the chronological framework because the data are so abundant and analysis does not require complex equipment. Moreover, chronometric dating results, even of the same material, may themselves provide widely variable results with serious interpretational consequences (e.g., Braswell, 1992; Freter, 1992, 1993; Webster, Freter and Rue, 1993).

The development and refinement of chronologies in the Maya area today generally takes the form of typological analyses of artifacts, predominantly ceramics, with checks provided by chronometric dating techniques. I use the example of ceramic chronology, therefore, as one detailed example of material chronologies and their interpretive implications. Though the concept of the artifact ‘type’ had long been a part of archaeological method and theory (e.g., Colton and Hargrave, 1937; Krieger, 1944), the type-variety (or type-variety-mode) system for ceramic typology/chronology as it is used today was outlined initially by Wheat, Gifford and Wasley (1958), and further developed in a series of articles that followed (Smith, Willey, and Gifford, 1960; Gifford, 1960). The method has continually been redefined by researchers and has come to pervade almost all of American archaeology (Hill and Evans, 1972: 239).

Ideally, the type-variety method includes several stages of integration. First, modes of ceramics are identified. In common usage, any discrete attribute of an artifact

has come to be defined as a mode, but this is not how the term was conceived. As originally defined, a mode is any standard, concept or custom that governs the behavior of the society in which the producer of the artifact lived as reflected in a given artifact attribute (Rouse, 1939, 1960). Analytical classification attempts to read the mode out of the artifact's attributes (Rouse 1960: 313). A mode, then, is an attribute with significance beyond the merely descriptive (Smith, Willey, and Gifford 1960).

A significant difference between modes and types is that modes tend to reappear at different points in time and space, though they usually exhibit different forms or contexts (Rands, 1961; Rowe, 1961: 328). Modes may function as horizon markers that indicate culture contact during a given chronological period (Willey, Culbert and Adams 1967: 305). Horizons may include closely related complexes as well as those that share only a few of the horizon markers.

Modal analysis is seen to be helpful in getting at an understanding of the processes that lead to an artifact's production, because modes represent the level at which selection between available choices in fabrication takes place (Rouse 1960: 320). Types, on the other hand, can obscure modal similarity because types as whole units may not reappear. Rouse (1960: 320) holds that while typological analysis is useful for describing change within a region, modes vary more geographically and are therefore useful for interregional comparisons.

The relationship between types and modes, and the differences in their interpretive implications, can cause confusion for archaeologists. Olivier (1999: 110), for instance, states that "there is no point in comparing typological assemblages from

this way Mesoamerica is in many ways a Classic, Teotihuacan-Maya chronological concept.

different periods or areas, for the very reason that they are defined precisely by their chronological and territorial specificity", and ignores the importance of modal variation. For this reason, most ceramic specialists call for the combined use of typological and modal analysis (Adams, 1971; Bellis, 1976; Gifford, 1960, 1976; Linares de Sapir, 1968; Sabloff 1975; Sabloff and Smith, 1969, 1972; Smith 1971, 1989; Smith, Willey and Gifford, 1960; Willey, Culbert and Adams, 1967; cf. Hare and Smith 1996).

The variety is the smallest meaningful unit of analysis that exhibits minimal modal variation. Several varieties may be combined to form a type (or type-cluster) (Gifford, 1960; Smith, Willey and Gifford, 1960; Wheat, Gifford and Wasley, 1958). If types represent cultural habits, than varieties are taken to represent individual behavior (Gifford, 1960: 345; c.f., Sabloff and Smith, 1972: 102). A pottery type is understood in this system to be the product of a culture with both spatial and temporal significance that cannot be removed from that type (Gifford, 1960: 341).

If ceramics at any two sites are too different, such comparisons are impossible (Sabloff and Smith, 1972: 102). It is assumed, therefore, that Maya ceramics are represented by a limited number of types, making intersite comparison possible over time (Sabloff and Smith, 1972: 102). Spatial/temporal groupings of high typological content similarity may be designated a ceramic sphere, though a given area's inclusion in a sphere is qualitative. Spheres are taken to indicate direction and intensity of culture contact (Willey, Culbert and Adams, 1967: 307).

For a given artifact, ware can be both the lowest and highest analytical level (Willey, Culbert and Adams, 1967; Rice, 1976). Ware is defined by the paste composition and surface finish, useful in answering technological questions (Sabloff and

Smith, 1972; Vaillant, 1927, 1935; c.f., Rice, 1976). Varieties and Types cluster into relatively synchronous units that may crosscut the divisions of wares (Wheat, Gifford, and Wasley, 1958). Wares of short temporal duration are considered to be of value as markers of discrete units of both time and space (Sabloff and Smith, 1972). Long duration wares can help to define ceramic spheres (Sabloff and Smith, 1972). Ware is considered to be useful for helping to determine the choices made by potters and determining ceramic rules as well as questions of technological development of ceramics (Sabloff and Smith, 1972: 112; Willey, Culbert and Adams, 1967).

A ceramic complex is the total of all modes and varieties that define the ceramic content of an archaeological unit that is usually understood to be a cultural phase (Gifford, 1976: 11). Because it is composed of ceramic assemblages unique to a particular time and place, the complex often becomes the instrument used for dating (and naming) phases at a site (Gifford, 1976: 11), a process that raises some issues discussed in more detail below. There may be overlapping sub-complexes that have specific cultural significance such as trade, cache vessels, or domestic items (Willey, Culbert, and Adams, 1967: 304). Finally, the ceramic system is a unit of shallow time depth, generally bounded by an archaeological period although it may be shorter (Gifford, 1976: 11; Henderson and Agurcia, 1987; Wheat, Gifford, and Wasley, 1958: 42). The ceramic system has a wide geographic range and consists of only one type-class, it is “*the black-on-white . . . pottery made or used by the people of a particular prehistoric culture throughout a region during a restricted interval of time* (Gifford, 1976: 12; see also Wheat, Gifford, and Wasley, 1958, fig. 2).

The type-variety system is intended to be flexible (Gifford, 1976: 20; Sears, 1960). Yet, archaeologists assume in practice a certain inflexibility such that they may be understood to be talking about a single and unique conceptual category when they are discussing a type, as they must do if there is to be any utility to the concept (Sabloff, 1975: 1-6; Sabloff and Smith, 1972: 102; Whittaker, Caulkins and Kamp, 1998). Consistency in typological usage is imperative (Sabloff and Smith, 1969; Sabloff, 1975: 3; Whittaker, Caulkins and Kamp, 1998) but it is rarely achieved and no “library” of ceramic types (Gifford, 1976: 46) has yet been assembled.

The fundamental problem is that patterning of all sorts in the archaeological record is, in part, a result of our analytical methods rather than ancient behavior (Skibo, Schiffer, and Kowalski, 1989: 388). As newly excavated ceramics are situated in the type-variety framework, there exists the very real possibility that new traits not indicative of the previously defined type to which such ceramics are assigned will be subsumed within that category. This problem can be additive, eliminating the comparative value of the type (Sabloff, 1975: 3). Whittaker, Caulkins and Kamp (1998) have, in fact, determined that differences in individual perception can cause directional rather than random dissonance in typologies, underscoring the seriousness of the problem. The ceramicist is therefore responsible for including as much data as possible for future researchers (Sabloff 1975: 6).

Even basic agreement on how the scheme works is hard to come by. Ware, for instance, is often ignored and removed from the type-variety framework because of the difficulty in differentiating two wares of the same color (Sabloff and Smith, 1972). Perhaps these problems should not be surprising, as they are mirrored in the biological

sciences from which archaeological typology was derived (Brew, 1946; see also Colton and Hargrave, 1937).

Exacerbating the problem, types often come to be viewed as advancements in knowledge and a form of data, rather than just analytical tools and themselves the products of analyses (Hill and Evans, 1972: 241; Jones, 1997: 107; Stoltman, 1978: 728). Thus, it simply cannot be substantiated that general implications for cultural process are implicit in the chronological/typological data (see Adams, 1971: 31). Returning to the question of the chronological aspects of typology, it must be remembered that it is not time that changes artifacts, but rather events in time. There is, therefore, no exact fit between time and type (Read, 1989: 162), a point that is sometimes obscured when ceramics with the similar attributes are assigned different types because a chronological boundary has been crossed.

There is, then, a disjunction between the method of analysis and the implications of the classification of artifacts that is obscured in the usage of types (Read, 1989: 160). The seemingly rapid appearance and disappearance of types ceases to be a feasible concept when dealing with relatively brief time-scales (Read, 1989: 161). Simply put, the type-variety system is meant to express a continuous process of transformation, with types and assemblages conceptually giving way in time to new types and assemblages. But these are defined by a discontinuous framework, creating an inherent paradox (Binford and Sabloff, 1982: 145; Dunnell, 1971: 116).

This problem is further emphasized by a fundamental point about chronologies based upon changes in material styles stated most clearly by Childe (1951: 58), “Archaeological time exhibits seriation but not duration.” That is to say, seriation

reflects changes in material culture, but there is no *necessary* relationship between the relative chronologies established by the seriation of types and any particular unit of physical time (Cowgill, 1996: 325). The duration of seriationally defined periods is established post hoc, and not being inherent in the material itself, the two can never be entirely united except through archaeological practice. Only an understanding of change that incorporates such a chronological practice from the beginning of the analysis might be expected to incorporate and approximate both the temporal and material aspects of an artifact.

3.5: Nested Chronologies

The problem of interpreting the chronology of any one aspect of material culture is compounded because archaeologists use multiple chronologies, and each carries with it unique interpretive baggage. Yet, in archaeological practice each of these chronological formats is bound up and nested within one another. Cowgill (1996: 325) glosses the different kinds of chronologies used by archaeologists as: 1) clock time, 2) phase time, 3) social time, and 4) characterization.

Clock time is “time of the physical world, measured by clocks,” and is perceived by archaeologists to pass regardless of human action. Phase time, on the other hand, refers to archaeological phases such as the Preclassic/Classic/ Postclassic model devised by Willey and Phillips (1958: 22), and they are usually ranked in ordinal sequences. Social time is considered by Cowgill (1996: 325) to reflect *emic* categories, and refers to “the immense variety of concepts, experiences, feelings and calculations of individuals. . . somehow connected with the physical phenomenon of clock time.” In our own

experience Cowgill's social time would include our daily round of meals, a cultural expectation that breakfast is a certain kind of meal coming early in the day and distinct in time, content, and meaning from either lunch or dinner. Finally, characterization is the definition of segments of clock or phase time according to "some interesting social and cultural features, and/or distinguished from some preceding and following segments by interesting changes" (Cowgill, 1996: 325). Cowgill views characterization as defining the use of a term such as "Hellenistic." None of these four has a necessary relationship to any other, but in practice they each structure the interpretation of each other.

When Thomsen first developed his stone/bronze/iron age typological chronologies for the analysis of cultural materials, he not only introduced the concept of time into the study of prehistory (Bibby, 1956: 13 in Stoltman, 1978), he also created the first explicitly nested archaeological chronology (see Chapter 2.2, and 2.3). This led to significant interpretive problems: if stone-age cultures are ancient, then those cultures that use stone tools are representative of ancient lifeways. Though processual archaeologists shifted the focus of analysis away from the development of typologies to the processes that resulted in change over time, they retained the cultural historical typologies and chronologies and their relations to one another (Graves, 1998).

This problem of nesting is fundamental to understanding Mesoamerican and other archaeological chronologies. It was Vaillant (1927, 1935) who provided the first effective articulation of Lowland Maya and Central Mexican ceramic and cultural chronologies (Boas, 1913; Gamio, 1913), drawing equivalence between cultural development, ceramics and the temporality of these disparate areas. As the type-variety method has been developed, most analysts provide frameworks which link the ceramic

chronologies of individual sites with regional chronologies centered on the site of Uaxactun, and subsequently with some version of Willey and Phillips' (1958: 22) Lithic/ Archaic / Formative / Classic / Postclassic scheme. Because Willey and Phillips never intended their framework to be attached to a particular temporality, the integration of their developmental chronology with clock time has resulted in much of the ambiguity discussed throughout this chapter. These nested chronologies have, in turn, often been linked to social models such as Service's (1962; Sahlins and Service, 1966) bands / tribes / chiefdoms / states.

The result in archaeological practice is often the interpretational equivalence of ceramic change and cultural change, wherein a ceramic complex represents a cultural phase that in turn defines a developmental stage and social organization. This is because cultural phases are viewed as systemic wholes, composed of a ceramic complex, architectural complex and all other material complexes (R.E. Smith, 1971: 7). Willey (1973: 13) acknowledges that different aspects of material culture change at different rates, but feels that it is likely that there are some points "in which significant and notable changes in several aspects of culture come about more or less concurrently". From such a perspective, therefore, one should *expect* periods of systemic change, even though "the correlation between units, ceramic systems, all other material classes and human socio behavioral units are neither easily nor reliably defined" (Ball, 1985: 405).

Standard chronological inevitably obscure the nature of change, not because the archaeologist is unaware of the complexity of these issues, or lacks the data, but

intentionally as part of the creation of a simplified model that facilitates interregional comparison (Rands, 1973: 45; Stone-Miller 1991: 20).⁵ Thus, though phase/period divisions are recognized as arbitrary and reflective of the biases of their origin, they are used because they remain convenient (Sharer, 1994: 48). Some archaeologists (e.g., Sharer, 1978) have explicitly tried to broaden the definition of cultural phases at a given site by considering chronologies that encompass the differential nature of change in multiple categories of material culture and abandon the use of ceramic complex names for cultural phase names. Unfortunately, this method has not been widely adopted in the Maya area.

The interpretive implications of this nesting are important. The discovery of a particular type implicitly indicates a certain phase, which in turn is indicative of a period (be it cultural or temporal), which is in turn indicative of a social structure. As Pasztory (1978: 5) succinctly describes the problem, “since the several Mesoamerican cultures do not start or finish periods of climax at the same time some may be Classic in date but Preclassic or Postclassic in character, a distinction that is blurred by period designation.” Other aspects of the material culture from a site at a given time may not agree with the implications of the ceramic typological analysis, and the researcher may take note of this, but there is no doubt that this will affect interpretation. The interpretive problems can also be reversed. If stratigraphic positioning identifies a given chronological period, it may encourage the archaeologist to ignore significant modal variation of the ceramics, and all that the variation may imply, because a given type with some modal affinities is expected for that period.

⁵ The interpretive problems arising from graphic representation of chronologies and the use of

This nesting has led some archaeologists to interpret variations in any one aspect of material culture, particularly ceramics, as indicative of social groupings, and changes in those groupings over space and time (Graves, 1998; Krieger, 1944). Despite the often-explicit recognition that particular aspects of material culture do not represent a culture (e.g., Hodder, 1986; Rouse, 1960; Sears, 1960; Smith, 1971; Smith, Willey, and Gifford, 1960; Willey, Culbert, and Adams, 1967; Willey and Phillips, 1958: 12), common usage would indicate that most archaeologists tacitly conflate material types with cultures or cultural phases. The problem arises in no small part because the names of ceramic complexes are so often shared with cultural phases (Willey, Culbert, and Adams, 1967). The result is that archaeologists often refer to ceramic complexes as if they constituted a culture (e.g., Bennyhoff, 1966; Gifford, 1974; T. Kidder, 1990; Willey, Culbert, and Adams, 1967; see Sharer, 1978 for an alternative model), and often view diachronic ceramic variability as a direct reflection of socio-cultural change (Arnold, 1985: 1; Bey, n.d.; Grieder, 1975: 850-851).

3.6: Discrepancies, Homogeneity, Heterogeneity

Despite these criticisms, archaeologists have long recognized a discrepancy between the boundaries defined by any one aspect of material culture and those defined by ethnicity or socio-political structures (Childe, 1951: 47; Hodder, 1978: 4). Although cultures are typically viewed as “mass, composite, and unitary phenomena” (Hodder, 1978: 24; see also Jones, 1997: 106), the different types of artifacts used to define a culture do not always share the same temporal or spatial boundaries of distribution

chronological charts have been most thoroughly and clearly discussed by Stone-Miller (1991).

(Shennan, 1978). Because the type is conceptually a homogenous group of artifacts that share a recurrent range of attributes (Clarke, 1978: 209; Willey and Phillips, 1958) it adds to many of these problems.

Typologies and chronologies are devices intended to reduce difference in order to produce interpretation (McGlade, 1999: 143; Shanks and Tilley, 1988: 119). The *a priori* assumptions of the investigator guide the classification and seemingly irrelevant observations are ignored (Hill and Evans, 1972). In practice, therefore, though materials in some predefined areas reflect interregional material *heterogeneity*, it may also be the case that there is no *homogeneity* within a region (Englebrecht, 1978). The longstanding analytical focus has been on similarities between objects within any given archaeological space (e.g., culture area, site, building, etc.), when it is the differences between them that provide the boundaries (Hodder, 1978: 13, 1986: 131, 143). As an example, because the use of the type-variety method encourages a focus on higher-level taxonomic units⁶ (e.g., ceramic group, complex, sphere) it often obscures variability within a phase (Love, 1993: 17; Rowe, 1959; Davis, 1981: 64).

Finally, the identification of types and the development of chronologies based upon data from a given site act to center that site and to make peripheral those sites at which the same type or chronology is subsequently applied (Joyce, 1993; see for example Canby, 1952). This problem arose in the archaeology of the Maya area before the development of the type-variety system, and as a result was carried over into the original implementation (though not conceptualization) of that system. As a primary example,

⁶ Though this is also sometimes the result of an insufficient sample or poor preservation that may eliminate the ability of the researcher to identify ceramics at the type or variety level (LeCount 1996: 130; Sabloff 1975: 124-125).

because the ceramic sequence from the site of Uaxactun was the best known, its ceramic complex names are commonly applied to the chronological horizons and ceramic spheres covering much of the Maya lowlands (Willey, Culbert, and Adams, 1967; for one alternative see French, 1983).⁷ As new types are continually defined, they must be integrated into an existing system that views the ceramic complexes of this one site as the baseline of participation in a cultural/regional chronological system.

3.7: Conclusions: What does It all Mean for Interpretation?

I have sought to draw out the historical nature of chronologies in the archaeology of Mesoamerica and the Maya area specifically, not to deny their utility as interpretive devices, but rather to make explicit many of the implications and limits of their use. Chronologies are devices necessary for interpreting the material culture that is, ultimately, the only window that archaeologists have onto the past. The chronologies predominantly used in Mesoamerica are extremely useful for answering the cultural-historical questions for which they were developed. They allow for the homogenization of cultures, and the telescoping of continual cultural change into discrete and normative phenomena, allowing for the relatively easy transmission of ideas among archaeologists, as well as between archaeologists and the public. This should not be viewed pejoratively, for it is neither good nor bad except in the implementation.

⁷ Uaxactun had long been considered the center of the “Old Empire” (Barrera Vasquez 1946), and all other Maya centers and their ceramics were inevitably compared as peripheral phenomena. As R.E. Smith (1940: 248) states, “it is really surprising that Piedras Negras and San José do not differ more definitely. It is quite obvious that they were influenced by other cultures and yet the Central Peten [Uaxactun] influence is strong.”

Cultural-historical chronologies, however, cannot be adapted to adequately frame processual or postprocessual questions about cultural change, for they ground the ideally dynamic models of both paradigms in the normative. Additionally, cultural-historical chronologies carry with them the interpretive baggage of their historical development. In particular, as archaeologists focus increasingly on questions such as the nature of agency, gender, and other salient identities that are only realized in the social moment, it is incongruous to speak of people participating in chronological phases such as Late Classic, or Tzakol Phase in Central America.

In understanding that our own professional chronologies are the product of a historical discourse, however, we may begin to work our way beyond the Cultural Historical. It becomes clear that our professional chronologies are fundamentally similar to the quotidian and non-professional chronologies of ourselves and of the societies that we study in many ways: 1) they are the products of our social practice, 2) they provide one of the key frameworks for understanding social behaviors by locating and limiting those behaviors in time and space, 3) all chronologies are nested within chronologies at different scales of analysis, or defined in contrast to the boundaries of other chronological possibilities at the same scale, and 4) because we must choose among the chronological possibilities to facilitate our understanding of archaeological materials, we purposefully reduce the ambiguity inherent in our chronologies.

Culture History will likely always play a part in archaeological interpretation, but it cannot provide the only chronologies. Brew (1946) long ago called for more typologies to address different archaeological questions. So too must we develop new chronological concepts to address new archaeological issues not encompassed by Culture

History (see also Hare and Smith, 1996: 281). We cannot escape entirely the influence of those archaeological chronologies that already exist. As part of academic discourse, they will necessarily influence the development of newer models. However, we are able to create interpretive frameworks as part and parcel of the questions that we wish to ask, rather than merely adapting models ill-suited to the task.

Finally, an examination of the historical development of chronologies in Mesoamerica and the Maya lowlands makes one very basic point exceptionally clear: our chronologies are our own. While the Maya Long-Count dates, changing ceramic and architectural styles and other material correlates of social behavior surely helped to shape emic perceptions of social time and place in the Maya area, they did so in Maya terms. Despite the fact that our archaeological cultural phases are based in large part on the material culture of the Maya they do not reflect the lived chronologies of the Maya. I will argue in the following chapters, however, that despite the disjunction in the historical development of our own chronologies and those of the Maya, archaeologists in identifying the 6th century AD as a period of profound cultural-chronological change have intersected with some indigenous concepts of a chronological breaking point. The question remains, however, as to how this is possible if the chronological practice of archaeologists and of the ancient Maya is so fundamentally different.

Chapter 4: Indigenous Chronologies in Practice

“A society’s self-understanding is largely a function of historical signs that mediate between its past, present and future states. It is this semiotic mediation that makes possible the objectification necessary for members of a society to participate in culture”

(Parmentier, 1985: 150)

4.1: Maya Chronologies and Archaeological Inquiry

Now that I have outlined what I mean by chronology,¹ as well as outlining the history and interpretive implications of archaeological chronologies, I wish to turn to the question of chronologies among the Maya. Because chronology is created in social practice, it will often have material correlates, and archaeologists *can* access indigenous chronological practice through an interpretation of material culture. In its materiality, indigenous chronological practice created the data and structures the interpretation of past societies just as much as, and perhaps more than, our own modern archaeological chronological frameworks.²

The question, then, is not only how do we achieve some insight into the actions of the Maya that were, in part, the outcome of chronologies in practice, but also how do we know that what we are studying would have had some indigenous recognition? This chapter explores both of these important issues. In particular I focus on how the construction and destruction sequences of royal architecture and monuments are indicative of Classic Maya conceptualizations and manipulations of chronology towards

¹ As stated in Chapter 2.2, “all social activity, by all people . . . is structured by an understanding of how time, place and person are recursively related . . . chronology at its basis is an interpretive framework that structures understandings of these time/place/person relationships . . . It is a framework that facilitates the integration of social action with a history selected from available historical possibilities.

² Archaeologists in the Maya area are admittedly privileged in their access to textual evidence for indigenous chronologies in the pre-Conquest era. The possibility of interpreting indigenous chronologies

political ends. This will form the basis for the interpretation of the case studies to follow in subsequent chapters.

The Maya are often described in terms that would indicate an obsession with time and the predictive nature of their various calendrical cycles.³ I would argue that it is perhaps more accurate to say that anthropologists and archaeologists are obsessed with the Maya concern for time. The Maya were, and are, no more and no less concerned with time than we ourselves are – although our concerns with, and understandings of time clearly differ dramatically from those of the Maya. As I note throughout this work, notions of time and space play a fundamental role in constructing identity and social interaction for all people everywhere.

The Maya conception of time is, perhaps, notable from our own European perspective in terms of its relationship with the divine. The Judeo-Christian-Muslim notion of time holds that time was divinely ordered from the point of creation onwards. God in this conception exists outside of time, outside of space and therefore - with few exceptions - beyond human experience and human intervention. While time may have been sacred in its divine inspiration, and continues to be linked to the sacred in terms of its relation to religious festivals marked out on our calendar, time has largely become that most secular of things - a commodity.

For the Maya, however, as attested both epigraphically and ethnographically divinities are closely connected with time and place (Gossen, 1974; Landa, 1978; León-

in the absence of such textual data is addressed in Chapter 9.

³ Helms (1988: 34), for one, states of the Maya and other Mesoamerican cultures that their “recognition of time was the most all-encompassing of their cosmological systems.”

Portilla, 1988; Thompson, 1966; Roys, 1967; Sharer, 1994; Tedlock, 1992a, 1992b).

Furthermore, since Maya divinities exist within time and space as do humans, human performance can play a fundamental role in defining the resultant nature of time. It is this concept, perhaps, that so intrigues the modern observer and is a theme that will be explored in detail in this chapter.

4.2: Maya Calendrics and Space-Time

Maya chronology is most often discussed in terms of the various Maya calendars known both from ethnographic and epigraphic sources. I will not go into a detailed exploration of the evidence for, and details of, each of these calendrical schemes.⁴ It is, however, useful to briefly explore the nature of each, and outline what we know of their social implications. Of particular import is the need to look at each of these diachronically. The construction and usage of these calendars is most often discussed in holistic and synchronic terms, although some changes are generally noted to have taken place between the end of the Classic Period (c. AD 900) and the period of Spanish Conquest during the 16th Century. In this and subsequent chapters,⁵ however, I will pay particular attention to changes in the content of inscriptions recording calendrical cycles as such changes are evident during the Classic period, from approximately AD 250 to 900.

A basic component of the calendrical cycles used by many Maya, as well as other Mesoamerican, groups is the conjunction of a “sacred almanac” of 260 days (commonly

⁴ For detailed synopses of the known calendrical schemes of the Maya see Aveni (1980), Harris and Stearns (1992), Sharer (1994), and Thompson (1970).

⁵ See chapters 7 and 8.

called the *tzolkin* by researchers), along with a *vague year* or *haab*.⁶ The *tzolkin* is not divided into months, but rather is a cycle of twenty day names prefixed with a number from one to thirteen (e.g., 4 Ajaw; see Fig. 4.1). Each day is associated with a patron deity that provides an individual character, or personality, to that day. If ethnographic and ethnohistoric analogy holds true for the Classic Period, people perceived a child to be greatly influenced by the character of the day on which he or she was born (see Tedlock, 1992a, 1992b, 1993; Monaghan, 1998a).

The *haab*, on the other hand, is an approximation of the solar year, composed of eighteen months of twenty days each. Days are named by the combination of a number, one to twenty, attached as a prefix to the month name (e.g., 8 Kumku; see Fig. 4.2). The final five days of the *vague year* composed a sort of non-month called *Uayeb*. Ethnographically and ethnohistorically these days are perceived not merely as unlucky, but as ill formed, ambiguous and amoral (Monaghan 1998a: 140-141).

These two systems were integrated into what is generally referred to as the calendar round, providing a date such as 4 Ajaw 8 Kumku.⁷ Modern scholars often represent this graphically as the meshing of two cogwheels (Fig. 4.3). Because of the number of permutations possible in combining a 260-day cycle with a 365-day cycle, only four of the day names in the *tzolkin* can be associated with the first day of the *haab* year. These four day names, along with their thirteen numerical prefixes, are identified

⁶ The terms *tzolkin* and *haab* are not employed in Classic Period inscriptions for these concepts. During the Classic Period *haab* described a period of 360 days (Stuart, 1996: 150). These terms are employed in this work, as they are in common usage among Mayanist scholars.

⁷ A note is required here on the orthography of Mayan terms used throughout this dissertation. When figures or quotes are drawn from other sources I maintain the orthography of those sources. In all other cases I adopt the orthographic conventions most recently in use by epigraphers Stephen Houston and David Stuart (for examples see Houston, 2000, 2001; Stuart, n.d., 2000).

as the year-bearers.⁸ They, too, are associated with deities that have specific personalities that dramatically influence the character of the year.⁹ During the Classic Period the year-bearers were the days Akbal, Lamat, Ben and Etz'nab.¹⁰ Once every 52 (haab) years the same tzolkin and haab date combination was repeated.

The evidence for calendrical cycles for the Classic Period is unique in that monuments recorded what has come to be known as the *Long Count*. The Long Count is, in one sense, an absolute calendar linked to a starting or 0-date. On the other hand, it is also part of a longer repeating cycle of dates that repeats approximately every 5,128 solar years.¹¹ The Long Count is composed of five units, 13 baktuns (each of 144,000 days), 20 k'atunob (each of 7,200 days), 20 tuns (each of 360 days), 18 uinals (each of 20 days) and 20 kins (each is 1 day). These are combined into a date commonly written by scholars as a series of five numbers separated by periods (e.g. 13.0.0.0.0), though again this is simply shorthand for glyphic inscriptions using bar-and-dot numeration¹² and the associated glyph for unit-time (e.g., baktun; Fig 4.4). The Long-Count is generally combined with the appropriate Calendar Round date (e.g., 13.0.0.0.0 4 Ajaw 8 Kumku).

These Long-Count dates often introduce Classic Period inscriptions on monuments,¹³ and in such circumstances are identified as the *Initial Series*. The basic

⁸ Though the year-bearers remain the same regardless of the numerical prefix, ethnographic evidence would suggest that the number, too, had an influence on character (Tedlock, 1992a, 1992b; Tedlock, 1993).

⁹ See Landa (1978) for Colonial era accounts of the traits of some of the year bearers.

¹⁰ For unknown reasons by the Colonial Period in Yucatan the year-bearers shifted forward to the days Kan, Muluc, Ix, and Cauac. In the highlands of Guatemala, however, the equivalents of the Classic Period year bearers are still maintained in the same order (Sharer, 1994: 565; B. Tedlock, 1992).

¹¹ The current cycle began on 13.0.0.0.0 4 Ajaw 8 Kumku, which corresponds to a date in our calendar during the year 3114 BC, and will conclude on December 21, 2012.

¹² For the "head" glyph variants of these numbers (see Harris and Stearns, 1992: 185-186).

¹³ The Initial Series is itself preceded by a commonly oversized glyph dubbed the *Introductory Glyph*, which contains a central element that most probably represents the patron deity of the haab month with which the Initial Series is associated.

Long-Count may also be appended with a supplementary series of glyphs which define other patron deities (“Lords of the Night”) of the given date, as well as glyphs that are concerned with lunar cycles. The Initial Series sets the beginning date for a given inscription, but the same inscription may move on to engage with events that took place before or after the Initial Series date. *Distance Numbers* are therefore provided in many inscriptions, intended to instruct the reader how many k’ins, uinals, tuns, or other units to count forward or backward from the initial date.

Of particular import to the Maya from at least the Classic Period onwards was the marking of the k’atun (approximately 20 year) period endings such as 9.6.0.0.0 9 Ajaw 3 Uayeb (see Coggins, 1980). During the Classic Period, Maya rulers often erected stelae to commemorate such period-ending dates.¹⁴ In some cases these dates were shortened to read, for example, K’atun 6 9 Ajaw 3 Uayeb. Though lacking the enormous time-depth of the full Long Count, such a date nonetheless can specify only one day within a cycle encompassing almost 19,000 years. Occasionally during the Classic Period, such a k’atun-ending period might be marked only by the Ajaw date upon which it fell, thus K’atun 6 9 Ajaw 3 Uayeb would be further reduced to simply K’atun 9 Ajaw, thus making such a date accurate to within only 260 tuns (about 256 solar years) (see Fig. 4.5), after which the cycle would repeat.¹⁵

During the Colonial Period, however, this Short Count date, referred to by the Maya themselves as “the count of the k’atunob” or *u kahlay k’atunob* (see Landa, 1978:

¹⁴ Monuments other than stelae were also concerned with the celebration of k’atun-ending dates. At Palenque, for instance, the interior panels of the Temple of the Inscriptions record the historical association between nine of Palenque’s rulers and k’atun-endings (MacCleod, 1983; Schele and Mathews, 1998: 105). A petroglyph at Piedras Negras records the K’atun 7 Ajaw (Fig. 4.5).

¹⁵ For the mathematics of this cycle see Harris and Stearns (1992: 11-25) and Sharer (1994: 572).

81), provided the exclusive means of recording dates beyond the 52-year Calendar Round. Landa (1978: 81) provided a graphic representation of this k'atun count, as produced by one of his informants, in the form of a wheel (Fig. 4.6). Each K'atun, 1 Ajaw through 13 Ajaw, was associated during the Colonial Period with a given deity, along with a mix of history and prophecy, that influenced the character of the 20-year period of the k'atun. These historical-prophecies were recorded in the various Books of Chilam Balam (e.g., Gubler and Bolles, 2000; Makemson, 1951; Roys, 1967, 1949), and the possible importance of these prophecies to Maya society is discussed in greater detail below. Given the pervasive association of deities and units of time/space, however, it is not difficult to imagine that similar prophetic histories were associated with k'atunob during the Classic Period.

The Maya recorded other sidereal and planetary cycles in Classic Period monumental inscriptions, as well as in Postclassic bark-paper books, or codices (e.g., Bricker, 1988a, 1988b; Bricker and Bricker, 1992). These included perhaps most importantly a concern with the cycles of Venus, which were apparently often associated with warfare events (Closs, 1979, 1981; Harris and Stearns, 1992: 129-135; Lounsbury, 1982).¹⁶ The cycles of Mercury, Jupiter, and Saturn and their conjunctions were apparently all recorded in association with significant events in the lives of Maya rulers (Harris and Stearns, 1992: 137-38; Lounsbury, 1989).

¹⁶ More recently Mark Child (1999) has convincingly shown that incidents of warfare as recorded in the inscriptions of the Classic Period are more often associated with lulls in activity associated with the agricultural cycle (e.g., times between planting and weeding) than with the movements of Venus.

4.3: Ethnographic and Ethnohistoric Evidence for Maya Chronology in

Practice

The conceptualization of all of these chronological schemes as cycles has helped develop the notion expressed in the anthropological literature that “indigenous” time in traditional societies (e.g., the Maya, India, and Bali among others) is exclusively conceived of as cyclical, predictive and repetitive (e.g., Agrawal et al., 1999; Cremo, 1999; Greenhouse, 1996). In contrast modern “Western” time is conceived of as linear, and each moment unique with no inherent reference to the past (e.g., Pearson and Richards, 1994: 59; cf. Gillespie, 1989: xxxv). The concept of an overriding and predeterminant cyclicity to Maya chronology was long the anthropological norm, even among many of those who also recognize the importance of practice in determining the social character of chronology (e.g., Farriss, 1984; Léon-Portilla, 1988; Puleston, 1979; Thompson, 1966: 167, 1970).

This concept of a potentially debilitating adherence to cyclical notions of time is mirrored in studies of other Mesoamerican societies. A particularly glaring example is Todorov’s (1984) argument that the leaders of the Aztec empire were unable to effectively combat the Spanish as a result of their adherence to cyclical predictions that appeared to call for the return of Quetzalcoatl and the fall of Motecuhzoma (cf. Gillespie, 1989; Greenhouse, 1996; Hassig, 2001). Thompson makes a nearly identical argument for the effect of prophecies related to the K’atun 8 Ajaw, and the destabilizing effect of these prophecies during the conquest of Peten Itza, Guatemala. He states, “It is possible that they [the Itza] did not fight well because they knew resistance against the power of the incoming k’atun was useless”(Thompson, 1966: 167). Puleston (1979) proposes a

similar interpretation for the collapse of polities in the Southern Maya Lowlands at the end of the Classic Period, going so far as to call the Maya adherence to cyclical prophecies “pathological.”

In creating a dichotomy between linear and cyclical time we ignore, or at the very least under-emphasize, the point that the nature of the time/place/person relationship is realized in practice, and is not predetermined. Notions of cyclicity and linearity may provide a cultural background or theme for a given action or interaction, but they are not the only determinant in social practice. Indeed, more recent scholarship dealing with the Maya ethnographic, ethnohistoric and archaeological sources has begun to emphasize the role of practice (e.g., Farriss, 1987; Gossen, 1974; Jones, 1998; Hofling, 1993; Léon-Portilla, 1988; Restall, 1998; Tedlock, 1992; Tedlock, 1993; Thompson, 1966: 165; 1970; Vogt, 1989).

The concept of a nearly slavish devotion to cyclical calendar prophecies did not, it must be noted, originate with modern scholars. The 17th century history of the conquest of the Peten Itza region of Guatemala makes much of the fact that the priest Avendaño was able to convince the Itza lord Kan Ek’ that the K’atun 8 Ajaw had arrived, and with it the moment for capitulation to Spanish authorities (see Jones, 1998; Villagutierre Soto-Mayor, 1983). Nor is the difficulty in sorting out the roles of social practice, cyclicity and linearity restricted to scholars of Mesoamerica. These issues have also been dealt with in Polynesia (e.g., Obeyeskere, 1993; Sahlins, 1982, 1989), India (e.g., Agrawal, et al. 1999; Cremo, 1999), Bali (e.g., Geertz, 1973; Howe, 1981), and pre-modern Europe (e.g., Banks, 1991; Grafton, 1995; Pearson and Richards, 1994a), to note but a few examples.

More recently, scholars have begun to reassess the concept of cyclical time in general. As Alfred Gell (2000:256) states succinctly, “having a repetitive/cyclical schedule for events does not mean having an idea that time itself is repetitive.” For the Maya, this same concept might be read as meaning that the temporal cycle did not return to the same point, but rather to the same potential social state (Farriss, 1987; see also Jones, 1998: 14–15; Restall, 1998: 43).¹⁷

It is the idea that these social states are simply potentialities, and not predeterminations, that I wish to explore. In discussing modern Tzotzil concepts of cyclicity in Chamula, Gossen (1974) notes that though the four creations identified by Chamulas are conceived of as part of a cycle, each creation is not conceived of as a mere repetition of previous events; rather each has a distinct character. It is the potential for human behavior to bring about the destruction of each creation that is continually renewed. Gossen further states that an overriding concern of Chamulas is “the layman’s role in preserving the social and natural order on a day-to-day basis” (Gossen, 1974: 89). This emphasis on performance to maintain the temporal/social order is often noted in ethnographic accounts of different Maya groups (e.g. Hofling, 1993; McGee, 1990; Neuenswander, 1981; Tedlock, 1992; Tedlock, 1993; Vogt, 1998).

Ethnohistorically, too, the role of individual or group performance in developing the character of a given spatial-temporal cycle is thoroughly documented. Thompson calls such behavior “rites of expiation and hedging” (Thompson, 1966: 165), intended to avert the ill omens of certain days, *k’atunob*, or other periods. Landa (1978: 63) provides a highly biased, but nonetheless important description of such practices:

These ceremonies over, and the evil spirit exorcised according to their deluded belief, they looked on the coming year as a good one, because it was ruled by the character Kan and the bacab Hobnil; and of him they said that there was no sin as in his brothers, and because of that no evils would come upon the. But since they often did so come, the evil one provided ceremonies therefor, so that when they happened they might throw the blame on the ceremonies or celebrants; and thus they continued always deluded and blind.

Thus in potentially good years, bad things might still occur as a result of poor ritual performance, while in potentially bad years ceremonies were provided to bring about positive results. These rituals were not conducted post hoc, intended to stave off the results of a social state that had already come into being. Instead they were an integral part of bringing a desired social/spatial/temporal state into being.

The importance of action in determining the social/temporal state is further highlighted by the behavior of the Itza and Kowoj nobles during the final conquest of the lakes region of the Peten (Jones, 1998; Villagutierre Soto-Mayor, 1983). The Spanish account makes much of the belief that the priest Avendaño was able to convince the ostensible ruler of the Itza, Kan Ek', to accede to Spanish domination as the K'atun 8 Ajaw had arrived, and with it the foretold fall of the Itza kingdom.¹⁸ Indeed, the reported statements of Kan Ek' at first glance seem to support this interpretation, "And that this is all true – that the time of the prophecies of the ancient priests has come . . . and to the governor of this captain I will render homage" (Villagutierre Soto-Mayor, 1983: 211).

Yet, the situation is clearly more complex. Not all of those nobles at the gathering with Kan Ek' and Avendaño were willing to lay down their arms. The

¹⁷ Howe (1981) similarly notes that in the Balinese concept of cyclical time, cycles do not return to the same temporal point, but to the same "logical point".

¹⁸ It is this incident, perhaps more than any other, that has provided fodder for an adherence to the notion that not only time, but events, were held to be cyclical to the Maya.

AjKowoj, a bitter rival of Kan Ek',¹⁹ is reported to have rebuked the possibility of peaceful domination, saying instead, "And what does it matter if the time be completed, if this fine point of my flint lance is not yet worn out?" (Villagutierre Soto-Mayor, 1983: 249). Even Kan Ek's own statement, when taken in context, is far more ambiguous than is generally recognized:

You will also tell him [the representative of the governor of Yucatan] that when he arrives at this village from which you have come, he should call me, and at his command I will go to see him, to learn if he comes in peace – because if he comes directly to my village I will declare war upon him.

And that this is all true – that the time of the prophecies of the ancient priests has come, and I urgently wish to see your governor. . . to the governor of this captain I will render homage, because my ancestry is from the province of Mayapan.
(Villagutierre Soto-Mayor, 1983: 211)

In the context of the very divided political landscape of the Peten region (see Jones, 1998) the statements of AjKowoj and Kan Ek' paint a very different picture from that of the unified obedience to calendrical prophecy that is often described. Jones (1998) has thoroughly described the factionalism present in the Itza case, and the statements made by AjKowoj indicates that at least some of the regional nobility were unwilling to follow the lead of Kan Ek'. Furthermore, it is not even clear that Kan Ek's concern is primarily with the k'atun. He seems to be concerned equally with a peaceful solution that would ideally leave him in charge – for rendering homage is not abdication – as well as one that would reinforce his authority by renewing his ancestral ties to Mayapan.²⁰

¹⁹ The forces of AjKowoj had apparently attacked and burned some of the buildings of the Itza capital at Noj Peten shortly before the arrival of Avendaño's party (Jones, 1998: 197).

²⁰ This seems very much akin to the concern of Kan Ek's contemporary, Don Juan Xiu, writing in Oxlutzcab in 1685. In a chronicle that in other ways appears to be a simple recounting of cyclical dates,

As much as he is fulfilling prophecy, therefore, Kan Ek' was attempting to maintain his authority in the face of potentially devastating threats. These dangers came from both Spanish forces as well as his own recalcitrant neighbors, AjKowoj in particular, whom he may have perceived as the more immediate threat. Several Spanish accounts make note of the fact that Kan Ek' was, indeed, motivated by his desire to see the defeat of his regional enemies (Jones, 1998: 213).

Furthermore, Kan Ek's failure to effectively control his own people during Avendaño's visit to Noj Peten makes it evident that there was no social movement unified by calendrical prophecies (Jones, 1998: 208-209). That, in fact, the Itza and Kowoj did violently resist the Spanish during the final conquest of the Peten is rather striking evidence that cosmic cycles did not pre-determine social behavior. Carol Greenhouse's description of the fall of Tenochtitlan and the death of Motecuhzoma resonates in this case as well: "failure was not destiny. It was defeat" (Greenhouse, 1996: 174).

Both Restall (1998) and Farriss (1984, 1987) have suggested that Maya calendrical prophecies served an important social function in dealing with cultural traumas such as conquest. Farriss (1987: 115) suggests that the Maya were, and are, fundamentally concerned with the maintenance of social and cosmic order, which are for them one and the same. Cyclical notions of time fulfill this need by continually offering evidence of cosmic order, and are a counterforce to random events and processes that represent social chaos and evil. Following this notion out, Farriss states that the elaborate

Xiu makes special mention "linear" dates that focus on his ancestors's role as "rain-bringers" and nobles at both Mani (the province within which Mayapan is located) and Chichen Itza, thereby reaffirming his own

calendrics of the Classic Period were developed as “a cycle so large that it could in theory encompass any conceivable linear sequence, to account for any contingency and thereby affirm the principle of cyclicity over the appearance of uniqueness and irreversibility [i.e. disorder, chaos and evil]” (Farriss, 1987: 114).

Restall (1998) furthers this idea. That the number of bad predictions far outnumber the number of good predictions in such works as the various Books of Chilam Balam is clear (Thompson 1966: 166; e.g., Gubler and Bolles, 2000; Makemson, 1951; Roys, 1949, 1967). In interpreting these prophetic writings, Restall concludes that the chronometric confusion that appears to confound any attempts to reconstruct a fully linear history from the events described is intentional. The Chilam Balam prophetic-histories, in particular those dealing with foreign invasions, are intended to conjoin events which linear history would read as separate. As he states, “It seems most likely, therefore, that both the Precolonial and Conquest periods are being described here . . . intended as an indictment of foreign invasion and political change, the evils of which are considered endemic to the process, regardless of the who-and-when specifics” (Restall, 1998: 130).²¹ Though the specific events are not pre-ordained, they may be easily encompassed as “regrettable continuities in Maya life”, and thus cyclical historical-prophecies act to blunt the effects of conquest, drought, or other traumas that might befall society (Restall, 1998: 43).

One thing seems clear: the historical-prophecies of the Maya were not static, but were dynamic and malleable for those who wielded the authority to use them. What

status as a noble with the accompanying rights and prerogatives accorded him by the Spanish Crown (Restall, 1998: 81).

²¹ See Chapter 7.3 for a discussion of a Classic Period example of the blurring of past and present, evident

Jones (1998: 14) calls the “k’atun historian” thus had access to a significant source of social and political power. Prophetic histories such as the Books of Chilam Balam could be continually reinterpreted and rewritten to account for, and gain advantage in, the present (Jones, 1998: 14-15). Though Maya rulers during the Classic Period based some measure of their authority upon their divine nature, as Eric Wolf (1999: 285) states:

[It is] unlikely that ultimate sacred propositions remain in place by virtue of their own ineffable qualities. It is more probable that their very ambiguity will invite challenges and threaten destabilization, unless they can be made secure through adequate means of domination. Such means usually combine outright force with hegemonic powers of persuasion.

Mesoamerican rulers, then, were in some sense embodiments of fundamental powers, but their roles were nonetheless negotiated (Houston and Stuart, 1996, 2001), and their ability to direct chronological discourse played a significant role in defining and maintaining their authority.

This then, briefly, is the dynamic I wish to expand upon: those with the social authority to do so may rewrite, and reinvent, public history through the manipulation of available chronological schemes. In so doing, they reinforce the very authority that allowed them to do so in the first place. As Henry Rutz (1992: 1) states, “the shape of time is forged in contests of social power.”²² This is not a notion foreign to historians

on Panels 2 and 12 from Piedras Negras.

²² As Leone (1992:27) similarly illustrates for late colonial and early post-colonial Virginia, the control of government by the wealthy seemed justified given their “enlightened” knowledge, “Who could fail to believe that those who knew the stars and the planets and the ancient deities from Mars to Jupiter should not also be in charge of handling the historical precedents of their own society in the form of law”. Such a reproduction and legitimization of social order cannot be seen as an automatic process, but rather is the outcome of social practice (Braithwaite, 1992:93; Tilley, 1992:114).

(Jones, 1998: 15; see also Grafton, 1995), but it is one that is underdeveloped in Maya studies.²³

My arguments to this point have been based predominantly upon ethnohistoric and ethnographic evidence. The problem in applying this to the archaeological record is that the specific analogies must somehow be tied into the evidence from the Classic Period, some 600 years and more before the Spanish conquest. Ample evidence, however, does exist in the epigraphic record left to us on the many carved monuments of the Maya Lowlands that strongly support the continuity of many chronological concepts – if not always the specifics of chronological construction – from at least the first millennium AD through to the present.

One issue that needs to be considered in dealing with the inscriptional evidence for Maya chronologies is the diachronic changes that took place in the nature of the dates that were recorded. Changes in the number and nature of inscribed dates are indicative of more than simply the growing complexity and length of inscriptions. We must take account of the fact that the choices made about the form and content of the inscriptions were imbued with social meaning defined by the needs of those who controlled the recording of such events.

Scholars have dealt with the changes in the number and kinds of noble titles recorded, as well as the advent of inscriptions dealing with warfare, as significant indicators of changes in the organization of Maya polities (e.g., Child, 1999; Fash, 1989; Fash and Sharer, 1991; Fash and Stuart, 1991; Golden, n.d.; Houston, 1993; Houston and

²³ It is not only those with in positions of paramount leadership who control notions of history and their material correlates. Household or lineage heads, too, may exercise a certain control over small-scale chronological schemes that differ significantly from those of paramounds (see Davis, 1989).

Stuart, 2001; Villela, 1993). To my knowledge, however, only Clemency Coggins (1980; see also Aveni 2000) has dealt with this issue as it pertains to the changing nature of inscribed dates, suggesting that the introduction of monuments celebrating k'atun-endings was directly related to Central Mexican political imperialism.

I argue that calendrical inscriptions increase in complexity and time-depth during the course of the Late Classic period because of the political needs of the rulers dedicating the monuments. The dynasties of many Maya polities were plagued by disruptions in the royal lineage (see Martin and Grube 2000), and the need of individual Maya rulers to legitimate their personal dynastic ties may explain the ever more complex historical references made on monuments. Some of these inscriptions extend dynastic history back to the beginnings of the current baktun cycle and beyond, into what appears to the modern reader as a mythical past.

At Palenque, for example, a glyphic panel in the Temple of the Inscriptions begins with a relatively contemporary date of 9.9.0.0.0 (AD 613), then jumps 1,246,826 years and 270 days into the past to record the accession of an ancestral deity. The inscription subsequently jumps forward to a date that would be the equivalent of a day in AD 4772 (Schele and Mathews, 1998: 106-107). Similarly at the site of Quirigua, Monuments 6 and 4 record dates that extend tens, even hundreds, of millions of years into the past (Martin and Grube, 2000: 221; Sharer, 1990: 34-36, 39-41, 1994: 571).

It is no coincidence that the rulers of both sites, K'inich Janaab' Pakal I at Palenque, and K'ak' Tiliw Chan Yoaat ("Cauac Sky") at Quirigua, had tremendous obstacles to overcome in maintaining their legitimacy. At Palenque, Pakal ascended to the throne in the wake of nearly a century of problematic dynastic succession and military

defeat (Martin and Grube, 2000: 158-162; Schele and Mathews, 1998: 95). At Quirigua, Cauac Sky had waged a successful war against his former overlord at Copan, resulting in the beheading of the latter. Subsequently Cauac Sky claimed to be the appropriate dynastic successor not only of Quirigua, but of Copan as well (Fash and Stuart, 1991; Martin and Grube, 2000: 219; Sharer, 1990: 107).

Thus, dates of such complexity and tremendous time-depth were not an attempt at passive myth making, but were part of the efforts of Maya rulers to both reaffirm and reform the nature of their right to rule. Such chronological gymnastics were fundamentally important for the production of a culturally legitimate history needed to provide the proper context for the dedication of monuments and architecture (see Stuart, 1998). Furthermore, Classic Period rulers did not merely exist within, or move through, time. As Stuart (1996: 165) indicates, on the basis of epigraphy and iconography, rulers of Classic Period polities “were themselves embodiments of time and its passage.” That their monuments were inseparable from their fundamental selves (Houston and Stuart, 1998: 90; Stuart, 1996: 160-165) reinforced the connection between person and monuments such that these inscribed objects “served the related purpose of manifesting individual time periods and of embodying the royal self” (Stuart, 1996: 168).

4.4: Maya Chronology made Material in Architecture

Epigraphic and ethnohistoric sources make it clear that indigenous notions about, and the manipulation of, chronology play a significant role in shaping the discourse of power. Architecture, too, both forms and is formed by this same social discourse. Architecture “is crucial to the reproduction of social practice because it provides part of

the mundane, everyday reality that verifies the ideology by fulfilling the expectations of the ideology” (McGuire, 1992:203). The architecture itself, though, is not significant apart from practice, the use of it and movement through it, by which it becomes associated with a web of historical events and therefore chronological significance (Johnson, 1994: 170). As such it clearly both embodies and helps to order chronological practice (Pearson and Richards, 1994: 5). This is no surprise to most archaeologists who, after all, have always relied on architectural construction sequences as a central component in the building of professional chronologies.

Archaeologists working in Mesoamerica have long noted the connection between architecture and astronomical observations associated with the calendar. Perhaps most famous is the E-Group, first identified at Uaxactun, wherein structures were apparently aligned to the solstices (Ricketson and Ricketson, 1937).²⁴ The alignment of other structures in the Maya area with other sidereal or planetary movements has since been well documented (e.g., Aveni, 1977, 1980; Aveni and Gibbs, 1976; Aveni and Hartung, 1986; Aveni, 2000; Fialko, 1988).

More than simply the source of architectural alignment, though, indigenous understandings of chronology - in particular notions about the locus of the ruler in space and time - had a profound effect on the construction, destruction and cessation of architectural programs in Classic Maya urban centers. Dennis Puleston’s (1979) argument that site abandonment at the close of the Classic Period was in large part the result of *dire k’atun* prophecies, although largely unsatisfactory, represents an important attempt to address these issues. Another seminal work is Freidel and Schele’s (1988)

²⁴ Although this has not always proven to be the case in building complexes designated as E-Groups on the

analysis of the relationship between iconography, the person of the ruler, the form of the temple-pyramid, and the movement of heavenly bodies. Although not accepted by all scholars, their interpretation does offer an early consideration of how the Maya may have integrated architectural form and personal movement with notions about cosmology.

More recently Wendy Ashmore (1989, 1992) has argued that Maya sites as a whole, as well as individual architectural groups within them, were often conceived of as cosmograms. Ashmore takes into account Maya cultural ideals of time and space and concludes that such architectural units as the Twin Pyramid groups at Tikal represent a horizontal application of the Maya cosmos (see also Coggins, 1980, Harrison, 1999, Jones, 1969). In such a conception the eastern and western radial pyramids represent the rising and setting sun respectively. The heavenly upper-world is transcribed onto the horizontal as the open roofed northern structure, incorporating a stela and altar recording the celebration of the k'atun ending. In the south, a building with nine doorways becomes the figurative underworld. The translation of vertical time space into horizontal terms finds clear parallels in ethnographically attested concepts of modern Maya groups (e.g., Gossen, 1974).

The studies cited above, however, generally interpret architecture and site planning in light of fixed cosmological and chronological notions. Architecture from this perspective may be modified from some ideal notions of how space should be used in order to deal with real-world logistical issues,²⁵ but there is little attempt to address how these changes may in turn recursively effect the chronological constructions of the

basis of their resemblance to Group E at Uaxactun.

²⁵ Ashmore's (1989: 281, 1992) work, for example, suggests that if the logistics of an idealized site plane proved impossible, another area near to the "cardinally correct" space may have sufficed for the Maya.

builders. As is clear epigraphically and ethnohistorically, notions of chronology are not fixed, but are malleable and provide a good deal of leeway necessary for the kind of political maneuvering in which Maya rulers of the Classic Period were engaged. Our interpretations of Maya architectural programs, therefore, should begin to incorporate not only a notion that they were partly driven by existing cultural notions of chronology and cosmology, but also that driven by the needs of social actors these building programs helped to structure subsequent understandings of these same concepts.

Peter Harrison (1997, 1999: 190), for instance, has proposed that during the Late Classic at Tikal, site planning was driven by the creation of what he dubs “Triangles of Love”. Harrison interprets the right triangles formed by the alignments of various palace, and temple-pyramid structures as the conscious attempts of Tikal’s ruler to reference both revered ancestors and beloved spouses. One implication is that each subsequent ruler must make choices that build upon existing architectural plans that necessarily have a profound effect on their own building programs. Such an interpretation takes into account both the desire and need for rulers to represent architecturally – in a public and very monumental way - what they choose to construct as their personal history, and to use such personal history as part and parcel of the construction of rulership (see also Fash, 1998).

Furthermore, it is important to consider, when looking at such architectural sequences, that for the Maya everything has a life-cycle of its own.²⁶ This is not simply to say a cycle of use, or even a social biography (Kopytoff, 1986), though they certainly

²⁶ Houses are conceived of as living beings in many societies. See Gillespie (2000) for a recent overview.

have this as well. In the Maya world-view, a house, a pot, a stone adze, a jade bead, all are born into the social world and conceived of as living objects (Monaghan, 1998b).

This life and death cycle is attested to ethnographically and ethnohistorically with portable objects, especially objects of profound ritual significance such as deity effigies that must be periodically replaced; new censers are fed and brought to life, old censers are killed and disposed of (Bruce, 1975; McGee, 1990; Landa, 1978).²⁷ The same is true of more “mundane” and non-portable objects such as houses. House raising and ensouling rituals act to bring the house into the order of the community. They are not only the result of social order, but act to perpetuate that order in the social life of the family (Vogt, 1998: 26, 1993: 59).

The feeding of corner posts and roof of a house is a widely documented in the Maya area, as well as in other parts of Mesoamerica (e.g., Duran, 1971; Guiteras-Holmes, 1961; Landa, 1978; Redfield and Villa Rojas, 1990; Stross, 1998; Whittaker and Warkentin, 1965; Vogt, 1969, 1998). Such acts may include a series of such ephemeral practices as the pouring of liquor or broth over the rafters, but may also involve the introduction of heat into the building either in the form of incense, candles, or the lighting of a hearth fire. In addition, activities that would be more archaeologically visible, such as the deposition of offerings under house posts (Vogt, 1969, 1998) are often involved.²⁸

David Stuart (1998a) has identified an epigraphic correlate to these ethnographic house building and house ensouling rituals. In addition to discussing glyphic records of construction events, Stuart cites a range of inscriptional evidence to propose a reading,

²⁷ The practice of ritual termination of monuments is evident in Mesoamerica at least as early as the Middle Formative period (see Grove, 1981).

²⁸ That such treatment may be applied to more monumental spaces identified archaeologically is clearly

och k'ak', which he glosses “fire entering”, as well as another phrase indicating “house censuring” (Fig. 4.6). Interestingly, Stuart argues that the majority of monumental inscriptions are, in fact, dedicatory in nature, concerned with the “activities surrounding the placement, creation, and activation of ritual things and spaces” (Stuart, 1998a: 375, 1996: 151).²⁹ This, despite the fact that by far the greater portion of the text is often concerned with the personal history of the individual(s) depicted as focus of the monument. Stuart’s argument is that the personal and political history recorded on these monuments present a context for the dedication event, which is itself “among the most important events worthy of permanent record” (Stuart, 1998a: 375).

In addition, numerous researchers have addressed the nature of caching activities as evidenced archaeologically (e.g., Becker, 1988, 1992; Chase and Chase, 1998; Coe, 1959; D. Chase, 1985, 1988; Haviland et al., 1985; Pendergast, 1979). The deposition of materials within architectural remains may take the form of any combination of whole ceramic vessels, smashed partial vessels, human³⁰ or faunal materials, lithic artifacts, or more perishable materials. Caching practices do in many ways seem to be site specific, though these patterns changed over time even within one site (Pendergast, 1998). A definitive separation of such caching practices into general categories of dedication or termination events has, however, proven problematic at best.³¹

indicated by the close iconographic and epigraphic association of temples with houses (see Taube, 1998).

²⁹ The “fire entering” event is also associated with burials (Fitzsimmons, 1998; Stuart, 1998: 398 – 399) that were re-entered and burned, and in at least some cases objects were smashed and removed. Archaeological evidence from Piedras Negras is clear, and is in one case directly tied to an inscription describing a tomb re-entry ceremony (Coe, 1959: 127; Houston et al., 1998).

³⁰ The difficulty of separating out human burials from caching activities is most thoroughly addressed by Becker (1988, 1992). McAnany, Storey, and Lockard (1999: 131-132) have recently addressed the interpretation of ancient burials as part of ensouling practices similar to those attested ethnographically.

³¹ Although it is true that individual instances of such definite categories can be identified, as with the Ante structure at Copan, Honduras (Sharer et al., 1999a: 18, 1999b: 138).

Just as the death rites of a person act to close the door between the world of the living and that of the dead (Vogt, 1998: 29) so, too, the termination of buildings acts to seal the access that the structure provides between the earthly and supernatural realms (Mock, 1998: 10). That which is part of the social order must be safely removed through rituals that also reaffirm that the order as a whole continues even as one of its constituent parts does not (Vogt, 1998). Death rites for a person or building, therefore, are part and process of the same cycle.

Furthermore, the termination of a building may be both a final act of abandonment, or may simply form a prelude to subsequent construction activities (Mock, 1998: 10; Stross, 1998). Materials from the termination of one structure may even be used in the dedication of seemingly unrelated buildings (e.g., Freidel and Schele, 1989; Walker, 1998). The theme of cyclic death and rebirth is evident not only architecturally, but is clear in both iconography and indigenous histories. Death and rebirth are central to the story of the Hero-Twins in the *Popul Vuh* (Goetz, Morley and Recinos, 1950; Tedlock, 1985), while the death of kings and their resurrection as the young Maize-god provides a common iconographic subject during the Classic Period (see Freidel et al., 1993). Notions of death and rebirth are also evident on monuments such as Piedras Negras Stela 25, where the king ascends to the accession scaffolding over the remains of a person who is likely to be a sacrificial substitute for the ruler himself (see Fig. 7.6; Martin and Grube, 2000: 142; Taube, 1988). Thus, it is perhaps no surprise that separating dedication from termination events archaeologically has proven somewhat problematic, for they may not have formed separable categories of events for the Maya.

Therefore, when it does become possible to identify individual termination events not directly conjoined with a subsequent construction event, it should give archaeologists pause. At Cerros (Walker, 1998), for instance, the final Classic Period abandonment of the site seems to have been accompanied by the deposition of termination materials over the central temple-pyramid at the site. Archaeologists working at Chichen Itza (Ruppert, 1952), Piedras Negras (Houston et al., 2000), and Copan (Andrews and Fash, 1992), have all noted that doorway lintels were purposefully destroyed with the intent of undermining structural integrity as part and process of site abandonment. At Yaxuna the termination of some structures seems to be the direct result of the periodic sacking of the site by competing power centers in the Northern Maya Lowlands (Ardren, 1999; Freidel et al., 1998).

Termination activities, however, may not be directly associable with either warfare or the final abandonment of the site. At Altar de Sacrificios following a hiatus in construction in one area of royal architecture (Group B), the focus of royal architecture is moved eastwards (Group A) (see Chapter 8.4; Smith, 1972: 113; Willey, 1973: 43-44). Such non-cyclic events, especially when associated with the central precincts and loci of authority at a site, obviously speak to a break in the social, and therefore chronological, order. In all cases, notions of social continuity and discontinuity are embodied in the materiality of the architecture, references to which help to define social memory and creates signs of and in history. This is a concept that will be expanded upon in the next section.

4.5: Royal Architecture, Royal Chronologies: Signs of, and in, History

The trope of architectural termination and dedication is particularly important for understanding indigenous chronologies of rulership among the Classic Maya.

Archaeologists have long noted the fact that Maya rulers are closely associated with certain architectural loci. As Webster (2001: 131) has recently described them, “Like giant hermit crabs, successive rulers loaded themselves with solid accretions in the form of tombs, temples, ball courts, and carved monuments.” That rulers might wish to associate themselves with the built environment of ancestral and/or supernatural authority is not surprising, and is common cross-culturally. Exactly why such accretion takes the form it does for the Maya - and why notions of termination and abandonment of individual structures or building programs within a site might represent such an important sign of chronological reformulation - requires a more thorough understanding of the Maya conceptualization of royal architecture.

Recent models of Maya social organization place emphasis not on lineage organization, but rather on a social hierarchies and corporate groups that have as their focus the “house”³² as a physical structure or place on the landscape (Gillespie, 2000a, 2000b, 2000c; Houston, 1998: 521; Inomata and Houston, 2001:9-10). The notion of the house-society posits that the house presents a locus for a corporate body “organized by their shared residence, subsistence, means of production, origin, ritual actions, or metaphysical essence, all of which entail a commitment to a corpus of house property, which in turn can be said to materialize the social group” (Gillespie, 2000a: 1-2; see also

³² For more thorough reviews of current research into the nature of House Societies see Carsten and Hugh-Jones (1995) and Joyce and Gillespie (2000).

Lévi-Strauss, 1982). Kinship terminology may still represent a significant part of the construction of the social group, but it is inseparable from the spatial component.³³

The distinction made hieroglyphically between *naah* (“building” or “structure”), and *-otoot* (“home, dwelling”) is evident at many sites (Stuart, 1998). In the case of the term *-otoot*, the dwelling is always possessed by someone, leading to the assumption that the term refers to the actual place of residence of the protagonist of a given text.

As Stuart (1998: 378) points out, though, this is not always so. In cases such as House E at Palenque, the building is architecturally definable as a throne room, and yet is labeled as the *house* of K'inich Hanab Pakal, thus eliminating the distinction between rhetorical houses and functionally residential structures. Even though this structure was maintained as a throne room by several of his successors, Pakal textually continued to “own” this building even after his bodily death (Stuart, 1998: 378). These buildings often bear their own names, as in one example at Piedras Negras where a structure is named on Throne 1 as *Chahuk Naah* (“Lightening House”) the *-otoot* of Ruler 6 (Stuart 1998: 390; Fig. 4.7).

The importance of the use of the term “house”, when other terms for buildings were clearly available to Maya scribes, indicates a choice that resonates with the model of a house society. The personal association of ruler and structure is evident. The rhetorical association of houses and individuals also extends to deities who possess

³³ Classic Period inscriptions from both monuments and ceramics make clear that statements referring to an individual as the “Nth” successor to the dynastic founder of a polity do not necessarily refer to statements of descent, but rather to statements of legitimate institutional succession. Those statements of lineal descent that are made typically refer only to parents, grandparents and children with more distant members of the matriline or patriline conspicuously absent but for a few cases.

structures labeled *way-ib*’, the dormitories of supernatural beings (Houston and Stuart, 1990; Stuart, 1998: 400).

When dealing with Maya rulers, the notion of any single structure as a house is perhaps better reformulated as the royal palace,³⁴ a complex of houses and temples that formed the locus of the paramount corporate body within the Maya polity: the royal court (Inomata and Houston, 2001). The royal court is not simply a household writ large and complex. It does accomplish many of the same functions as a household, but its composition, social role and spatial focus differ significantly from other households. The royal court may be a highly fluid and competitive corporate group, difficult to define cross culturally, whose only unifying characteristic is a dependence on “physical proximity to the ruler” (Inomata and Houston, 2001: 7). If the ruler is highly mobile, the court, too, is likely to move. The close association of Maya rulers with specific locations and buildings, however, indicates by extension a close association of the Maya royal court with a particular place or places (see Inomata and Houston, 2001; Inomata, 2001; Martin, 2001; Webster, 2001).

Thus, royal houses/palaces - the difference between truly residential and merely rhetorical houses being largely moot - become “signs of history” and “signs in history” *par excellence* for Maya rulers, courtiers and society at large. Adopting the terminology proposed by Richard Parmentier, signs *in* history are those “value laden objects, expressions, and patterns of action involved in social life that are loci of historical intentionality” (Parmentier 1985:134). Signs *of* history “refers to those mnemonic devices which, through their iconic, indexical, and residually symbolic properties, codify

³⁴ See Webster (2001) for a recent review of Maya palaces as an identifiable architectural category.

events as history, that selective discourse about the diachrony of a society”

(Parmentier, 1985: 134).³⁵ It is obvious from these definitions that many things within society may function as signs both in and of history, and Parmentier (1985, 1987) notes that such signs may be both material and immaterial (e.g., names, narratives, and ritual practice among others).

From this perspective, the accretion of buildings within the royal palace of a Maya site represents a sign in history in which each accessible structure represents historically situated actions. Constant construction in these royal palaces, however, eventually led to the demolition or interment of older structures, with newer edifices raised on top of these signs in history. When newer structures are essentially replications of earlier structures³⁶ or overall spatial organization, this accretion, Webster's (2001) “hermit crab” effect, becomes a sign of maintenance and the continuity not only of architectural form, but also of the social and political order; it becomes a sign of history. In the case of Maya palaces, social order is embodied by ruler, royal court and the architectural setting of the palace itself which is - with its buildings, architectural decoration and accompanying monuments - the most permanent sign of the political institutions.

³⁵ I should reiterate here that I differ with Parmentier in the use of terms. For the point of clarification, I see history as that totality of events past which are remembered, memorialized, etc. by society. I view practice-based chronologies as the “selective discourse about the diachrony of a society.”

³⁶ By replication I mean here the maintenance of such characteristics as axes of orientation, spatial association with other structures around a plaza, or apparent function as, for example, residential or ritual structures. Newer structures may be larger, and incorporate new programs of architectural decoration but they act socially as fundamental replicas of earlier buildings. Such is the case, as one example, with Temple 16 at Copan. This building is consistently replicated in ever-larger forms, maintaining both its iconic role as the dynastic founder's pyramid (his name decorates the exterior facades of successive construction phases) as well as acting as an index of the founder's tomb, which is located at the heart of the structure's earliest construction phase (Sharer et al. 1999a, 1999b).

By extension, the demolition of a palace, or other royal architecture such as centrally located temple pyramids or monumental sweatbaths, represented a moment of danger, dislocation and potential social, political and chronological rupture. For those able to take advantage of this ambiguous state, though, it may also have represented a moment of opportunity to reformulate the signs in and of history. This is the trick of chronology as social practice. There is a perilous need “to maintain *both* the invariance of structure. . . and the value of temporal depth” (Parmentier, 1985:136). If a ruler chooses, or is required, to eliminate signs of history that are politically compromising - dynastic associations with a discredited and disgraced ruler for instance - they must at the same time ensure that other signs remain, or are deployed, that act as indicators of stability. Moreover, the connections that they make must be the appropriate connections, chosen from a suite of historical possibilities.

As we have seen ethnohistorically, Maya rulers were indeed able to draw on a wide variety of signs of history in such forms as k’atun prophecies, the character of a year based on its designated year-bearer, or other such astronomical and astrological formulations. Furthermore, ethnohistoric documents make clear that the association of certain named ancestors with events and places in the past were used to signal continuity even in the face of actions that might otherwise prove to be unequivocal signs of rupture (e.g., Kan Ek’ structures the capitulation to the Spanish, in part, as a return to Mayapan and the fulfillment of k’atun prophecy). They were also, it seems, able to draw upon themes of connection and disconnection through such material correlates of space-time as the architectural programs of their predecessors.

An important issue that must be addressed at this point is the question of to whom can we actually assign agency in the construction of royal architecture (see Fash, 1998). As noted by Houston and Stuart (2001: 57), there often seems to be no master plan governing the small changes that take place in the architecture of Maya royal palaces through time. Building and plaza layout often seems to have changed incrementally rather than as the wholesale reformulation of the plaza plan. While we could, perhaps, hypothetically posit that an initial plan was devised by the ruler for a given plaza or palace, we still must take account of changes made to these plans by court members, masons, and others involved in the actual construction of buildings.³⁷

Searching for modern notions of agency in every aspect of the architectural program, however, may be a moot point in discussing ancient Maya palaces. In fact, hieroglyphic inscriptions would seem to indicate that Maya rulers were, in most cases, rhetorically passive and indirect³⁸ in roles that we might otherwise assume to be active:

The ruler “cultivates” actions through an agricultural trope for supervision . . . he binds the year-stones . . . he dances, probably as a form of prayer or sacralization of movement . . . But does he build, capture, or sacrifice? No. Such events occur hieroglyphically but in passive constructions curiously distanced from royal participation. It is imagery more than text that depicts active and socially integrated rulers.

(Houston and Stuart 2001: 56)

Yet, though their actions are rhetorically passive, we should not conceive of their presence and performance as conceptually passive in social life and in the development of programs of architectural programs. The power of Maya rulers is passive only in the

³⁷ In the case of the Acropolis at Copan, for instance, it seems that a template of royal architecture was established in the 5th Century AD, probably under the aegis of the dynastic founder, Yax K’uk’ Mo’. Except when required by the logistics of the available building space, changes made to this template consisted of expansion, rather than wholesale reformulation, of this template throughout over four centuries of continual growth (Traxler, n.d.).

³⁸ One example is a common phrase used to indicate the dedication of a stela, “his banner stone is planted”

sense that they generate it as part of their essence as lordly figures, through no effort on their part (see Houston and Stuart, 1996, 2001; Houston and Taube, 2000). The power that was held by them passively, however, was itself active and both constructive and destructive. Maya rulers are often named in hieroglyphic texts as the sun-faced or sun-eyed *k'inich ajaw*, and their fiery essences burned like the sun, while at the same time the ruler was a cultivator (Houston and Stuart, 2001: 55-56), and their field of vision, like that of deities, was itself active and constructive (Houston and Taube, 2000: 281-289).

Returning to the issue of royal palaces, then, it would seem that a probable implication of lordly power is that Maya *k'uhul ajaw*, “holy lords”, were perceived to have brought about the creation of programs of royal architecture, whether or not they were involved in the day-to-day decisions of every aspect of construction. Their presence, and their performance of ritual activities, which left material correlates such as caches, was conceptually procreative of such architecture. The consolidation of the sign of architecture with the performances associated with the placement of royal monuments (Stuart, 1998;Looper, 1997) reinforced the role of lordly power in the creation of those edifices. The monuments, in fact, appear to have been conceived of not as mere icons of the rulers and actions that they portrayed, but as actual embodiments of the self of the ruler so depicted (Houston and Stuart, 1998: 90; Stuart 1996: 168).

Even for the *k'uhul ajaw*, though, those signs of rulership fundamental to the maintenance of power were not inalienable. This may seem more obvious in terms of such ostensibly non-material signs as calendrical prophecies, which were potentially open to a wider public for constant reinterpretation. But this is a potential hazard even in the

(*ts'ap-ah u-lakamtun*) (Stuart 1998: 375).

case of such monumental material signs as stelae, other carved monuments, pyramids, and palaces; signs that we might normally consider to be irreducibly signs of the ruler himself.

The making of a material signs inevitably leads to a loss of control over meaning from the original signaler (Hodder, 1989: 71; Keane, 1997). As Keane (1997: 93) states:

Exteriorization and objectification work hand in hand with detachability and mobility. Herein lies both the promise and the risk posed by things, as vehicles of representation. . . The capacity to stand for its owner over the course of its travels is not an inherent property of objects themselves, but requires human activities and interactions to sustain.

Even monumental architecture is, as with all signs, polysemous and contains the potential for both messages of authority and the inversion of that authority.

As archaeologists we are able to peel back the construction layers in order to get a, albeit somewhat distorted, picture of individual construction phases. In this sense – at a minimum the ability to say which buildings were contemporary with which others - we are able to reestablish the original context of the signs. But in a living city or palace this is impossible; construction proceeds, contexts change. Any architectural program as complex as the royal palace of a Maya polity would have been in a nearly constant state of construction; individual structures and portions of structures would have been razed, rebuilt and renovated.³⁹ As part of an ever-changing set of material signs, then, even the seemingly immobile can be “exteriorized” and in danger of “misappropriation” through

³⁹ Some buildings at Piedras Negras were apparently never completed. For unknown reasons these structures were left half-built despite the fact that occupation at the site continued unabated after these building projects were abandoned. Other structures in the South Group of the site were apparently left in a state of dilapidation, neither razed nor renovated, for several hundred years (Stephen Houston, personal communication, 2001; Houston and Golden, 2001; Wells, 1998; Fitzsimmons, 1999).

new associations in the form of subsequent construction or of performance within a given architectural space.

Given the need to combat this potential for unwanted significance accruing to royal architecture, it is possible to see the placement of monuments within these dynamic architectural settings as part of an effort on the part of rulers to maintain control over the signs of their authority. The dedication of monuments becomes part of a repetition and ritualization of behaviors that replicates the original intent of the architectural sign, or changes the intent along lines defined by the ruler. Ritual, word and material become what Keane (1997: 66) terms the “laminated sign.” Through ritual, the social order is reaffirmed in a visual, and perhaps a visceral manner, such that power relations are reified and their intellectual truth becomes a material truth through the dedication of monuments and buildings (Gailey, 1987:35; Tilley, 1992:115).⁴⁰

As but one example, Tatiana Proskouriakoff (1960) first noted such repetition at Piedras Negras in connection with the marking of five-year periods⁴¹ by most rulers of the site, beginning with the accession monument of K'inich Yo'nal Ahk I (Ruler 1) in AD 608 (Fig. 4.8). The dedication of monuments at such regular periods by the lords of Piedras Negras acted to reestablish the social and the temporal order of things through elaborate public rituals that left obvious and public material evidence (Stuart, 1996:

⁴⁰ It is true that a number of critiques of archaeological interpretation have raised the issue of whether or not the ideals and ideology of the elite - and the chronology making of Maya rulers clearly falls into such a category - pertained to all facets within society (e.g., Braithwaite, 1992; Hodder, 1991:70; Miller and Tilley, 1992; Tilley, 1992). However, as Davis (1989) makes clear for modern Libya, the co-existence of multiple histories (e.g., national, genealogical, personal) and their potentially conflicting effects on social life does not necessarily negate the social and political significance of any one of those historical discourses (see also Appadurai, 1981).

⁴¹ Sylvanus Morley (1917) recognized that the marking of five-year (hotun) periods was important in Classic Period inscriptions, but apparently failed to make the historical connections that were so important to Proskouriakoff's studies.

165).⁴² Again, these are signs both “of” and “in” history. They become objects of discourse, references that are in turn signaled about. Ruler 2, the son of Ruler 1, furthers this same emphasis by erecting monuments in front of the burial pyramid of his father, a process followed by at least two other dynasts at Piedras Negras that reinforces continuity with the ruler’s immediate predecessor (see Chapter 7.3; Houston and Golden, 2001).

As archaeologists, however, we must constantly consider the question: Is this how the Maya rulers themselves would have viewed the situation? No, in one sense of course not. This is a fully modern argument. Furthermore Maya rulers at a primate site such as Piedras Negras dedicated monuments, commissioned palaces, pyramids and other structures when they were able to, not only as part of the egocentric construction of power, but as an expected part of their performance as rulers. In this sense such acts are inherent to the social performance of roles culturally defined for the ruler. From this perspective, it is perhaps better not to consider them as acts consciously performed to address the very specific chronological/historical argument that I construct for them.

On the other hand, within the realm of expected and acceptable social behaviors – the creation of monuments, the construction of pyramids and palaces – there is a virtually infinite range of acceptable variations in terms of location, style, the timing of construction and destruction, among many other characteristics. So, we are drawn back to the conclusion that material style, placement (i.e., context), and performance (e.g., oration, dancing, bloodletting) are all laminated into a purposeful sign with an intended outcome. The architectural programs and associated monuments of Maya rulers are not the only materials signs of chronological manipulation that I will explore in this work,

⁴² Such acts may have been increasingly important in the complex power politics of the Late Classic,

but the above provides a fundamental outline of the arguments that I will apply to the case studies in the following chapters.

4.6: Conclusions and Prelude to a Case Study

Ethnography, ethnohistory and epigraphy have all provided a large body of knowledge concerning the nature of various Maya chronologies and how they have changed through time. One theme that has persisted for thousands of years is the indivisibility of space and time, which are perceived to affect the character of human life, bringing either potentially beneficial or detrimental results. Another persistent theme, however, is the role of human behavior and ritual performance in bringing about any given state of chronological being. It is, for instance, human performance that yields the beneficial character of a year-bearer with positive associations, and inhibits the harmful effects of a year-bearer associated with negative influences.

The ethnohistoric work of Restall (1998) and Jones (1998) makes clear that human performance also played a role in the manipulation of indigenous chronology towards individual political ends. There was no one correct interpretation of the historical-prophecies associated with the k'atun cycles, and this ambiguity provided for a wide-range of political maneuvering. The conquest of the Peten region provides a most dramatic example of such political maneuvering as contestants for political power couch their diametrically opposed actions in similar chronological rhetoric.

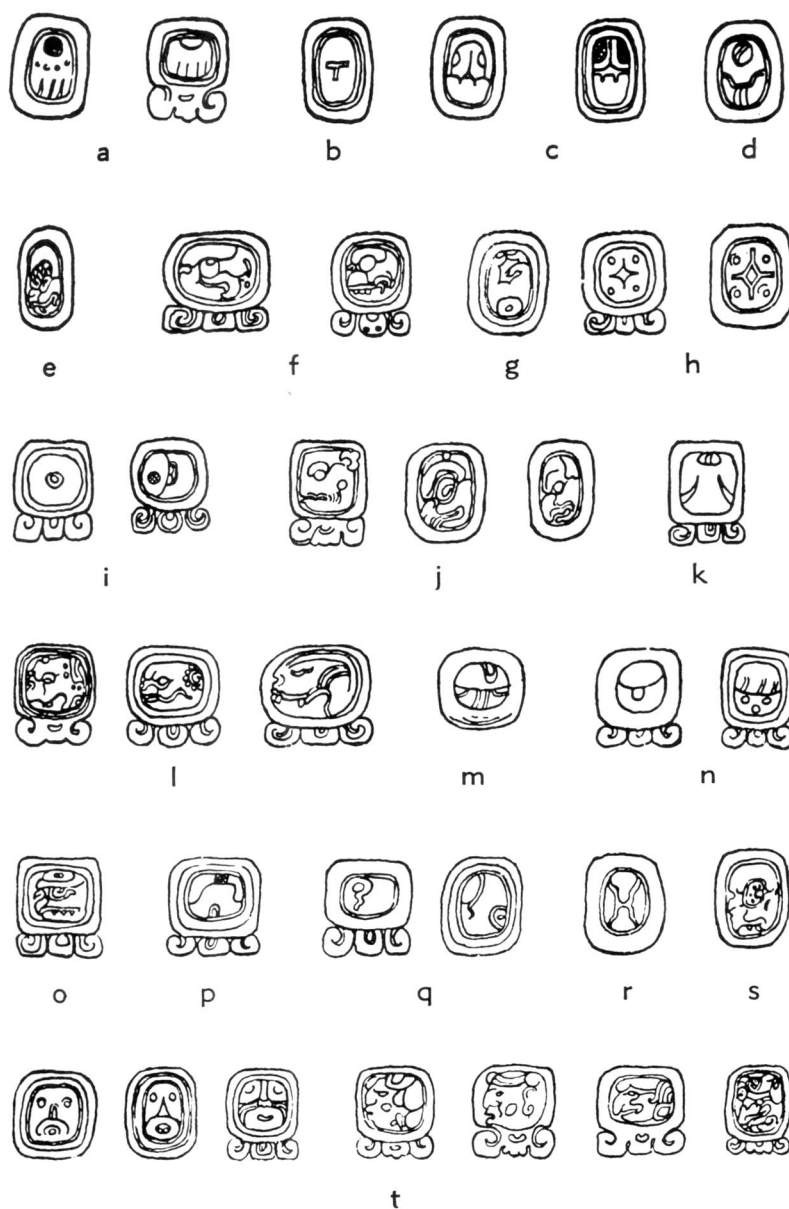
We also have in the inscriptions available from the Classic Period a historical record of the manipulation of the chronological possibilities available to Maya rulers in

combating what Stephen Houston (personal communication, 2001) has called “dynastic anxiety.”

the form of temporal cycles spanning millennia. To reiterate, the choices made about the form and content of these inscriptions is imbued with social meaning defined by the needs of those who controlled the recording of such events. That the complexity and time depth of these inscriptions increases with the dynastic difficulties encountered by some rulers during the Classic Period further exemplifies the use of chronological schemes as a tool of political authority. For archaeologists, though, the key to understanding social behavior must lie in the ability of researchers to access information about practice from the material record, for historical texts are not always available. The life cycles of such material objects as pottery, carved jade objects, and architecture among other items do, however, do provide the archaeologist with access and insight into the use of chronology as part of the construction of social and political practice among the Maya.

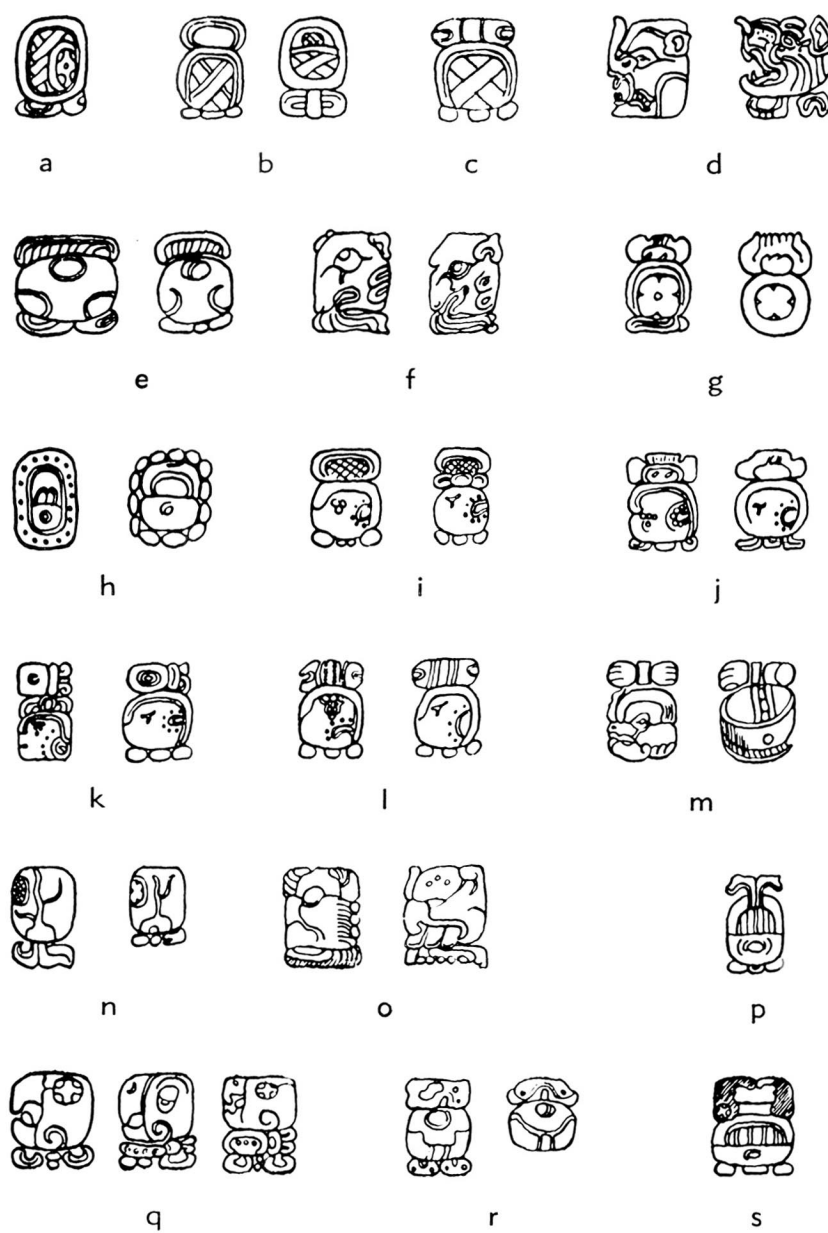
I have illustrated the importance of material signs of chronological construction, using as one particularly dramatic example, the role that architecture may have played in defining the identity and role of rulership during the Classic Period. The association between the ruler and the place of the royal palace, with its associated monuments, temples and other ancillary structures, extends not only to the individual person of the ruler, but to the royal court as the paramount corporate body within the Maya polity as well. The signs of continuity and discontinuity implied in the building programs of Maya lords, material signs that were reinforced by performance, are chronological signs accessible to archaeologists. It is the ambiguity of disjunction and discontinuity in chronological possibilities that archaeologists, non-archaeologists and, in this case, the ancient Maya rulers, can manipulate towards social and political ends. The subsequent

chapters will explore these themes more fully through case studies, with a focus in particular on the Acropolis, or royal palace, of Piedras Negras, Guatemala.



(a) Imix; (b) Ik; (c) Akbal; (d) Kan; (e) Chicchan; (f) Cimi; (g) Manik; (h) Lamat; (i) Muluc; (j) Oc; (k) Chuen; (l) Eb; (m) Ben; (n) Ix; (o) Men; (p) Cib; (q) Caban; (r) Etz'nab; (s) Cauac; (t) Ahau

Fig 4.1: Tzolkin day names (from Sharer, 1994: 563)



(a) Pop; (b) Uo; (c) Zip; (d) Zotz; (e) Tzec; (f) Xul; (g) Yaxkin; (h) Mol; (i) Chen; (j) Yax; (k) Zac; (l) Ceh; (m) Mac; (n) Kankin; (o) Muan; (p) Pax; (q) Kayab; (r) Cumku; (s) Uayeb

Fig. 4.2: The haab months (from Sharer, 1994: 564)

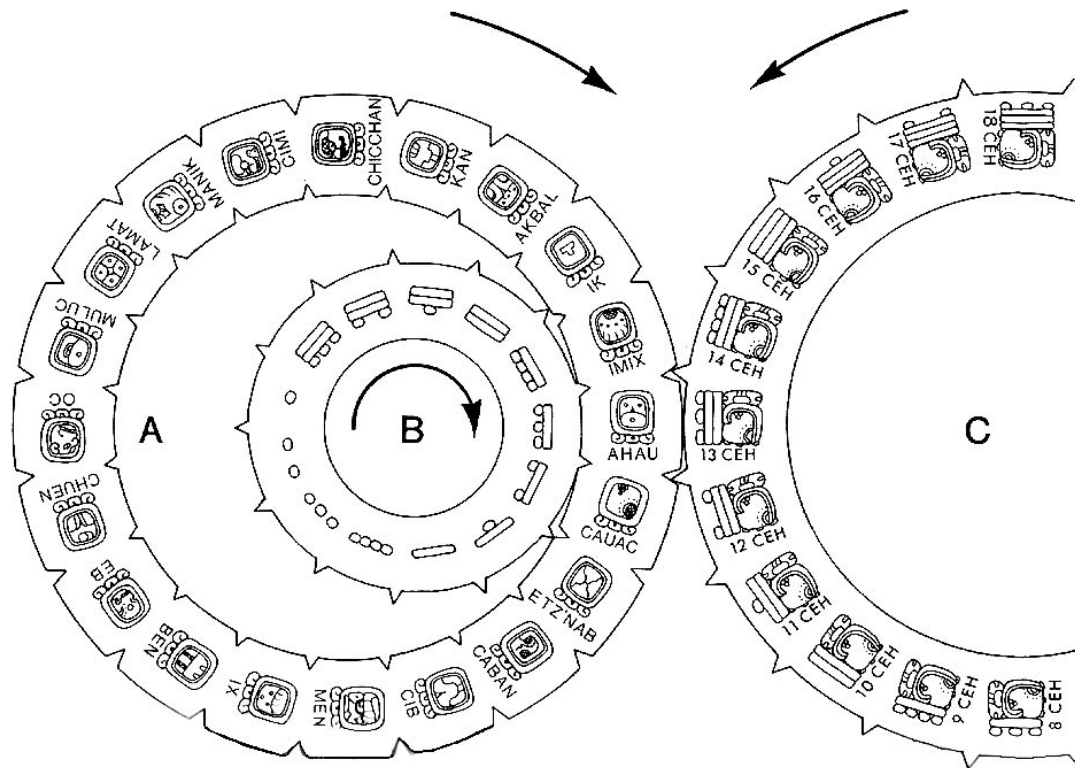


Fig. 4.3: Diagram of the 260-day calendar (left) meshed with the 365-day calendar (right). The 365-day calendar is reduced to a wheel with just one month for the purposes of the diagram (after Sharer, 1994: 567).

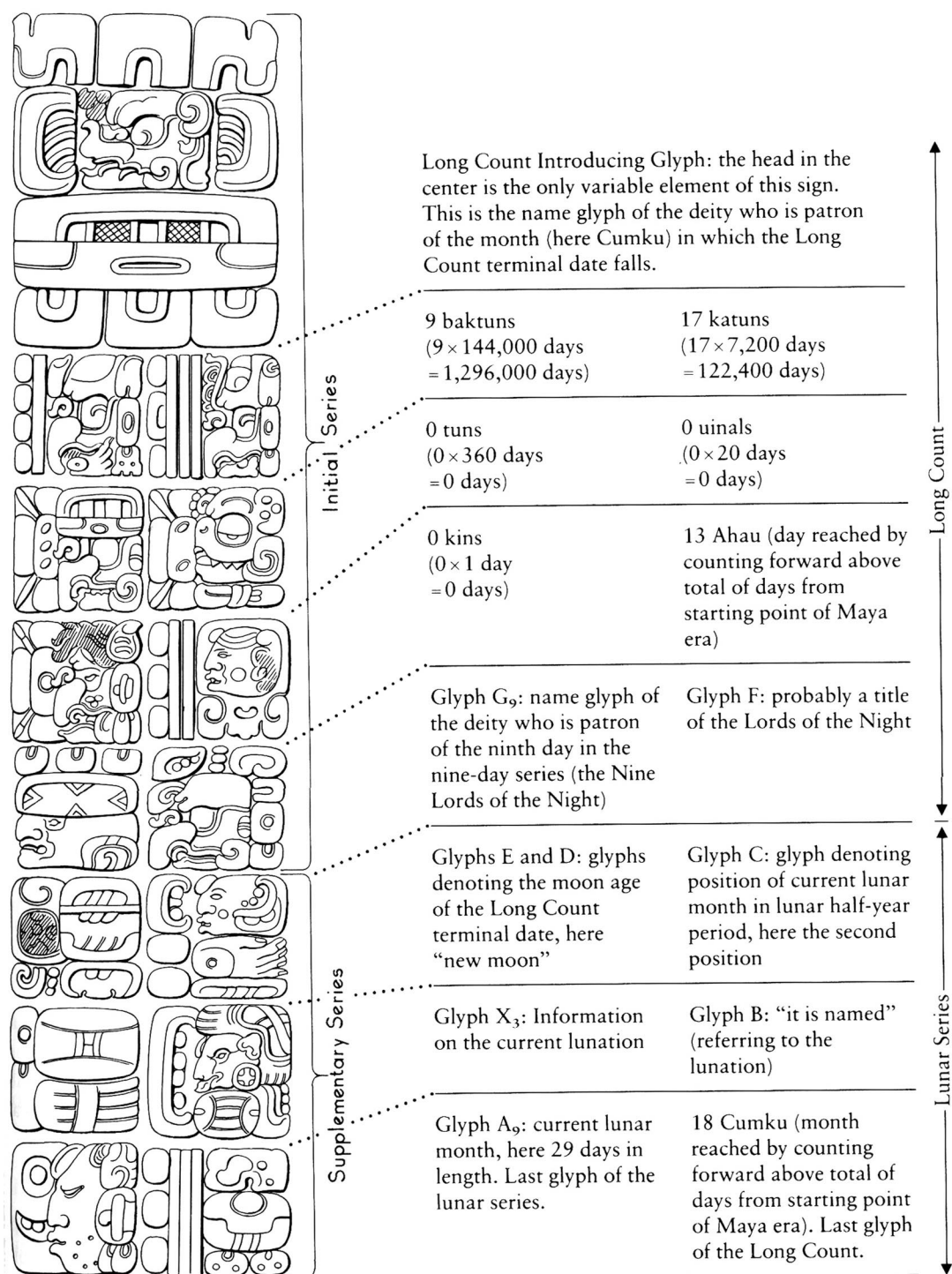


Fig 4.4: Example of a Long Count inscription on Monument 6 from Quirigua, Guatemala (from Sharer, 1994: 569).

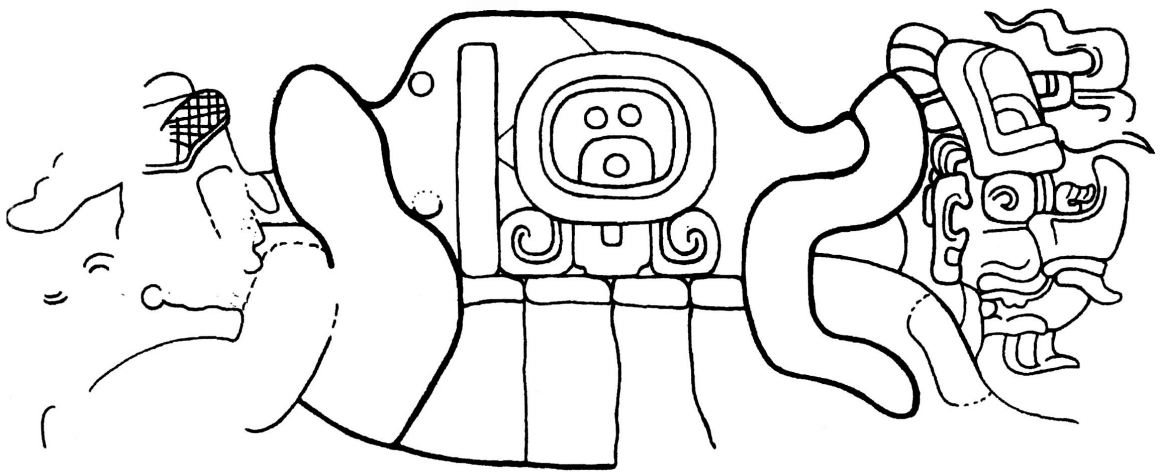


Fig 4.5: Petroglyph from Piedras Negras, Guatemala, with cartouche commemorating K'atun 7 Ajaw, apparently indicating a date of either 9.7.0.0.0 7 Ajaw 3 Kankin (December 5, 573 AD) or 10.0.0.0.0 7 Ajaw 18 Zip (March 13, 830 AD), although the exact reference is unclear (drawing by Zachary X. Hruby, 1999).

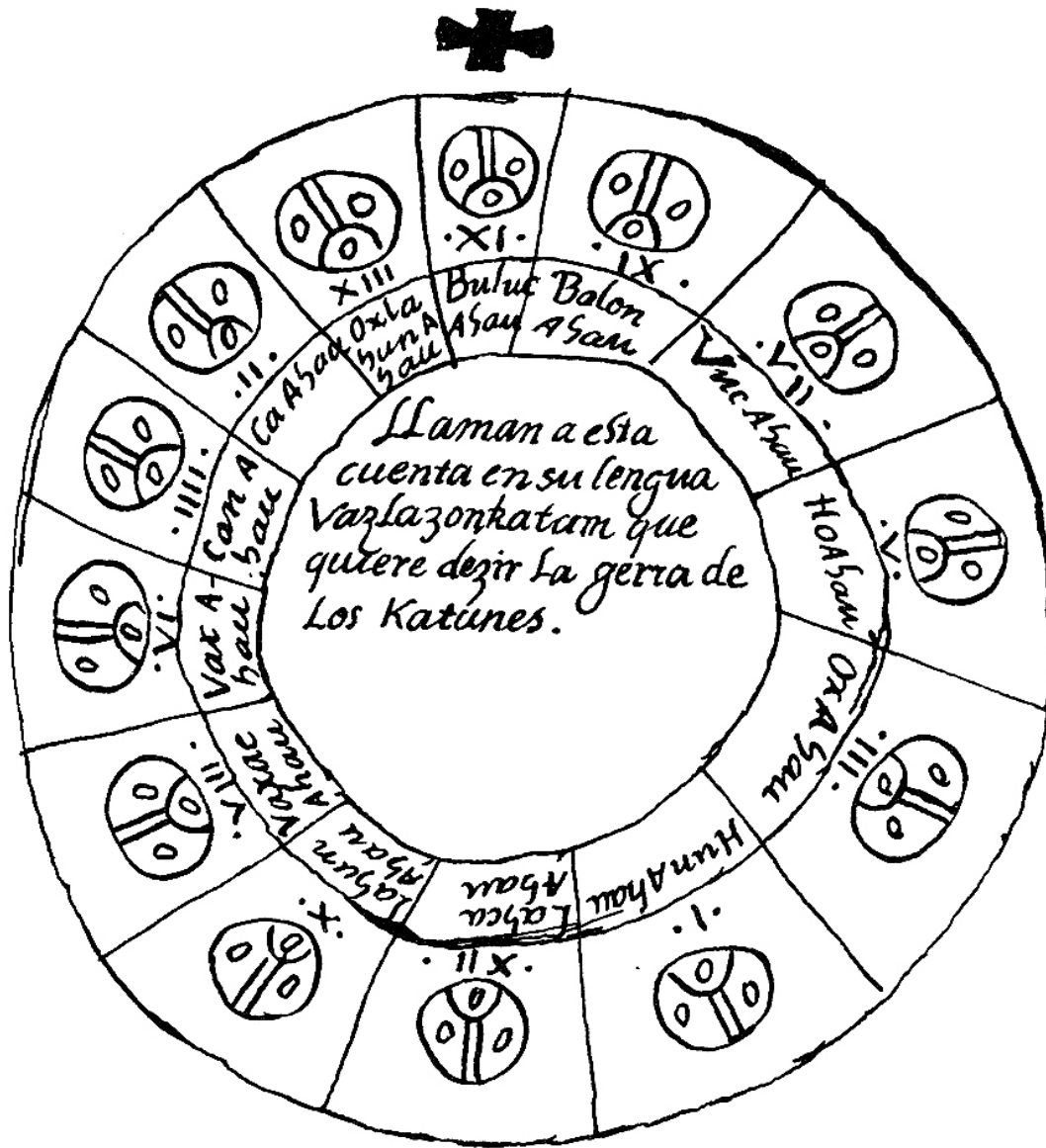


Fig. 4.6: The k'atun wheel drawn by an informant of Fr. Diego de Landa, showing the 260-year *u kahlay k'atunob* (from Sharer, 1994: 573; see also Landa, 1978: 81).

Chapter 5: Excavations in Court 3 of the Acropolis

5.1: An Introduction to Excavations in Court 3 and Court 4 of the Acropolis

Chapters 5 and 6 provide a comprehensive examination of the data recovered in four field seasons of excavation from 1997 to 2000. This research was carried out under my supervision as part of the Piedras Negras Archaeological Project, in Courts 3 and 4 of the Acropolis of Piedras Negras. Beginning with an overview of the Acropolis, this chapter subsequently sets out brief definitions of the architectural, ceramic, and other archaeological terminology used, some of which is specific to Piedras Negras and needed to understand the excavations. Following these introductory sections, detailed descriptions of the excavations of Court 3 are provided and the architectural developments they reveal are compared to excavations conducted in other parts of the Acropolis. This chapter concludes with a synthetic overview of the historical development of the Acropolis. Excavations conducted in Court 4 are described in Chapter 6.

5.2: The Acropolis of Piedras Negras: Overview of the Architectural Complex

The Acropolis is a complex of masonry platforms and superstructures whose highest buildings rise dozens of meters above all of the other architecture at Piedras Negras (Fig. 5.1, 5.2, 5.3). Over the course of nearly four centuries the Maya built an enormous edifice on what was once merely a large hill at a bend in the Usumacinta River. In its final guise, the roofs of the highest buildings in the Acropolis would have stood some 40.00m above the great plaza to the southeast, and on its northwest side it towered

nearly 100.00m above the Usumacinta River. Passengers in canoes moving down the Usumacinta would have seen the Acropolis the moment they turned the final bend of the river above Piedras Negras. The Acropolis was the royal palace of the city for hundreds of years, where the residences of dynasts and their courtiers were joined with temple-pyramids, sweatbaths, throne rooms, and the other architectural trappings of Maya royalty.

But the Acropolis did not exist apart from the site of Piedras Negras. Drawing the line defining where the Acropolis ends and the rest of the site begins is difficult at best. Descending from the megalithic staircase at the base of the platform designated Str. J-1, one arrives at the West Group Plaza (Fig. 5.1). This broad, open space provided a gathering space for public events, perhaps even the display of prisoners or other tribute on the megalithic staircase (Houston, 1998: 522). On the southwest side of the plaza is Str. N-1, a large sweatbath, aligned with the ballcourt (Strs. K-6a and K-6b). The playing alley of the latter is, in turn, aligned with the pyramid K-5 (Fig. 5.1, 5.3), a building that dominates the northeastern end of the West Group Plaza. The significance of this procession way between N-1 and K-5 is not clear.

Numerous other structures are arrayed about the West Group plaza. Str. 0-18, a columned platform, seems to have provided an entryway through which people passed as they climbed up from the East Group Plaza. Str. O-17, an enigmatic and unfinished building sits in the southern corner of the West Group Plaza. People entering the West Group Plaza from the East Group Plaza via the K-2 staircase passed by K-3, a small building that despite its diminutive size held the crypt of a royal personage who died while in his/her teens (Fitzsimmons, 2000). On the northern side of the Acropolis a large

temple-pyramid (J-29) looms over the Northwest Group Plaza. An apparently unfinished pyramid (Strs. J-27 and J-28) lies just to the west.

To isolate the Acropolis as an architectural entity apart from the rest of Piedras Negras is an arbitrary and artificial action. There are, however, two reasons to begin from this point of isolation. First, doing so facilitates the analysis and discussion of the archaeological data. Second, the Acropolis was clearly the royal palace of Piedras Negras, and stood as a discrete architectural unit that is discontinuous spatially and temporally from other areas of the site. Although individual buildings were renovated, demolished and rebuilt in a piecemeal fashion, the royal palace did occasionally undergo dramatic changes such as rapid increases in building size, changes in patio layout, demolition, and abandonment not reflected in contemporary activities in other architectural complexes at the site. I therefore place the following boundaries on the Acropolis for the purpose of the analysis to follow: the Acropolis includes all of those structures on the hill itself (all of them falling within the “J” square on the site map), as well as those structures that sit on the West Group plaza, exclusive of the K-5 pyramid.

The results of excavations carried out in the Acropolis during the 1930's by Linton Satterthwaite and Francis Cresson have been published only in part (Satterthwaite, 1935, 1936, 1946, 1954; Coe, 1959; Holley, 1983). Based upon the available data, Satterthwaite concluded that there were six construction phases in at least two of the courts (Courts 1 and 2) before a final seventh occupation level that consisted of the remains found on the building floors (Satterthwaite, 1943; Holley, 1983). Occupation began during the Early Classic (later narrowed down as the Naba phase by Holley) and continued into the ninth century. On the basis of a smashed royal throne found in Str. J-

6, as well as the possibility of episodes of burning in Str. J-12, Satterthwaite postulated that the dynasty of Piedras Negras had succumbed to a peasant revolt (Satterthwaite, 1935: 11-12).

Evidence of post-dynastic “squatters” in the southern sectors of the site (e.g., the South Group Ballcourt, and Strs. R-2, R-8, and O-7) indicate that occupation elsewhere at Piedras Negras did not cease with the destruction of buildings in the Acropolis, and the discovery of several “Lacandon” Postclassic censers within Str. J-2 indicated that the Acropolis itself had continued to be visited well after it ceased to function as a royal palace (Houston et al., 2001: 85; Satterthwaite, 1946). Though the current study largely confirms the dates of occupation in the Acropolis posited by Satterthwaite, these more recent excavations greatly refine our understanding of the complex construction sequence.

5.3: Architectural Terminology

Architectural terminology used by the Piedras Negras Archaeological Project follows that established by Satterthwaite (1943) for Piedras Negras in the 1930’s, with some modifications as defined at Tikal by Shook and Coe (1961). The acceptance of these designations inherently brings with it the problematic nature of some of the terminology, problems well recognized by those earlier researchers. However, use of these terms eases comparison between the current and earlier research projects.

Structures visible on the surface, or with minimal removal of topsoil, were named in sequential order within their survey square. Thus, in the “J” survey square on the Piedras Negras Site Map (Fig 5.1), the first structure was designated Str. J-1, the

twentieth was Str. J-20. The numbering of structures is strictly an artifact of mapping, and has no implications for Maya cultural activities. The term ‘structure’ (abbreviated Str.) is the basic designation for any architectural feature that appears to constitute a discrete building. No distinction is made in building designation between the staircase, basal platform or superstructure. This inserts some imprecision in terminology (see Shook and Coe, 1961: 7), but retains interpretive latitude (e.g., the basal platform of Str. J-20).

The antecedents of a structure visible at the surface are designated, in reverse order, by the addition of an ordinal to the end of a structure designation. Thus, the final version of a building is Str. J-20-1st, while earlier versions may be numbered Str. J-20-2nd, Str. J-20-3rd, and so forth. If no ordinal is designated in the discussion of a given structure, it is to be understood that the final construction episode (i.e., -1st) is intended. Less frequently in this study, a letter may be appended to the end of the designation indicating different additions made to a larger construction, the bulk of which is maintained. Thus, Str. J-20-1st may remain largely intact, even as modifications are made to rooms in the superstructure, or to the staircase. These modifications are lettered in reverse order. Str. J-20-1st-A would designate the final modification of the final version, preceded by Str. J-20-1st-B, J-20-1st-C, J-20-2nd-A, and so forth.

Finally, some structures lie beneath those visible on the surface, but have no other apparent association with these overlying buildings. These earlier buildings may represent structures used for different purposes (e.g., a residential structure overlain by a temple-pyramid), lie at an entirely different angle, or be separated temporally by other construction (e.g., a building is buried, a patio floor is placed above it, and finally another

building is placed on the patio floor at a later date). Such buildings are designated by the term “Sub”, appended with a number from latest to earliest. Thus, another building may lie below Str. J-20-3rd at an entirely different angle, and would be designated Str. J-20-Sub-1. Different versions and modifications of “Sub-series” structures are enumerated as with any surface-visible structure (e.g., Str. J-20-Sub-1-1st, J-20-Sub-1-2nd-A). Floors outside of buildings (e.g., plaza or patio floors) are similarly numbered in reverse order, from the 1st patio floor.

Patio designations for the Acropolis of Piedras Negras are largely accepted from the map produced by Parris and Proskouriakoff in the 1930s (Satterthwaite, 1943). Thus, in Court 3, the patio floor is simply referred to as “The 1st Patio Floor of Court 3.” The only significant variation with the earlier designation of structures and patios in the Acropolis is the addition of several structures visible on the surface but not mapped or designated in the vicinity of Str. J-24 (Figs. 5.1, 6.1, 6.2). As a result of these additions the patio associated with Str. J-24 has been designated Court 4 for the purpose of consistency with other architectural designations in the Acropolis.

5.4: Provenience Designations

Excavations at Piedras Negras were carried out using the lot system, in which provenience is designated with a combination of alphabetic and numeric codes. The first two-letter designation indicates the site name (e.g., PN is Piedras Negras, LP is La Pasadita). The first set of digits represents an operation: thus, PN-11 is the 11th set of excavations to be begun during the Piedras Negras Archaeological Project. Patio groups or other distinct features typically define the spatial limits of an operation, thus PN-11

consists of all those excavations conducted in Court 3 of the Acropolis. Each operation number receives a letter suffix (the "sub-op"), indicating a subdivision within the operation. Thus, PN-11A includes all of those units placed at the base of the staircase of a single building, Str. J-20, within Court 3. Sub-ops are further divided into individual units of excavations (e.g., PN-11A-1, PN-11A-2). A unit represents a horizontally bounded space, generally quadrilateral, within the sub-operation. The unit is finally divided into lots. Lots are considered to be indivisible and may consist of natural, arbitrary or cultural features.¹

5.5: Burial and Cache Terminology

The designation of burials and caches in this study follows the practice established by the University Museum researchers (see Coe, 1959). Caches are enumerated in the sequence of their discovery within a building, and this number is appended to the designation of the structure within which the cache was discovered. Thus, the fifth cache discovered in Str. O-13 is Cache O-13-5.

Burials are numbered sequentially without reference to their locus of discovery. The University Museum project of the 1930s excavated ten features designated as Burials 1 – 10 (see Coe, 1959), while more recent excavations have extended this sequence to Burial 110. Burials do not receive any other designation as a coherent feature, though they may encompass more than one lot.

¹ This system facilitates the recording of stratified deposits, but does grow somewhat unwieldy in the

5.6: Ceramic Phases

Lacking an established ceramic chronology, Satterthwaite (1935: 56, 1938) based his relative dating of architectural phases at Piedras Negras on sequential construction episodes, Long Count dates on monuments associated with construction episodes, and his assumption that “other considerations being equal, there was in operation a tendency to widen the rooms and make outer walls thinner.” In Satterthwaite’s architectural chronology earlier buildings had heavy, low vaults and later buildings had higher, lighter vaults (Holley, 1983: 67). Pole-and-thatch roofs, and later beam and concrete roofs, preceded fully masonry superstructures with corbelled vaults (Satterthwaite, 1938).²

The relationship between the dating of ceramic phases and the dating of architectural sequences is a complex and convoluted one (see Coe, 1990:7-9). Construction phases are used to date the ceramics that are, in turn, used to provide dates for other construction phases. This relationship is, perhaps, nowhere more complicated than in the royal palace of a Maya site, where long occupation and innumerable architectural modifications - often associated with datable monuments or burials - may provide the greater part of the evidence for building a site-wide ceramic sequence. Therefore, in a discussion of the architectural development of the Acropolis at Piedras Negras it is necessary to briefly outline the body of evidence that provided George Holley (1983) with the bases of his chronology for Piedras Negras (Fig. 5.5).³ Though this chronology has undergone some modification with the addition of more recent data it

recording of minute, horizontally differentiated deposits.

² For a full outline of Satterthwaite’s vault chronology see Holley (1983: 233, Table 4).

³ Some references in this text cite Holley as the primary source for data pertinent to excavations conducted in the 1930’s. Though Holley himself was clearly not a primary investigator, he did have access to notes and manuscripts not available to me (e.g., Holley 1983: 63).

continues to provide the best means of dating episodes of construction throughout Piedras Negras (Fig. 5.6; see also Forsyth and Hruby, 1997; Muñoz and Fitzsimmons, 1998; Muñoz, 1999; Muñoz, 2000).

Holley (1983: 70-71) lacked a sufficient sample for assigning ceramic types and complexes to the Preclassic materials from Piedras Negras. More recent excavations by members of the Piedras Negras Archaeological Project have allowed project ceramicist René Muñoz (1999; 2000; Forsyth and Hruby 1997) to assign a Middle Preclassic Hol phase (600 - 300 BC) and a Late Preclassic Abal phase (300 BC - 150 AD). These phases are still undergoing consideration by Muñoz and Griselda Robles. However, the range of dates does seem to be largely confirmed by radiocarbon assays, made on charcoal recovered from stratified deposits below Str. R-5 in the South Group of Piedras Negras (René Muñoz, personal communication 2001).

Following a poorly defined period of about 300 years,⁴ the ceramic sequence continues into the Naba Phase. Holley (1983: 78) correlates the Naba ceramic phase at Piedras Negras with the Tzakol 2 and Tzakol 3 phases at Uaxactun, largely on the basis of stylistic affinities with the ceramics of the latter site. The Naba ceramic phase falls within the Early Classic, and Holley (1983: 230, Table 1) provides beginning and ending dates ranging from approximately AD 400 to 575. The earlier of these dates is the less secure of the two, as it is based entirely on stylistic comparisons with other sites. This situation is further complicated by the fact that the sample of Protoclassic ceramics at Piedras Negras is vanishingly small, and thus the transition from Preclassic (i.e., forms typologically similar to the Chicanel phase ceramics at Uaxactun) to Early Classic

⁴ Very few Protoclassic ceramics have been identified at at Piedras Negras making the definition of a

ceramics (i.e., forms typologically similar to Tzakol 2 and 3 ceramics at Uaxactun) is not well documented at the site. Other temporal correlations for monuments, architectural construction episodes and Naba phase ceramics for the beginning of the phase are absent (Holley, 1983: 80 - 81).

The ending date of the Naba phase is, of course, coterminous with the beginning date of the subsequent Balche phase. Few “pure” Balche phase ceramic deposits have been identified, and the definition of a distinct phase between the Early Classic Naba, and Late Classic Yaxche phases resulted in the fact that “most types lumped in the Balche complex were factored out of the clearly defined Naba and Yaxche complexes” (Holley, 1983: 84).

Nonetheless, despite its initially problematic definition, the Balche phase has proven difficult to subsume within any other ceramic phase, and the transitional nature of the ceramic styles reflects similarly rapid changes in architectural programs at Piedras Negras. Stela 25, a monument associated with structure R-9 in the South Group of Piedras Negras (Fig. 5.7), is dated to 9.8.15.0.0.0 (AD 608) and associated with Balche phase ceramics. Thus, Holley (1983: 85) concludes that the Naba to Balche transition must have occurred well before that date and he extends that beginning date to AD 575. Construction associated with structure R-9 and Stela 26 (Fig. 5.8) provides the ending date for the Balche phase. Stela 26 is dated 9.9.15.0.0.0 (AD 628) and is associated with Yaxche phase ceramics. Holley confirms these dates with construction sequences established in the Acropolis, as well as structure K-5.

The Yaxche phase, which Holley (1983: 220) places between approximately AD 600 and 730, is defined on the basis of structural fill from a number of locations from around the Piedras Negras (Holley, 1983: 116 - 117). Associations with Stela 26 provide Holley's beginning date for the Yaxche phase, as noted above. Holley (1983: 124) posits an early and late facet for the Yaxche phase that appears to be borne out by more recent excavations. The terminal date for the Yaxche phase is provided by associations of Chacalhaaz phase sherds with Stela 9 in front of structure J-3 (Fig. 5.9), dated to 9.15.5.0.0.0 (AD 736), immediately above sealed deposits containing Yaxche phase ceramics. Thus, Holley concludes that the transition between phases lies shortly before AD 736.

Holley (1983: 117 - 118) further substantiated this date on the basis of the associations of Burial 5 (Coe 1959: 124) with fill containing Yaxche phase ceramics (although there are also sherds of the earlier Naba and later Chacalhaaz phases). Burial 5, contains shell plaques bearing a date of 9.14.17.14.17 (AD 729). This same interment also appears to be the grave of Ruler 3 (Yo'nal Ahk II), who died in AD 729 (see Proskouriakoff 1960; Martin and Grube 2000: 147).

A sherd found in excavations during the 2000 field-season of the Proyecto Arqueologico Piedras Negras further bolsters the association of Yaxche phase ceramics with this time period. The lot designated PN-32G-6-4 (Houston and Arredondo Leiva, 2000a) contained a deposit of fill containing Yaxche phase ceramics that includes a sherd bearing the name of Ruler 3. Although Ruler 3 does have a variant of the same name as Ruler 1 and Ruler 5, stratigraphic associations indicate that the individual named is Yo'nal Ahk II. On the assumption name refers to a ruler living at the time of vessel

production (and that it is contemporary with the other ceramics in the deposit), the deposit is provided with good circumstantial evidence for a *terminus post quem*: the Yaxche phase ceramics in this fill would have been produced no later than the death of Ruler 3 in AD 729.⁵ Further circumstantial evidence for dating the Yaxche phase is derived by Holley from similarities in motif design on date-bearing monuments and polychrome ceramics, as well as the apparently coincident dating (as established by Satterthwaite, 1961) of the introduction of corbelled arch architecture at Piedras Negras.⁶

The final well-defined phase in the Piedras Negras ceramic sequence is Chacalhaaz, which dates from approximately AD 730 to 840 (Holley 1983: 230). The Chacalhaaz ceramic phase is defined on the basis of stratigraphic positioning of fill in sealed structural deposits over those containing Yaxche phase ceramics, as well as the association of structural fill containing Chacalhaaz phase ceramics with dated monuments. As noted above, the beginning date for the Chacalhaaz phase is primarily provided by architectural/ceramic associations with Stela 9. Later dates for this phase are supported by the association of construction in Structure J-6 with Throne 1 (Fig. 5.10) dated to 9.17.15.0.0 (AD 785).

Holley's conclusions regarding the end of the Chacalhaaz phase are less conclusive. As Chacalhaaz phase ceramics are considered to coincide with the "waning of Maya Classicism" at Piedras Negras (Holley, 1983: 154), the end of the phase is

⁵ Conversely it provides a *terminus ante quem* for the fill, which could not have been deposited before the accession of Yo'nal Ahk II in AD 687. Another deposit excavated in 1998 as PN-24B-5-4 yielded a number of fragmentary bowls that are incised with the name of Ruler 2 (Arredondo, 1998; Houston et al., 1998b). Ruler 2 governed Piedras Negras from AD 639 – 686. That deposit contained exclusively Yaxche Phase ceramics and would fall firmly towards the beginning and middle of the period of production and use of this assemblage.

interpreted to coincide with the cessation of the “hallmark” of Maya Classicism: the dedication of dated monuments. Holley (1983: 155) cites Proskouriakoff’s (1960) reading of 9.19.15.0.0 (AD 825) as the end of monument dedication at Piedras Negras, and Satterthwaite’s (1961) argument for 10.0.0.0.0 (AD 830) as possible dates for the conclusion of the ceramic phase.

Holley divided the Chacalhaaz phase into two facets.⁷ This division was largely based on excavations conducted in the Acropolis, where fill from the final episodes of construction (assigned to Early Chacalhaaz) appeared to constitute a somewhat different assemblage than that found in on-floor deposits (Late Chacalhaaz). On this basis, Holley (1983: 156) concludes that the divide between the early and late facets of this phase must come sometime after AD 785, the date on Throne 1, which is associated with the final episode of construction in Structure J-6.

Lacking sealed construction deposits, Holley had a difficult time separating out a late facet for the Chacalhaaz phase from either the early facet, or from the subsequent (and even more ill-defined) Kumche phase. This problem is exacerbated by the confusing overlap in terminology assigned by Holley to the fine-paste ceramics, called the Tamay sub-complex, that are present in both Chacalhaaz and Kumche phase assemblages. At some points this sub-complex is referred to simply an assemblage of types, at other points it is defined according to phase time.

⁶ Excavations conducted by Mark and Jessica Child (Child and Child, 2000) revealed an Early Classic tomb with a corbelled arch vault that would clearly indicate the introduction of this architectural feature at Piedras Negras well before the 7th century date proposed by Satterthwaite (1961).

⁷ Excavations in 1999 (Child and Child, 1999) and 2000 (Golden and Quiroa, 2000) shed a great deal of light on the division of early and late facet Chacalhaaz ceramics, and are discussed in detail in the conclusion section of Chapter 6 in this volume.

The Kumche complex, posited as beginning after AD 830, is defined by the introduction of Fine Orange ceramics as well as the Tres Naciones group of Fine Gray ceramics.⁸ In addition to several new varieties of existing ceramic types, Holley assigned the development of several new monochrome types to this phase. Though several Postclassic censers were found by Satterthwaite in the Acropolis, these cannot be associated with any other ceramics that might allow for the development of an assemblage to define a Postclassic phase at Piedras Negras.

5.7: Dating of Construction Phases in the Current Study

The dating of construction phases in the Acropolis is largely based on the association of construction fill with ceramics assigned to the phases described above. The boundaries of these ceramic phases are, of course, only approximations, and this results in many of the interpretive difficulties discussed in Chapters 2 and 3 (e.g., Coe 1990; Cowgill, 1996; Sharer, 1978). However, it is important to mention here in general terms the interpretive choices made in the current research; choices that are not fully explained in the discussion of every deposit considered in this work.

In those instances where all ceramics recovered from a given lot are assignable to ceramic types identified as belonging to a single ceramic phase (and where stratigraphy agrees with the phase designation) there is little cause for an interpretive dilemma. However, far more prevalent is the recovery of lots that contain ceramics of which some types are assigned to one phase, while others within the same lot are considered

⁸ Fine Gray ceramics from the Chablekal ceramic group had been introduced to Piedras Negras somewhat earlier and, in fact, define the Tamay Subcomplex that constitutes part of the wider Chacalhaaz assemblage. (Holley 1983: 191).

diagnostic of an earlier or later phase. Where other data (e.g., radiocarbon dates, dated monuments) are unavailable, lots are assigned to phases based upon stratigraphic associations and the relative preponderance of ceramics types found therein.

Thus, if the fill beneath a floor contains predominantly Yaxche phase ceramics, but also contains a minority of sherds normally designated as belonging to the later Chacalhaaz phase, it may be reasonable to assume that the fill was deposited within a few years - to either side - of the later boundary of the Yaxche phase. Stratigraphic associations (e.g., a deposit containing late facet Yaxche phase sherds below, and early facet Chacalhaaz ceramics above) may offer confirmation of this interpretation, but even under ideal circumstances the assignation of a particular lot to a period of time spanning less than 25 years is dubious at best, unless substantiated by other data such as epigraphic information.

Such epigraphic information may be found not only on monuments, but also on vessel fragments containing names or dates. Names of individuals found inscribed or painted on sherds are considered to refer to individuals living at the time of manufacture of the vessel - unless the inscription indicates otherwise, as with a parentage statement. This does not mean that the individual was living at the time of deposition, but the ceramics are unlikely to have been prior to the known accession date of the king.

Conversely, fill containing exclusively Yaxche phase sherds may nonetheless be designated late Chacalhaaz in date when bounded above and below by lots containing Chacalhaaz phase ceramics. Unfortunately the lack of separate terms for ceramic, architectural and other cultural phases at Piedras Negras causes some confusion in such cases (e.g., the ceramics are of the Yaxche phase, but the fill is of the Chacalhaaz phase),

and all attempts have been made in the body of this work to clarify such situations.

Any situations more complex than that described immediately above are discussed in detail. Table 2 in Appendix I provides a brief contextual explanation for the dating of each lot discussed in Chapters 5 and 6.

5.8: Excavations in Court 3 of the Acropolis

Structure J-20

Court 3 is the highest of patio groups in the Acropolis, with the current ground surface of the patio itself at an elevation of about 82.00m above the Usumacinta River, and approximately 28.00m above the West Group Plaza (Figs. 5.1, 5.11). Five buildings that form a rough quadrilateral around the patio define the spatial boundaries of the court. To the northwest side of the patio sits Str. J-20. A structure of unknown function, J-20 is a long platform 15.83m x 9.70m, with a low masonry superstructure. Though the superstructure was cleared of debris and collapsed masonry in the 1930s for the purpose of mapping, nothing was reported on these excavations, and available excavation notes do not reveal in any detail what artifacts may have been uncovered. The floor plan of the J-20 superstructure appears to be like that of other structures typically called palaces at Piedras Negras, with a double-galleried central space, flanked by two side rooms. No masonry benches were found in this building.

There is no reason to assume that it could not have been residential in function - though, again, any such assignation would be entirely speculative. The lack of standing architecture and the scarcity of rubble from collapse probably indicates that this building

did not bear a masonry roof.⁹ Although the base of the superstructure, wall bases, and pillars are of masonry, the roof and perhaps some portion of the upper walls were almost certainly made of perishable materials.

A staircase runs down into Court 3 from the summit of J-20, but its risers are almost entirely collapsed as a result of poor construction. On the northwest side of the building, the bulk of the platform is artificial, though it does appear to rely on the natural bedrock of the hill to provide at least part of its mass. Though not shown on the map of the site produced by Parris and Proskouriakoff, there was a stairway descending from the summit of J-20 to the northwest, providing access from Court 4 into Court 3 (Fig. 5.12). As with the staircase leading into Court 3, that into Court 4 is virtually disarticulated; only an angular, ramp-like form, a well articulated landing at its base, and the remains of a couple of risers indicate the presence of a staircase.

Structure J-23

The platform of J-20 is integrated with the platform of Str. J-23, which lies to the northeast of the former building, at the northern corner of Court 3. Str. J-23 is the highest point in the Acropolis, and, in fact is the highest point at Piedras Negras. The base of the superstructure of J-23 sits approximately 36.00m above the West Group Plaza, and 90.00m above the Usumacinta River. Excavation data from the 1930s were unpublished, though field notes, photographs, and the state of the building today would indicate that work consisted of removing of debris for the purpose of mapping the superstructure.

⁹ It is possible that the evidence for roofing and upper reaches of the masonry walls were disturbed during the 1930s.

Standing walls - at least one vault that has since fallen was standing during the 1930s - indicate that the superstructure was entirely of masonry with corbel vaults. The spring-line of the vault is at 2.10m above the floor level. The floor plan of the superstructure is a double galleried central space, flanked by two smaller rooms. There are no masonry benches in this building. On its northwest side, the low platform of J-23 sits atop the partly exposed bedrock of the hill. On its southeastern side, a staircase descends to the roof of Str. J-22. Spatially, therefore, the superstructure of Str. J-23 is not oriented onto Court 3 but looks down onto Courts 1 and 2, as well as the West Group Plaza on one side, while on the other it opens onto a vista of the Usumacinta River.

Structure J-21

The platform of J-23, however, does provide the architectural link between J-20 and Str. J-21, which sits on the northeastern side of Court 3. The superstructure of J-21 is a vaulted masonry building that was excavated only in part during the 1930s, with data existing as unpublished photographs and field-notes. The interior space of J-21 is distinctly asymmetrical because of renovations that included the walling off of doorways at some point shortly before the abandonment of the structure (Houston and Arredondo Leiva, 2000a). The superstructure originally consisted of a double galleried space with a flanking room on the southeastern end of the building. The closing off of a room on the northeastern side of the building divided the gallery on that side into two smaller spaces, within which a masonry bench was built. A porch-like extension of the platform extends southwest onto Court 3, though this appears only in part on the site map (Figs. 5.1, 5.2).

Structure J-18

On the southeastern side of Court 3 lies Str. J-18. J-18 is another double-galleried building with flanking side rooms. Excavations during the 1930's were unpublished, but field notes and photographs indicate that, as with the other buildings in this patio, work was largely confined to the removal of rubble for mapping purposes. Photographs indicate that the masonry throne in the northwestern gallery had legs built into the floor of the building, while the backrest had elaborate modeled stucco decoration (some of which is still visible today) such that it resembled a stucco version of Throne 1 or the throne visible on Panel 3. The total absence of a bench for this throne was used in conjunction with the destruction of Throne 1 and the burning in Str. J-12 to lend support to Satterthwaite's hypothesis of a peasant uprising (Satterthwaite, 1935: 11-12). On its southeastern side J-18 overlooks Str. J-8 and the J-5 platform leading down into Court 1.

Structure J-19

The final building composing Court 3 is Str. J-19. Str. J-19 is the lowest of the buildings on Court 3, standing only about 1.00m above the patio level, and consists of little more than a low masonry platform that at one time supported a largely perishable superstructure. The platform measures approximately 17.80m from northwest to southeast and nearly closes off the entrance to much of the northwestern gallery of Str. J-18. Though masonry wall butts are visible, no formal floor plan is discernible from the surface and excavations were never conducted to reveal such a plan. The building was excavated in the 1930s and the results published by Satterthwaite (1954: 85-87). Though several meandering trenches are visible, Satterthwaite acknowledges that his supervision

of the excavations was minimal and his report concerns only a small axial trench.

This excavation revealed two phases of construction of the building (Strs. J-19-1st and J-19-2nd) and these were associated with two phases of the exterior patio floor (Fig. 5.39).

These are the only published references to the construction sequence of the patio itself within Court 3. Satterthwaite (1954: 86) concluded that the structure was a palace structure similar to its more massive counterparts within Court 3.

At the center of Court 3 is an exposed bedrock platform that rises only a few centimeters above the current ground level of the patio (Fig. 5.11). No definitive associations between this outcropping and the final phases of the buildings of Court 3 can be ascertained. All that is clear about the relationship of this natural platform and the architectural features of the patio is that at the time of abandonment this relatively round natural feature would have jutted slightly above the stucco surface of the patio. There are neither reports nor notes of excavations associated with this bedrock exposure, but an excavated pit running along the northwestern side of the outcrop indicates that excavations did take place.

5.9: PN-11A, PN-11F, and PN-11H: Excavations Associated with Str. J-20

Operation PN-11 was originally begun as a series of probes into Court 3 during the 1997 field season of the Piedras Negras Archaeological Project. In subsequent seasons the operation was extended to include excavations in all parts of the Court 3 patio floor, as well as probes into Strs. J-23, J-20, J-21, and J-18 (Golden, 1997, 1998; Golden and Pellecer, 1999). Sub-operation PN-11A includes one set of the original test pitting excavations in front (southeast) of the staircase of Str. J-20. This sub-operation was later

extended to include a trench running southeast from the base of the J-20 staircase to the bedrock outcrop at the center of Court 3. Sub-operation PN-11F continued the line of the PN-11A trench into the staircase of J-20 in order to expose the building sequence of Str. J-20 and the associations of the different construction phases of that structure with those features uncovered in the PN-11A sub-operation. Finally, the sub-operation designated PN-11H consisted of two probes on the northwest side of the J-20 platform that were conducted in order to clarify the construction sequence of Str. J-20 (Fig. 5.25). Table 1, Appendix II provides an overview of all architectural phases as revealed in these sub-operations.

PN-11A-1

The first excavation in Court 3 was PN-11A-1, in front of the staircase of Str. J-20, following the central axis of that building. The unit was 2.00m in length, by 1.00m wide. The unit's orientation along its long axis was 115 degrees east of north. The unit included the first riser of the staircase of J-20, although the stairs were left *in situ* in order to avoid destroying the architecture.

The stones of the first step are between 7 and 12 cm in height by 30cm wide. The first lot (humus level, 0.00 - 0.61m)¹⁰ contained pebbles and cobbles in a matrix of dark brown loose earth (Fig. 5.14). Among the sherds recovered¹¹ was a ceramic brick

¹⁰ Unless noted as an absolute altitude, lot depths are from the ground surface of the midpoint of the excavation unit.

¹¹ The reader is referred to Table 1, Appendix I, for ceramic weights from each lot described in Chapters 5 and 6. A full type-variety assessment of the ceramics excavated in Courts 3 and 4 is not presently available, as these materials are still undergoing analysis by other members of the Piedras Negras Archaeological Project. The provisional assignment of ceramics to types, and of types to assemblages and ceramic phases for all units in the Acropolis was conducted by the author. The results of this analysis for all units in PN-11 and PN-46 are presented in Table 2, Appendix I.

covered in stucco that measures 7.00 x 8.00 x 2.00cm.¹² The sherds appear to be assignable to the Chacalhaaz phase.¹³ This lot ended with the discovery of what is likely the 4th Patio Floor (as encountered in PN-11F-1-4). No later floors were preserved in this unit and the stratigraphy suggests an intrusion, probably the result of tree roots.

The second lot (0.61 - 1.05m) represented the floor and the construction fill of Patio 3. The floor here was only one centimeter thick. The fill consisted of large cobbles and soft gray-brown dirt, supported by soil that was darker and harder packed. The first construction phase of the patio appeared at first to be the final phase, but as a result of subsequent excavations referred to below, it became apparent that this was the penultimate phase of the patio. There were not many sherds in this lot, but the majority of these appeared to be from the Late Classic, similar to those of the previous lot.

At approximately 1.06m in depth, a floor of burned clay and stucco was uncovered and this layer defines Lot 3 (1.06 - 1.65m). Immediately on top of this floor, that is within Lot 2, there had been pieces of bajareque along with stucco fragments from a wall, some of which were collected as samples. The bajareque indicates that there had been a structure made of perishable materials, constructed upon this base of clay. The clay floor was measured 5 - 10cm in thickness.

The burned clay floor sat immediately atop a dark clay deposit. The two constitute separate strata, but this was not immediately apparent during excavation and so both were included in the same lot. A sample of clay was taken from this lot and other

¹² This brick is classified under the type-variety system as Granizo Unslipped (Holley, 1983). Such bricks probably served as tenons, inserted into the interstices between stones in the exterior walls of buildings on the Acropolis and intended to help support the weight of stucco facades.

¹³ See Table 2, Appendix I for ceramic phase assignments of all lots, estimated dates of deposition, description of context, and explanation of date assigned.

parts of the same deposit (e.g., PN-11A-2-4, 11A-3-4, and 11A-4-4). The clay floor was actually relatively devoid of artifacts, and acted as a seal over the top of the dark clay beneath. This dark clay contained abundant quantities of artifacts. Perhaps the most interesting aspect of this deposit was that it yielded a great quantity of polychrome sherds as well as sherds incised with graffiti. These partial vessels must have been deposited with some force, for refits were possible for parts of vessels scattered over several square meters (Fig. 5.15).¹⁴ In addition to the sherds, such diverse materials as figurine fragments, an ocarina in the form of a turtle, fragments of obsidian and chert, and the bones of a small animal were recovered from this dark clay.

As already mentioned, this deposit was sealed above by the clay floor, as was also sealed below by a deposit of hard fill. This fill was present in PN-11B-1 and 11B-2, as well as in the excavations directed by Héctor Escobedo in the second terrace of J-3 and in front, at the foot of the Acropolis (see Escobedo, 1997). All of the sherds recovered from this deposit correspond to the Naba Phase ceramics, though many represent possibly unique types.

PN-11A-2

The first lot of PN-11A-2 (0.00 - 0.41m) was slightly different than in PN-11A-1. Lot 1 began with the same level of humus, but here a stucco floor was encountered at 41cm.¹⁵ This floor represents the penultimate phase of the patio in front of J-20 (2nd Patio

¹⁴ David Freidel reported a similar deposit at the site of Cerros, Belize (Freidel and Schele 1989).

¹⁵ No absolute elevations being were established for excavations conducted during the 1997 and 1998 field seasons because of problems relating to site survey. Based on estimations and known absolute elevations for the 2nd Patio Floor as measured in PN-11L-1 and PN-11I-12 the level of the floor in this lot is in keeping with this assigation.

Floor), which was very thin (1cm in maximum thickness) and had largely been destroyed by weathering.

No ballast was encountered below the floor, only a level of dark earth 13 cm in depth that defined Lot 2 (0.41 - 0.55m). This lot contained a moderate quantity of Late Classic sherds, apparently from the Chacalhaaz Phase. The 4th Patio Floor was encountered at 55cm.

The 4th Patio Floor and its ballast represented Lot 3 (0.55 - 1.04m), the description of which is exactly the same as explained in PN-11A-1-2. All of the sherds recovered from this level appear to be from the Yaxche Phase of the Late Classic. This lot ends at the level of the burned clay floor at 1.04 m in depth.

Lot 4 (1.04 - 1.20m) includes the clay floor and the black clay beneath. Cutting through the clay floor, more materials from the Early Classic deposit were uncovered. The biggest difference between the materials of PN-11A-1-3 and PN-11A-2-4 is that there were more polychrome and incised sherds in the former. A feature of particular interest was two courses of cut stone were encountered in the northeastern profile of this lot. This feature does not appear to be a building but is more likely to be a cist, perhaps for a burial or offering. Unfortunately, time constraints during the 1997 season did not allow for the excavation of this feature. At a maximum depth of 1.65m a level of calcified fill was encountered, ending work in this unit.

PN-11A-3

PN-11A-3 was a 1.00 x 2.00m extension of PN-11A-1, to the southeastern side of the latter. Lot 1 (0.00 - 0.25m) was the humus level, which contained Chacalhaaz Phase

sherds similar to those encountered in PN-11A-1-1 and PN-11A-2-1. The 2nd Patio Floor was encountered at 25 cm in depth.

Lot 2 (0.25 - 0.67m) was the level of dark soil below the final phase of the patio floor. This lot contained numerous Chacalhaaz Phase sherds, but did not yield other types of artifacts. Lot 2 finished at the upper boundary of the 4th Patio Floor, at a depth of 67cm. The floor here was in a better state of preservation than in PN-11A-2 or PN-11A-2-2.

Lot 3 (0.67 - 1.25m) included the 4th Patio Floor and its ballast. Few artifacts were uncovered in this level, but those that were correspond to the Late Classic. The surface of the burned clay floor was encountered at 1.25m.

Lot 4 (1.25 - 1.55m) began at the level of the burned clay. The clay floor crossed the unit at an angle of 18 degrees west, occupying only the southeast half of PN-11A-3-4. This is of note because J-20 follows the entirely different orientation of 26 degrees.

The black clay in this lot was obviously part of the same deposit evident in PN-11A-1-3 and PN-11A-2-4, though there were some differences. Here there were more polychromes (including a large well preserved sherd with glyphs, see Fig. 5.16) and incised sherds. There was also a sulphurous smell in this deposit, probably a result of the activity of bacteria working on organic materials in the deposit.

Rather than a cemented layer of beneath this deposit, a level of thin rocks that formed a mosaic floor was uncovered at 1.55m. Beneath the mosaic floor, the materials were assigned to lot 5 (1.55 - 1.65m). Less than ten sherds were discovered in this layer of dirt that was darker and softer than that of Lot 4. At 1.65 m in depth, a level of cement was encountered ending excavations in this unit.

PN-11A-4

PN-11A-4 represented an extension 1.65m wide to the southeast of PN-11A-3. The first lot (0.00 - 0.22m) of the unit was the humus level. A change in soil color was encountered at 22cm. Although no preserved stucco floor was found, this change was indicative of the level of the 1st Patio Floor.

The change in color indicated the beginning of Lot 2 (0.22 - .43m). This level ended at the surface of the 2nd Patio Floor, somewhat preserved here, at 43cm. The third lot (0.43 - 0.65m) was thinner here than in PN-11A-1-2, 11A-2-3 and 11A-2-4, because the ballast of the floor is not as thick and the deposit below is thicker.

At 75cm the level of the deposit of black clay was arrived at, beginning Lot 4 (0.75 - 1.47m). The smell of sulfur was very intense here. Upon reaching the bottom of this layer, an artifact rich deposit was encountered, containing polychrome sherds, incised sherds, animal bones, obsidian, figurines (including a complete ocarina, Fig. 5.17), ceramic earspools (Fig. 5.18) and a jade bead.¹⁶ Beneath this deposit, a masonry platform was uncovered at 95cm in depth.

The deposit that had initially appeared to be an unusually rich midden as exposed in other excavations of PN-11A, was revealed in this unit to be the remains of the ritual termination of a building, J-20-sub-1 (Fig. 5.19). This structure had a small staircase in what was later revealed to be the eastern corner. The first step is 42cm high, and 32cm wide, and the second is 10 cm high. The first terrace of the building is 56cm high.

¹⁶ Details of artifact analysis are currently unavailable. Lithic artifacts are being analyzed by Zachary Hruby. Kitty Emery is conducting the analysis of faunal remains. Matilda Ivic and Jessica Child are conducting independent analyses of figurines.

PN-11A-5

This was a 2.00 x 2.00m unit located on the southeast side of PN-11A-4 (Fig. 5.13). The first lot consisted of the 25cm thick humus layer (Fig. 5.20). Very few cultural remains were recovered in this first lot. Those sherds that were encountered were determined to be assignable to the Chacalhaaz phase. The 1st Patio Floor was not preserved in this unit.

The second lot was a level of rocks within a matrix of soft earth that represented the ballast for the 1st Patio Floor, although as mentioned above the stucco of this floor was not preserved in this unit. This ballast was somewhat thicker on the northwest side of the unit. The lot, therefore, continued to a depth of 65 – 70cm along the northwestern edge of the unit, but to only 55cm along the southeastern edge. Very few artifacts were recovered from this lot.

The third lot consisted of the level of dark clay that capped the Early Classic deposits in this part of the patio. This layer was everywhere 60cm thick, but reversing the pattern established in the deposit above, this lot was deeper to the southeast dropping to a maximum depth of 1.40m, while to the northwest it extended only to 90cm.

A variety of artifacts were recovered from this level, including figurines, obsidian and carbon. Flotation of soil samples show that the clay was surprisingly clean of micro-materials that are normally encountered in construction fill. This may indicate that the clay was specially prepared as part of the termination activities associated with the Early Classic structures. Although a broad range of artifacts was recovered, in absolute

quantities this was somewhat less than those encountered in the same levels of PN-11A-1 through PN-11A-4 (see Table 1, Appendix I).

The fourth lot was a level of large cobbles and small boulders set directly above bedrock, ending at a depth of 2.00m. This level of loose fill represents the vast majority of fill that buries the Early Classic occupation here and in other parts of Court 3 and the Acropolis in general. A calcified layer overlying the rubble formed a hard cap that made excavation extremely difficult. This calcification is the result of water percolating down through overlying fill and through the loose rubble. Those few sherds encountered were assignable to the Naba phase.

A thin layer (15cm thick) of soft, dark earth, below the loose fill in the northwestern half of the unit constitutes the fifth lot. A few Naba phase sherds were uncovered in this lot. Below the fifth lot there was a culturally sterile layer of soft, dark earth that almost certainly represents the ancient humus layer of the hill. Excavations in this unit were concluded after a probe extended 50 cm into this layer confirmed that it was sterile.

PN-11A-6

This 2.00 x 2.00m unit represents an extension of PN-11A-5 to the southwest. The first lot consisted of the humus layer, 25cm thick. As in the first lot of PN-11A-5, very few cultural materials were recovered in this level, but those sherds that were identifiable belonged to the Chacalhaaz phase. The second lot consisted of the ballast for the 1st Patio Floor (25 - 70cm). Again, as in PN-11A-5, almost no artifacts were recovered. This lot

was, however, different from its analog in PN-11A-5 in that the layer became thinner to the southeast. In the last meter of the southeastern side of the unit this level did not exist.

The third lot consisted of the level of clay that covers the Early Classic deposits. Although many artifacts were recovered, there was not a great diversity and the fill did not yield many figurine fragments or lithic objects. Those sherds recovered are assignable to the Naba phase. The bedrock rises in this lot to the southeast, and as a result the lot was only 20cm thick (60 – 80cm below the ground surface) on that side. To the other side of the unit this same stratum is between 30 and 90cm below the ground surface.

The fourth lot designates a stratum identified only on the northwestern side of the unit, and it is the same layer of loose rubble fill encountered in PNA-5-4. Here the level is 90cm to 1.30m below the current ground level and located immediately on top of the current ground level. As in the third lot, the bedrock rises to the southeast in the form of a ramp. The Maya modified this ramp, leveling it in several places, in order to provide a stable foundation for masonry stairs that run at an angle of 5 degrees east of north, the same angle as J-20-sub-1. This staircase so formed was found to have at least two risers, though based upon the observed modifications to the bedrock a third riser is likely to be present but buried within unexcavated fill.

PN-11A-7

The dimensions of this unit were irregular as it was bounded on the southeast by the form of the bedrock outcropping. The unit was on both sides 2.00m wide, but was

approximately 2.50m long on the southeast side, and 2.40m to the northwest (Fig.

5.13). The first lot consisted of the humus layer (0 - 25cm). As with the humus in every part of Court 3, this level yielded ceramics of the Chacalhaaz phase. Above the humus there was approximately 30cm of soil, devoid of artifacts, that consisted of the fill from the old test pit running alongside the bedrock outcrop. This pit runs perpendicular to the PN-11A trench and PN-11A-7 crossed it.

The ballast for the 1st Patio Floor was not evident in PN-11A-7, and, therefore, the dark clay level indicating the end of the Early Classic occupation defined the second lot. This layer is situated directly above the bedrock. In this unit the bedrock dips rapidly 40 cm from the northwest side of the unit, forming one wall of a chasm running across the patio from northwest to southeast. The clay level dips over the edge of this chasm but stops just a few centimeters over the lip of the bedrock (Fig. 5.20, 5.21).

The third lot consisted of the fill of the chasm itself, formed of large cobbles and boulders, many of which were impossible to move for lack of heavy lifting equipment. The test pit from the 1930s was entirely cleared of loose debris and the chasm excavated to a depth of 2.80m below the edge of the bedrock outcrop. It is obvious that the chasm is far deeper than this, as it was possible to insert a metric tape at least 5.00m into the gaps between the fill, but the difficulty and danger of excavating such unconsolidated fill prevented further excavation. It is possible that natural processes filled the chasm, but the presence of large sherds among the cobbles indicates that it was most likely filled in by human action. Unfortunately, because of the fill and disturbance by earlier excavators it was impossible to date the deposit from its associated artifacts. However, given the

context of the deposits in the PN-11A trench, it would appear that the chasm was filled in at the end of the Early Classic along with much of the patio.

PN-11A-8

This unit was excavated as an extension (was 0.50m wide by 2.00 to 2.20m long) of PN-11A-7, with the intent of decreasing the possibility of collapse as well as to take further advantage of the exposed excavation from the 1930s, which had already removed approximately 1.00m of overlying fill. Given the loose fill and the condition of the earlier excavations it was not possible to maintain very exact lots. For this reason only one lot was designated, and this extended 2.80m down from the ground surface. This excavation did not reveal the extent of the chasm, but it does appear as though there exists one or more caves, rock shelters, or other sort of opening within the bedrock outcrop. Other such exposures in the area often have overhangs, though caves are scarcer around Piedras Negras. The continued danger of collapse prevented further excavation.

PN-11A-9

This unit (2.00 x 1.00m) was located to the southwest side of PN-11A-4 and exposed a larger portion of Str. J-20-sub-1. The first lot was composed of the humus layer (0 – 25cm), and yielded sherds assignable to the Chacalhaaz phase. Between the level of the ballast of the 1st Patio Floor, and the humus there was a layer of compact brown soil with small pebbles. This level was designated as the second lot, was approximately 38cm thick and located immediately above the floor ballast. A moderate amount of Yaxche and Chacalhaaz sherds were recovered from this second lot.

The third lot (0.63 – 1.03m) was the level of the ballast for the 1st Patio Floor. As in other parts of the trench, the ballast was composed of small pebbles with very little soil and virtually no artifacts. Below the ballast the layer of dark clay delimiting the Early Classic occupation of the Patio was uncovered and designated as Lot 4 (1.03 – 1.43m). The clay here was placed directly above the remains of the J-20-sub-1 platform and superstructure. Although in terms of the fill found in other construction episodes of the Acropolis this clay yielded a significantly large quantity and variety of artifacts, neither the quantity nor the variety were equivalent to what had been encountered to the northeast of J-20-sub-1 in the same deposit. Interestingly, a 1cm thickness of the clay at the interface between the buried building and the overlying deposit was darkened, hardened and ashy. This indicates that the clay had been deposited when the building was being terminated, and, in fact, while it was still smoldering.

The platform of Str. J-20-sub-1 was intact to a height of 80 – 90cm, and was formed of five or six courses of stone. There is no reason to assume that this does not constitute the full height of the building platform. The superstructure had been made entirely of perishable materials, of which many remains were recovered in the form of bajareque. Excavations within the platform, designated Lot 5, revealed loose rubble fill 0.90m thick that clearly did not extend below the exterior walls of the platform. No formal surfacing such as a stucco floor or cleared bedrock had been prepared for Str. J-20-sub-1. Rather, the building was situated directly on top of the ancient topsoil.

PN-11A-10

PN-11A-10 was a 1.50 x 1.50m unit located to the southwest of PN-11A-6 in order to better expose the masonry stairs uncovered in the latter unit. The first lot corresponds to the level of humus (25cm thick), with sherds of the Chacalhaaz phase. The second stratum encountered was the layer of dark clay that was not as densely packed here as in other units where it had been as exposed. As a result some mixing had occurred of sherds from the Early and Late Classic in the uppermost centimeters of the layer.

A second set of masonry stairs, one course of stone in height, was encountered within the clay but above those found in PN-11A-6 (Figs. 5.20, 5.21). No surface had been prepared for the stairs, and they were situated on the fill below. Furthermore, the treatment of the masonry was far cruder than that of the stairs found in PN-11A-6. One possibility would appear to be that these had been built specifically for the episode of architectural termination, and were buried immediately thereafter. Below this second set of stairs a third level (Lot 3) of dark clay and small cobbles continued for 45cm before ending at the bedrock.

PN-11A-11

Another unit measuring 1.50 x 2.00m was opened to the southwest of PN-11A-10 to better reveal the construction sequence of the masonry stairs. The first lot consisted of the humus layer (0 - 25cm) with sherds of the Chacalhaaz phase. The second lot represented the dark clay containing Naba phase ceramics, within which were located the

second set of stairs, as well as another line of worked stones approximately 50cm to the southwest (Fig. 5.21). The significance of this new line of stones remains unclear.

PN-11A-12

PN-11A-12 was an extension of PN-11A-10, 1.10 m to the southwest, which was begun in order to clarify the association of the masonry stairs with the chasm. Below the first lot (the humus layer, 0 - 25cm), the dark clay layer (25 - 35cm) was encountered and defined Lot 2. The clay was situated directly on top of the bedrock and the edge of the chasm. Another line of worked stones was encountered near the edge of the chasm probably the remnants of a small step. It is not possible to confirm whether or not the construction of this small step was associated with the other stairs situated on the bedrock (PN-11A-6-3) or with the stairs encountered in PN-11A-10-2.

PN-11F-1

With the construction sequence of the patio to the southeast of Str. J-20 clarified by the PN-11A trench, it was decided to follow up on these initial results by extending excavations into the platform of Str. J-20 itself. It was not possible to follow the trench line established by PN-11A because of the need to avoid the removal of old-growth trees. PN-11F was ultimately defined by a trench consisting of seven units rising along the staircase of J-20 at an axis of 105.1 degrees (Figs. 5.13, 5.20). The first unit in this sub-operation measured 1.50 x 2.00m and covered the third through fifth risers of the staircase. The first lot consisted of the 10cm of humus lying above the masonry. The

stairs themselves were in an extremely poor state of preservation, and no riser was complete across the width of the staircase.

The second lot, approximately 1.70m in depth, consisted of the fill beneath the stairs. The fill consisted of large cobbles within a matrix of soft earth. Thus, the final phase of the J-20 staircase was merely a veneer of worked stones over a rather unstable hearting. The ceramics recovered from the fill were assignable to the Chacalhaaz phase. This lot ended at the level of the 1st Patio Floor. The patio floor here was in an exceptionally good state of preservation because of the protection afforded by the overlying mass of fill, and was articulated with the platform of the structure that has been provisionally designated Str. J-20-2nd (see PN-11F-4-2, below).

The fill below the floor was designated as the third lot, and consisted of fine soil with pebbles. This lot was 25cm thick and terminated at the surface of the 2nd Patio Floor. The 2nd Patio Floor was laid almost directly (less than 10cm) above a 3rd Patio Floor, but this stratum was only evident in the profile and so did not receive a separate lot designation. Thus, the 25cm of the third lot incorporates two construction episodes. The fill contained a great quantity of materials including sherds (Chacalhaaz Phase), charcoal, chert, obsidian, and animal bones.

The fill of the fourth lot consisted of highly compact fine dirt with pebbles, and was a mere 10cm thick. The lot ended at yet a 4th Patio Floor. Not many ceramics were uncovered in this lot, but those that were are provisionally assigned to the Yaxche Phase.

The fifth lot consisted of the ballast and fill underlying the floor that marked the end of Lot 4. There were, in fact, two floors (the 5th and 6th Patio Floor), which were laid one atop the other with no intervening fill. Each floor was somewhat thicker than those

above (2-3cm thick in comparison to less than 1cm), but they were in a poor state of preservation. The fill itself consisted of cobbles without much soil, and ranged from 25 - 30cm in thickness. The lot became increasingly dark towards the bottom with more clay, somewhat resembling Lot 6 below, but there was no clear dividing line. The ceramics recovered were assigned to the Naba phase.

The sixth lot consisted of dark clay similar in large part to the level of dark clay that seals the Early Classic constructions uncovered in PN-11A, yet it does differ here in certain aspects. There was no great quantity of artifacts (see Table 1, Appendix 1) and the texture is somewhat more compact. The lot continues 22 – 25cm before a new layer of clay and pebbles begins. This new layer is very compact, and possible burned, although the division was very fine and difficult to understand. A line of stones one course high, some worked and others uncut river cobbles, ran from north to south on the southeastern side of the unit. The significance of this line of stones remains unclear.

Below the compact layer, Lot 7 represented another level (22 – 25cm thick) of dark clay. Here there were a great many sherds, as well as obsidian, charcoal, chert and bajareque. All identifiable sherds belong to the Naba Phase. A radiocarbon assay of charcoal from PN-11F-1-7 yielded a calibrated date of 1503 \pm 52 BP (AD 395 - 499).

The eighth lot consisted of 40cm of soft black soil with large cobbles. This lot yielded a great many sherds of the Naba Phase. The ninth lot was defined by a stratum 40cm thick that consisted primarily of large cobbles with a minimal amount of soil, below which was the ancient humus layer. Very few cultural materials were encountered in PN-11F-1-9, but the ceramics were all identifiable as belonging to the Naba Phase.

PN-11F-2

PN-11F-2 acted to connect the line of the PN-11A trench with that of the PN-11F units. A unit 2.00 x 1.00m with its long axis at an angle of 71 degrees, PN-11F-3 was placed at the northwest side of PN-11A-4 and 11F-9. It included the first two risers of the staircase of Str. J-20-1st. The first lot consisted of the 10 – 20 cm of humus overlying the stairs themselves. The steps were in a better state of preservation here than in most of the staircase, with many of the stones in their original positions. The second lot consisted of the fill, approximately 10cm thick, below the stairs that was composed of dark soil and pebbles. Both lots contained ceramics of the Chacalhaaz Phase.

The third lot proceeded until 47cm below the level of the first riser of the J-20 staircase, and 28cm below the current surface at the patio level. This lot consisted of soil that is somewhat lighter in color than the humus. The ceramics from this level appear to be a mix of Chacalhaaz and Yaxche phase materials.

The fourth lot (Early Classic, Naba Phase) is the ballast below the first patio floor (associated with PN-11F-1-5). The floor here was well preserved, although only a few millimeters thick. The lot consisted of 20 – 35cm of pebbles without a minimal matrix of loose dirt. Very few artifacts were recovered in this lot.

Lot five was the stratum of dark clay deposited over the remains of J-20-sub-1. This layer was between 10 and 30cm thick and contained many sherds, all of which were consistent with a Naba Phase assemblage. Given the evidence from this lot when compared with other lots representing the same clay layer, it is possible to say that the majority of fine objects (e.g., polychrome sherds, incised sherds, earspools, etc.) were

deposited over the center and to the north side of J-20-sub-1 during the termination ritual associated with the destruction of the building.

Another thin layer (10cm thick) of black clay with bajareque and ash immediately above the remains of the J-20-sub-1 platform was encountered below the first clay level. Low, linear mounds on the upper surface of the platform consisting of bajareque and powdered stucco appear to represent the remains of the wall bases of the perishable superstructure. There is no clear separation in terms of deposition between this layer and the layer above. The most probable conclusion is that the color change and presence of ash in this layer is the result of the deposition of the dark clay and ceramic layer on the remains of the building while it was still burning or smoldering. One-half of an Aguila Orange drum had been placed vertically within the deposit on the northern edge of the unit, seated immediately above the remains of the J-20-sub-1 platform.

PN-11F-3

This unit was 1.00 x 1.50m in size, lying at an angle of 71 degrees along its long axis, was placed on the southeastern edge of PN-11F-1. This placement meant that the unit included the first two risers of the staircase of the J-20 platform. The humus on top of these stairs constituted the first lot (0 – 10cm). Sherds recovered from this layer were assignable to the Chacalhaaz Ceramic Phase.

There were 40 – 45cm of fill, consisting of soil, pebbles and small cobbles, below the stairs designated as Lot 2. In this lot, too, the sherds were assignable to the Chacalhaaz Ceramic phase. This second lot ended at the top of the 1st Patio Floor, which

was preserved only in fragments in this location. The ballast of this floor was designated Lot 3. Very few artifacts were recovered in Lot 3.

The fourth lot was the dark layer of clay (here only 10cm thick) that yielded a relatively large quantity of Naba Phase ceramics. This assemblage included a high frequency of polychrome and incised sherds. Below the clay was a level, approximately 1.00m thick, of large cobbles within a matrix of loose, dark soil that constituted Lot 5.

Lot 5 contained a great variety of artifacts including animal bones, carbon, figurines, obsidian, and chert in addition to the ceramics sherds. The north platform façade of J-20-sub-1 was exposed in this lot, but no staircase was in evidence. This would seem to indicate that the small staircase uncovered on the northeastern corner of J-20-sub-1 in PN-11A-4-4 was one of a pair of flanking staircases for the platform. This pattern of flanking corner staircases is relatively common in the architectural corpus of Piedras Negras. The fact that no central staircase was uncovered makes the assignment of an orientation to the building somewhat more difficult. However, given the set of stairs uncovered initially in PN-11A-6-3 it would seem probable that the east-west axis was important to the building's use. Excavations in this unit ended at the base of the J-20-sub-1 platform.

PN-11F-4

This unit was 1.50 x 1.50m square, and placed on the northwestern edge of PN-11F-1. The first lot consisted of the 10cm humus layer lying on top of the staircase. The risers themselves had been completely obliterated in this part of the building, having slumped as the loose fill beneath gave way to root action and erosion. The fill of cobbles

and loose earth below the remains of the masonry constituted the second lot, and reached a maximum depth of 2.00m, lying directly above the first terrace of J-20-2nd. This terrace was 1.60m high, and built of small, flat, cut stones. The masonry was well preserved, having been protected by the overlying fill.

There was a plinth with stucco preserved at the base of the terrace. This feature extended 80cm to the southeast from the terrace itself and stood 25cm high. The First Patio Floor had been worked into the plinth, indicating that the two were contemporary and predated the staircase - although it is impossible to say by how long. The stucco of the terrace façade was not preserved, although powdered stucco was present in the fill. All the sherds recovered in this lot are assignable to the Chacalhaaz Phase.

PN-11F-5

PN-11F-5 was a unit measuring 1.40 x 2.00m, oriented along its long axis at an angle of 71 degrees, and placed on the northeastern edge of PN-11F-4 and PN-11F-6. The first lot (Chacalhaaz Phase) consisted of 10cm of humus overlying the remains of the staircase of J-20. Below the remains of the staircase the second lot consisted of cobbles and loose soil that constituted the construction fill. The fill in this unit was a maximum of 1.60m in thickness. In the western side of the unit a second terrace of J-20-2nd was exposed. This terrace was 90cm high and well preserved. As with the first terrace the masonry consisted of small, flat, cut stones.

PN-11F-6

This unit measured 1.50 x 2.00m and was placed along the northwestern edge of PN-11F-4. The first lot consisted of the 10cm of humus on top of the remains of the J-20 staircase. Below the stairs was the expected fill consisting of cobbles and loose soil that constituted the second lot. The fill here was a maximum of 65cm thick, and overlay the third and final terrace of J-20-2nd. This terrace is 25cm high, and it is not possible to state definitively whether it is part of the J-20-2nd platform or, rather, part of the superstructure. All of the sherds recovered in this unit are assignable to the Chacalhaaz Phase.

PN-11F-7

In order to determine whether or not there had been a principle staircase associated with the northeastern side of J-20-2nd, PN-11F-5 was extended one meter to the northeast thereby defining the limits of a 1.00 x 1.40 m unit designated PN-11F-7. The first lot consisted of the 10cm of humus overlying the remains of the staircase of J-20-1st. As in PN-11F-5-2, the second lot consisting of construction fill extended to a maximum depth of 1.20m. The second terrace of J-20-2nd was exposed here as well, but there was no evidence for a contemporary staircase.

5.10: PN-11H: Excavations in the Northwest Side of J-20

The principal staircase of J-20-2nd was not encountered in PN-11F, and it was, therefore, necessary to make a probe into the northwestern side of J-20-1st in order to

determine the orientation of the structure. Two test pits were placed just off the northwestern edge of the superstructure of J-20 and designated as PN-11H.

PN-11H-1

PN-11H-1 was placed along the line of the PN-11F trench, below the northwestern edge of the superstructure of J-20. The unit was 2.00 x 1.50m, and ran at an angle of 71 degrees along its long axis. The first lot consisted of the 10 – 20 cm of humus overlying the terminal architecture of the platform that contained Chacalhaaz Phase ceramics. The architecture of the platform was not well preserved. It is possible that there were terraces on this side of the structure at one time, or perhaps the final steps in a staircase, but the condition of the architecture prevents any more definite statements.

Below the worked stone of the architectural façade the second lot consisted of loose, large cobbles with no matrix to at least a depth of 2.30m. The consistency of the fill made it impossible to continue excavation below this depth for fear of collapse. Several retention walls were crudely built within the fill, but there was no evidence of earlier construction phases. No artifacts were found in this fill.

PN-11H-2

This unit was located 60cm to the northeast of PN-11H-1 on line with the trench defined by the PN-11F units. The first lot consisted of the 10 – 20cm of humus overlying the terminal architecture and contained Chacalhaaz Phase ceramics. The second lot corresponded to the level of large, loose cobbles that constitutes the fill of J-20. Lot 2 was excavated to a depth of 1.50m before it was deemed unsafe to continue. As in PN-

11H-1-2 several retention walls were exposed within the fill, and no artifacts were encountered.

5.11: PN-11D: Excavations within the Superstructure of Str. J-23

As mentioned above, Str. J-23 is not only the highest point in the Acropolis; it is the highest point anywhere within the site core and provides a sweeping vista of both the Usumacinta River to the northwest and of the majority of the site to the southeast. Largely for this reason it was chosen by project directors Stephen Houston and Hector Escobedo as the ideal resting place for the remains of Tatiana Proskouriakoff, which had been brought to Piedras Negras from Boston by David Stuart. Sub-operation PN-11D was conducted, therefore, as a controlled excavation to make space for the urn of Proskouriakoff, which now rests below an inscribed plaque (Fig. 5.23).

PN-11D-1

This unit consisted of the removal of the debris above the floor of the southwestern room of the superstructure of Str. J-23. Given the current condition of the buildings, and the records of excavation available from the 1930s in the form of field notes, it was anticipated that the debris atop the interior floor of the building represented only about sixty years of deposition. However, excavation revealed that work during the 1930s had, for the most part, not reached the level of the interior floor. The first lot consisted of the humus layer (0 – 15cm), to the southwest of the wall situated on the northeastern side of the room. Small fragments of modeled stucco were found near the southeastern wall, and some unslipped sherds were found directly atop the remains of the

floor. The interior floor itself was not well preserved, having been heavily damaged by root action.

The second lot consisted of the humus (0 – 15cm) in the area of the southeastern doorway, between the southeast room and central gallery of J-23. Sherds and modeled stucco fragments were also encountered in this lot. The third lot represented the humus layer (0 - 15cm) in the entryway of the northwest doorway. Only three sherds were recovered there.

PN-11D-2

In order to excavate the cavity for the interment of the urn that contained the remains of Tatiana Proskouriakoff, a 50 x 50cm unit was placed at the middle of the southwest side of the northeastern wall of the room excavated in PN-11D-1. The wall itself is 2.20m wide and runs at an angle of 120 degrees. The floor was between 3 and 5cm thick, constructed above unconsolidated fill of river cobbles. It was only possible to excavate 65 – 75 cm within this fill because of the possibility of collapse and danger to the integrity of Str. J-23. Only two sherds were recovered in this sub-operation, and it was not possible to assign a type or phase to them. After Proskouriakoff's burial, masons covered the excavation with cement in order to stabilize the floor and protect the remains.

5.12: PN-11G: Excavations at the Intersection of Str. J-20, Str. J-23, and Str. J-21

On the map of Piedras Negras produced by the University of Pennsylvania project the intersection between J-23 and J-20 was not clearly defined, but was drawn simply as a jagged line (Fig. 5.2). In fact, this corner is formed by the intersection of three structures

(Strs. J-20, J-23, and J-21) that in their final phases of construction formed a singular façade (Fig. 5.24). To better understand the development of J-20 it was therefore necessary to understand the other two structures. To accomplish this task seven units were placed in this corner of Court 3 (Fig. 5.25). A detailed summary of the architectural sequence encountered in this sub-operation is provided in Table 2, Appendix II.

PN-11G-1

This first unit measured 1.50 x 2.00m (25 degrees along its long axis) in the corner between J-20 and J-23. Part of the southeastern wall of the J-23-1st platform was excavated during the 1930s, but although photos and minimal field notes of this excavation exists nothing was ever published. The first lot consisted of the collapse of the old excavation unit and the humus layer. As a result there is significant variation in the depth of the lot, from 0.25 – 1.00m. It is difficult to place a secure date on the ceramics from this lot given the presence of collapse.

The second lot was formed by the collapse of the platform façades of J-20 and J-23, and contained Chacalhaaz Phase ceramic material. Satterthwaite (1954: 85) concluded that J-20 had possessed a perishable structure, however the present excavations did reveal vault stones. Whether these came from J-20 or J-23 is impossible to determine with certainty, although J-23 seems the more probable source.

The first terrace of J-20-2nd was exposed in this lot, as well as the plinth of the platform, but without the overlying fill of the staircase to protect it the terrace was in a much poorer state of preservation than as encountered in PN-11F-4-2. It is clear that the platform of J-23-1st was built over J-20-2nd. Excavation in this unit was stopped at the

level of the 1st Patio Floor, the stucco of which was not preserved in this section of the patio.

PN-11G-2

A unit measuring 1.50 x 2.00m was placed along the southwest side of PN-11G-1. The first lot consisted of the humus layer, which was 10 – 25cm thick. Below the humus a level of collapsed material including masonry from the platform façades, as well as vault stones, defined the second lot. This layer was 1.20m in maximum thickness and ended at the level of the 1st Patio Floor. All of the sherds recovered from both lots were assigned to the Chacalhaaz phase.

PN-11G-3

PN-11G-3 measured 1.50 x 2.00m and was placed along the southwest side of PN-11G-2. The first lot was the 25cm thick layer of humus. Below the humus began the second lot, a layer of building collapse with worked stones from the platform façades, but lacking the vault stones evident in PN-11G-1-2 and PN-11G-2-2. As with PN-11G-2-2 this lot was 1.20 m thick and overlay the remains of the 1st Patio Floor. Ceramics were similarly of the Chacalhaaz Phase. In this unit, however, the edge and corner of a partial balustrade of the staircase of J-20-1st was exposed overlying the basal molding of J-20-2nd. It was also possible to see in the southeast profile of the unit several well-articulated risers of the staircase.

PN-11G-4

This unit was placed along the southeastern edge of PN-11G-1. Because of the excavations of the 1930s it was not possible to create an entirely rectilinear unit, but PN-11G-4 measured approximately 1.50 x 2.00m and lay at an angle of 71 degrees along its long axis. Below the first lot (the humus, 10 – 25cm thick) the second lot consisted of the level of collapse from the surrounding structures.

Within Lot 2 a low wall was exposed running at an angle of 71 degrees. The wall was 1.00 m in height and 1.40m long, built of the small, flat cut stones typical of the final construction phases of Court 3. The wall intersected with the platform of J-23-1st and therefore postdates that structure.

PN-11G-5

This unit is an extension (1.50 x 2.00m) to the southwest of PN-11G-4. The lots in this unit follow exactly the same pattern as in PN-11G-4. The excavation of Lot 2 revealed the corner of the wall initially exposed in PN-11G-4-2. All of the ceramics encountered belonged to the Chacalhaaz Phase.

PN-11G-6

PN-11G-6 is an extension to the southeast of PN-11G-4. As with the latter unit, this unit was 2.00m long, but was irregular in width (extending to a maximum of 2.60m). Below the level of the humus layer (Lot 1, 0 - 25cm), there was a layer of building collapse (25 - 50cm) designated as Lot 2. The basal mold of the superstructure of J-21 was exposed in good condition, with stucco still articulated with the floor to the front of

the superstructure. This floor constitutes the upper surface of the platform of J-21-1st, delimited on one side by the wall encountered in PN-11G-4-2. The stucco was clearly burned in patches. In addition, another wall was exposed 1.40m to the southeast of the aforementioned wall, almost certainly forming part of an earlier construction phase of J-21.

There was a cut into the stucco that formed the surface of the J-21-1st platform. The floor was cut 84cm out from the superstructure wall, extending to the southwest side of the unit (approximately 1.20m), where it ended at the exterior wall of the J-21-1st platform. The fill within this cut represents Lot 3. Approximately 70cm in depth, the fill did not yield many sherds, but those it did produce represented what seems to be assignable to either the early Chacalhaaz or late Yaxche Ceramic phases. The fill consisted of small, flat, cut stones - such as those used in the masonry of the building - within a matrix of very soft, light brown soil.

Although few ceramics were encountered, this lot did yield fragments of modeled stucco from an architectural façade, perhaps fallen from the façade of the J-20-2nd platform. Moreover, a large, flat, ovoid (averaging 70cm in diameter) made of stucco was found leaning against the side of the J-20-2nd platform where it had been carefully placed in antiquity (Fig. 5.26). Lying 30cm to the southeast there was also a smaller stone disk (20cm in diameter). Both objects sat on top of a level of stucco, and neither showed any sign of decoration apart from their shape.

Within the platform of J-21-2nd the fill was designated Lot 4. This lot yielded quite a few sherds along with some charcoal. The sherds were apparently late Yaxche

Phase in date. The lot ended after 50cm at a layer of cobbles and soil that was not excavated.

The fifth lot consisted of the fill below the stucco layer that defined the lower boundary of Lot 3. Very few sherds were encountered, but those that were appeared to be early Yaxche, or perhaps Balche, in date, although neither assessment can be considered secure. The lot, 35 - 40cm thick, was terminated at the level of the 1st Patio Floor, the stucco of which was preserved in patches.

PN-11G-7

A small portion of the wall of J-23-1st was removed to confirm the construction sequence at the intersection of J-20 and J-23. In the corner of the two buildings, where the platform of J-23-1st was built over the wall of J-20-2nd the upper 80cm of the wall of J-23-1st was removed (recall that this wall had already been heavily modified by both collapse and the excavations of the 1930s). This probe revealed that J-20-2nd intersected, but did not go underneath, the masonry of J-23-2nd. This would indicate that J-20-2nd must postdate J-23-2nd.

5.13: PN-11B and PN-11I through PN-11L: Excavations Associated with Str. J-18

Sub-operation PN-11B consisted of two test pits excavated in front of the southwestern side of Str. J-18 during the 1997 field season. Excavated during the 1999 season, PN-11I was intended to build on, and expand the findings from the 1997 field-season as explained in PN-11B. In order to begin these excavations it was first necessary to move one of the bins of back-fill from the 1930s excavations. These bins were built up

from the collapsed materials taken from inside the rooms of buildings on the Acropolis. Although they represent a reasonable solution to the problem of the relocating such material over the course of excavation, they nonetheless inhibit future excavations in all of the courts of the Acropolis. Table 4, Appendix II provides a detailed synopsis of the architectural sequence as revealed in these sub-operations.

PN-11B-1

Operation PN-11B consisted of two units in front of J-18, a palace with a throne in its central room (Figs. 5.1, 5.2). The notes of the University of Pennsylvania excavations indicate that the throne and building façade were both originally covered in modeled stucco. The first unit in front of J-18 was PN-11B-1, and followed an angle of 10 degrees east (2.90m long, by 1.00m wide), occupying half of the door of the throne room. 1.11m of the unit lay within the room (the remainder outside in the patio), but the dirt here was only removed to the level of the interior floor, as there was not sufficient time or workers to responsibly section the architecture.

The first lot (0.00 - 0.53m) of the unit was the level of the humus, mixed with many pieces of cut stone that represented the collapsed walls of the building. We recovered a moderate quantity of sherds, dated to the Late Classic. At 12cm in depth, 66cm in front of the exposed stairs, an alignment of worked stones was encountered that followed the same orientation as J-18. It was not possible to determine the significance of the alignment in this unit, as the feature was partially covered and mixed with the same wall-fall described above.

At 53cm in depth we arrived at a patio floor. This floor was mostly destroyed, preserved only in scattered pieces. Given that the depth was similar to that detected in sub-operation PN-11A, the floor discovered here is likely to be contemporary with the penultimate patio floor in front of J-20. The 1st Patio floor had eroded entirely here in front of J-18.

In discussing the different phases of the patio floors, however, it must be remembered that there is a strong possibility that no single flooring level covered the entire patio until its final phases, if then. Rather, the filled in chasm running across the patio may always have represented a break in the flow of the patio floor, and the semi-circular outcropping of bedrock was at all times exposed above the level of the patio. Therefore, the 1st Patio Floor (or other phases) in front of J-18 has no necessary contemporaneity with those exposed in front of J-20 or J-21, although they are likely to be relatively contemporary.

The second lot (0.53 - 1.10m) was the fill below the patio floor. The soil in this level was dark, but not so dark as Lot 1. The rocks were smaller, except for a single large stone. At 63cm, an alignment of stones crossed the unit. Maintaining this line, we continued downward, until arriving at a level (0.90 - 1.10m) of rocks joined into a calcified layer. At this point, in order to better understand the alignment of stones, I began the unit 11B-2, described below in detail.

The level below the calcification (Lot 3, 1.10 - 1.90m) consisted of river cobbles without a binding matrix. The cement is a mix of rocks and sand and appears that it was constructed as a hard covering for the loose fill below. Two pick-axes were broken cutting through this level of cement. The action of the water and time has resulted in the

formation of stalactites below the cement, passing into the rocks below. Because of these stalactites it was initially difficult to distinguish the four courses of cut stone, between 1.24 and 1.90m in depth, that were evident in the north wall of the unit. This masonry represented the initial exposure of an Early Classic building, J-18-sub-2.

At 1.90m, a stucco floor was found marking the beginning of lot 3 (1.90 - 2.30m). The floor was a surface associated with two phases of J-18-sub-1. The first phase has the form of the basal skirting with well-preserved stucco, 3cm thick. Immediately to the side of the skirting there are at least two courses of worked stone. These stones join the skirting and constitute the second phase of the building.

PN-11B-2

This unit was begun in order to discover the significance of the alignment of stones encountered in PN-11B-1-2. In PN-11B-2, the levels and lots were, in most cases, exactly the same as those in PN-11B-1. In Lot 2 of this unit (0.00 - 0.62 m), the level of humus, the same alignment of stones was uncovered as described in PN-11A-1-1, at 12cm below the ground surface. Here it was obvious that the alignment represented a riser of the low entrance staircase of J-18. The riser was 45cm high and made of river cobbles, along with some worked stone. Of interest is the presence of an ovoid stone (28 x 32 cm), with a circular hole worked through the center (12 cm in diameter), incorporated into the riser. It appears to be a re-used banner-stone.

Below and to the front of the stair, was a level of the patio floor at 62 cm (it was not well preserved) that began the second lot (0.62 - 1.22 m). At 69cm in depth the same alignment of stones described above for PN-11B-1-2 was uncovered, following an

orientation perpendicular to J-18. This alignment did not have any obvious architectural associations.

Lot 3 (1.22 - 1.64m) was the lower level of cement. This fill was exactly the same as that of PN-11B-1-3. Here two or three courses of worked stone were encountered in the north wall of the unit. Excavations were concluded at 1.64m because of the threat of collapse.

PN-III-1

This was a rectangular unit measuring 1.00 x 2.00m, oriented at an angle of 100 degrees along its long axis and placed just outside of the throne room of Str. J-18 (Figs. 5.27, 5.28). The first lot consisted of the remains of the backfill left by the University of Pennsylvania's excavations, which measured 10 - 15cm in depth. The soil in this layer was very fine and loose, and contained some cut stones as well as a very few Chacalhaaz and Yaxche Phase sherds.

The second lot was the 20cm thick humus layer. It contained an average quantity of ceramic and other artifacts that, although heavily eroded, appear to represent a mix of the Chacalhaaz and Yaxche phases. Lot 3 consisted of a level 25 - 30cm thick of brown earth with pebbles. The sherds recovered are assignable to the Yaxche phase. This lot ends at the level of a patio floor.

The fourth lot began with the level of sub-floor ballast. The floor had not been very well preserved in this unit, and only a few thin fragments were found. The ballast consisted of pebbles and dark soil. It was not possible to securely date the ceramics recovered from this layer.

Two walls representing the highest point of a series of superimposed platforms were encountered at the bottom of Lot 4. The first construction phase of the platforms followed an angle of 26.5 degrees, and the second phase a slightly different orientation of 23 degrees. The first phase still had a thick cap of stucco on the southeast side that was not present in the subsequent phase. These buildings were designated using the J-18-sub-2 series because Str. J-18-1st is the nearest surface building, although the latter structure covers only the minimal remains of the staircase of Strs. J-18-sub-2-1st, -2nd and -3rd.

Excavation in this unit was ended when the bedrock was reached. The limestone here is contiguous with the limestone outcropping excavated in PN-11C in the center of the patio, although in this location it is not obvious whether the bedrock was modified significantly prior to construction, or whether the masonry platforms were placed on a largely unprepared surface. The bedrock in PN-11I climbs to a maximum height of 127.77 m above sea level (approximately 28 meters above the level of the West Group Plaza).

PN-11I-2

This unit measured 1.00 x 2.00 m and was placed along the southwest edge of PN-11I-1. The first lot consisted of the backfill left by excavators during the 1930s. The second lot was defined by the humus layer, which contained a small quantity of heavily eroded sherds probably from the Chacalhaaz Ceramic phase.

Lot 3 consisted of a layer of brown earth with pebbles. The lot was concluded upon reaching the level of the surface of the patio floor. It was not possible to date the sherds recovered from this layer.

The fourth lot began with the ballast of the patio floor of Court 3. As in PN-11I-1-4 the floor above the ballast was preserved only as a few fragments of thin stucco. The fill of the ballast consisted of pebbles and dark earth. The ceramics indicate a date contemporary with the Yaxche Ceramic Phase.

Below the ballast began the fifth lot. This consisted of a level of dark brown, soft soil with pebbles that contained sherds of the Naba Ceramic Phase. The fifth lot ended at a level defined by large, loose, cobbles that constituted the sixth lot. These cobbles almost entirely cover the exteriors of the J-18-sub structures. Few artifacts were recovered from this fill, however those sherds that were identifiable were Naba Phase ceramics.

Lot 7 consisted of a thin layer of soil below the loose rubble fill of Lot 6. The few ceramics recovered belonged to the Naba phase. This layer also contained a significant quantity of bajareque that probably represents the remains of the perishable superstructure that once topped Str. J-18-sub-2-1st.

PN-11I-3

This unit measured 1.00 x 2.00m and was placed along the southwestern side of PN-11I-2. The first lot consisted of backfill from the excavations of the 1930s. The second lot was defined by the 20cm thick humus layer, which contained some eroded ceramics that are probably of the Chacalhaaz Phase. Below the humus layer the edge of

the platform of Str. J-19 was exposed. The masonry façade of the platform consisted of well-cut stones standing 55 - 60 cm high.

The third lot consisted of the level of dark earth and pebbles. Those ceramics that were identifiable could be assigned to the Yaxche Ceramic phase. The lot ended at the level of the patio floor, which was found in a better state of preservation here.

Lot 4 began with the ballast of the patio floor. The unit was somewhat reduced at this point to leave some 30 cm of the patio intact along the edge of J-19 in order to prevent the collapse of that structure. The floor ballast consisted of dark earth and pebbles. On the basis of the ceramics recovered this fill would be contemporary with the Yaxche Ceramic phase.

Below the ballast, a level of soft dirt with pebbles defined Lot 5. The minimal ceramics recovered in this lot did not allow for the assignment of a date. This layer sat directly atop the remains of J-18-sub-2, and exposed in Lot 5 was the rounded corner of J-18-sub-2-3rd. It was impossible to reach the bedrock in this unit because it dipped precipitously to the southeast.

PN-11I-4

This was a 1.00 x 2.00m unit to the northwest of PN-11I-3. The first lot consisted of the backfill from the 1930s excavations, 15 - 30 cm thick. The second lot consisted of the 15cm of humus. The ceramics recovered from Lot 2 were heavily eroded, but probably represent Chacalhaaz Phase materials. The edge of the platform of Str. J-19 was exposed below the humus layer.

The third lot consisted of a layer of brown soil with pebbles. The ceramic from Lot represented Yaxche Phase materials. The lot ended at the level of the patio floor. As in PN-11I-3 the floor was encountered in a better state of preservation closer to J-19. Excavations in PN-11I-4 were terminated at the patio level.

PN-11I-5

This unit measured 1.00 x 2.00 m oriented at an angle of 100 degrees along its long axis, and placed along the northwest edge of PN-11I-4. The backfill from the excavations of the 1930s constitutes the first lot, and was 15cm thick. The second lot consisted of the humus layer, which was exposed only in a 1.00 x 1.00m probe on the southeastern side of the unit. The humus layer was 10cm thick and contained a small amount of stone debris. The ceramics in Lot 2 represented a mix of Chacalhaaz and Yaxche phase materials.

A level of brown soil with pebbles, 25 – 30cm thick, defined the third lot. The ceramics recovered were apparently of the Yaxche Phase. The lot ended at the level of the patio floor, which was not well preserved in this unit.

Lot 4 represented the ballast for the patio floor, continuing 15 – 30cm before ending at the bedrock. In the eastern half of this probe several cobbles formed part of the floor ballast lying above the bedrock. It was not possible to assign a date to the ceramics from this lot.

PN-111-6

A 1.00 x 2.00m, placed along the northwestern edge of PN-111-5. The first lot consisted of 30 cm of backfill from the excavations of the 1930s. Below this backfill began the humus layer that constituted the second lot. The humus was 20cm thick and contained ceramics representing a mix of Chacalhaaz and Yaxche materials.

The third lot consisted of the fill of compact, clayey soil earth and stones, 25cm thick, ending at the level of the patio floor. The sherds from this lot represented Yaxche Phase ceramics.

The fourth lot was defined by the ballast of the patio floor, the floor itself being almost entirely absent in this unit. The ballast layer itself was 15cm thick. Ceramic materials recovered were assignable to the Naba Phase.

Lot 5 consisted of earth placed directly on top of the bedrock, which begins at between 60 – 80cm below the current ground surface. The lot itself was 30cm thick, and contained large fragments of bajareque that probably represent the remains of the perishable superstructure of J-18-sub-2. All of the ceramics recovered from this level belong to the Naba Phase.

A small, apparently natural, pocket in the bedrock in the northwestern side of the unit (30 x 20cm) contained abundant ceramics fragments as well as bajareque and a bone earplug. The majority of the ceramics were assignable to the Naba Phase. This hole, 40cm deep, constituted the sixth lot. In addition to the Naba Phase materials, one piece of a bowl or incurving rim basin was uncovered that seems to be Laguna Verde Incised, and would therefore represent the only evidence of Late Preclassic material found in Patio 3. The lot ends at the level of the bedrock.

PN-11I-7

PN-11I-7 is a 1.00 x 2.00m unit to the southwest of PN-11I-4. The objective of this particular unit was to expose another portion of the J-19 platform. The first lot consisted of the humus level, which was approximately 10 – 20cm thick. Apart from a few fragmentary pieces of eroded Chacalhaaz Phase ceramics there was no cultural material recovered in this unit.

PN-11I-8

A unit measuring 1.00 x 2.00m, PN-11I-8 was placed on the northwest side of PN-11I-1. The first lot consisted of the 30 cm of backfill from the 1930s excavations. The second lot consisted of the humus layer, which was 15cm thick. The ceramics found in Lot 2 were heavily eroded, but almost certainly date to the Chacalhaaz Phase.

The third lot consisted of fill of brown soil with dispersed pebbles. Ceramics recovered were probably Chacalhaaz Phase materials. The lot continued for 20cm before ending at the level of the patio floor.

Lot 4 is defined by the ballast for the patio floor, which consisted of a thin layer of pebbles on top of dark soil. The lot varied from between 10 – 30cm in thickness. The ceramics would indicate a date for this layer contemporaneous with Yaxche Phase ceramics. This lot ended at the top of the J-18-sub-2 platform façades, as well as the bedrock.

PN-11I-9

This unit measured 1.00 x 2.00m and was placed along the northeastern edge of PN-11I-6. The first lot consisted of 30 cm of backfill from the excavations of the 1930s. The humus layer, 20cm thick, defined the second lot, which contained heavily eroded Chacalhaaz Phase ceramic fragments.

Lot 3 consisted of dark brown soil with thinly dispersed pebbles, and contained Late Classic ceramic materials, although it was not possible to assign a particular phase. The patio floor itself was not preserved in this unit, and in fact the ballast that formed Lot 4 did not form a well-defined layer. As a result Lot 3 lot will probably have included material from the fourth lot. Lot 4 was 30 – 40cm thick and ended at the bedrock.

PN-11I-10

A unit measuring 1.00 x 2.00m, PN-11I-10 was placed along the northwest side of PN-11I-8. The first lot consisted of backfill from the excavations of the 1930s, and the layer was 30cm thick here. The second lot corresponded to 20cm of the humus layer. The ceramics from Lot 2 were highly eroded.

The third lot consisted of dark brown soil with thinly dispersed pebbles. This level ended at the level of the patio floor. The ceramics recovered from this lot were Late Classic in date.

Lot 4 consisted of the ballast for the patio floor, formed by a thin cap of pebbles over brown soil, 10 – 30cm thick. The ceramics appear to be from the Yaxche Phase. The lot terminates at the top of the J-18-sub-2 platform and the bedrock.

PN-11I-11

This unit measured 1.50 x 2.00m, and was placed along the southeastern edge of PN-11I-1 and PN-11I-2, overlapping part of the PN-11B-1 and PN-11B-2 units that had been excavated in the previous season (Figs. 5.27, 5.28, 5.29, 5.30). The first lot consisted of the humus layer, which was 15cm thick. A very few Chacalhaaz Phase sherds were recovered from the humus layer.

Lot 2 consisted of brown, compact, soil with pebbles, measuring 30cm thick. The edge of the step at the entrance to J-18 (originally exposed in PN-11B-1 and PN-11B-2) was uncovered in this lot. The lot ended at the level of the poorly preserved patio floor. Those ceramics found in this lot belonged to the Yaxche Phase.

The third lot consisted of the fill below the patio floor, measuring a maximum of 50cm thick. At the top of this lot a thin layer (2cm) of grayish brown soil and pebbles constituted the mixed remains of the patio floor itself and the ballast materials. The ceramic material recovered was from the Yaxche Phase. The most important feature uncovered in Lot 3 was the third phase of the J-18-sub-2 platform (designated J-18-sub-2-3rd). J-18-sub-1-3rd followed an angle of 16.5 degrees, which makes it slightly different angle than J-18-sub-2-1st and -2nd.

Lot 4 consisted of loose rubble fill, a maximum of 1.60m thick. The top of this rubble fill had been cemented together as the result of water percolating from above. All of the ceramic encountered appeared to be from the late Naba Phase. The fifth lot consisted of 40cm of brown soil containing abundant moderately sized cobbles. Lot 5 yielded Naba Phase ceramics.

PN-11I-12

PN-11I-12 was a 1.00 x 2.00m oriented at 100 degrees, located immediately to the north of PN-11I-11 (Figs. 5.27, 5.28, 5.29, 5.30). The first lot consisted of the humus layer, which was 15 cm thick. The ceramics recovered in this lot were heavily eroded, but appeared to be of the Chacalhaaz Phase.

Lot 2 consisted of 30cm brown, compact earth with pebbles. The edge of the step into the entrance of J-18 was exposed in this lot. It was, however, poorly preserved. The lot ended at the level of the patio floor, and contained Late Classic ceramics. The 1st Patio Floor here was measured at an elevation of 127.93m (27.93m above the grid origin established by Zachary Nelson in the West Group Plaza) and this is in keeping with the 1st Patio Floor level measured in PN-11L-1-2.

The third lot consisted of 50cm of fill below the level of the patio floor, including a thin layer (2cm) of grayish-brown soil and pebbles at the top of the lot. The ceramics recovered in this date to the Yaxche Phase. The third phase of J-18-sub-2 was also exposed in this lot.

Lot 4 consisted of loose rubble fill, which was a maximum of 1.20m thick. The top of this layer was cemented together as a result of water percolating down from above. It was not possible to date this lot securely.

The fifth lot, as in PN-11I-11, was a level of brown soil (somewhat lighter in color than in PN-11I-11-5, with abundant moderate sized cobbles. At the bottom of the lot (1.00m at its maximum thickness) two platform façades were exposed, running at an angle perpendicular to the test pit. These platforms appear to have constituted two construction phases of a landing of the staircase that descended from the J-18-sub-2

platforms. Thick stucco was present covering the northern wall. At the bottom of the lot, between the two walls, a well-preserved floor was exposed that was clearly associated with the northernmost wall. In addition, another low wall was visible within the fill on the southeastern profile of the unit.

Lot 6 consisted of fill that was very similar to the fifth lot, lying 15 – 60cm over the first phase of the staircase landing. Removing the fill revealed that the staircase of J-18-sub-2-1st had been ripped out completely in antiquity. A line of stucco in the north profile of the unit appeared to follow the lines of several of the missing risers. It was also possible to see the form of the staircase in the stucco and rocks within the platform in the western profile of the unit.

The seventh lot was similar in texture and color to Lot 5, and was located below the base of the platforms. As with the risers of the staircase, the surface of the landing had been broken in antiquity. The fill contained ceramics that appeared to be from the Naba Phase. Lot 7 ended at a lens of white clay and stucco.

This lens was between 5 and 20cm thick, without any evidence of ceramics. Below this lens, Lot 8 was composed of dark brown soil with many fragments of stucco and bajareque. All of the ceramics from Lot 8 were from the Naba Phase. Excavations were terminated at this level for fear of collapse.

PN-11I-13

This unit was 1.00 x 2.00m, and placed along the southwest side of PN-11I-11. The first lot consisted of the 30cm of humus, as well as collapse fallen from the walls and vaulted roof of Str. J-18. There was very little ceramic in this layer, but that which was

present was a mix of Chacalhaaz and Yaxche Phase materials. Many of these sherds had stucco on them and were almost certainly part of the modeled stucco façade of the building.

The second lot consisted of brown soil and stones that had collapsed from Str. J-18. Lot 2 was varied in thickness from 20 – 30cm. There were abundant fragments of modeled stucco that at one time had formed the façade of J-18. Unfortunately, very few well-articulated fragments were uncovered, and this makes it difficult to gain an idea of the overall design of the façade. Some of the articulated fragments, measuring approximately 30 x 50cm, were in the form of spheres and vegetal designs (Fig. 5.32). In addition one large fragment of what appeared to be a human leg or arm was found, sculpted in the round.

Although it is not possible with the evidence available to gain a full understanding of the façade design, it is possible to infer that the fragments recovered here are similar in some ways to those from Structure A3 at Seibal (Smith 1982: 30 – 51). In that building the stucco, although fallen from the façade, was largely preserved and revealed portraits of humans with hieroglyphic and vegetal designs. It is also interesting to note that many fragments of the stucco from Seibal had ceramics embedded within them. It would appear that the sherds offered structural support to the heavy, yet fragile, stucco. Because it was impossible to safely remove the larger portions of the stucco found in PN-11I-13-2, they were left *in situ* and a stone box was constructed over and around them in order to protect them.

The third lot consisted of a sounding in the northwestern side of the unit (40cm wide, and 50cm deep). The probe revealed the southwest wall of the J-18-sub-2-1st

platform, indicating that the corner of this platform would be some 40 cm to the southeast (Fig. 5.28). The fill of the sounding consisted of loose soil and pebbles, and contained Yaxche Phase ceramics.

5.14: PN-11J

The PN-11J sub-operation began as an excavation intended to look for *in situ* artifacts from the final occupation of the Acropolis within the southwestern room of Str. J-18. The excavation was extended, due to several factors discussed below, and in the end formed a trench to the northwest side of J-18 that revealed much of the construction sequence of that Late Classic structure (Figs. 5.33, 5.34).

PN-11J-1

This was a 2.00 x 2.00m unit, located within the southwestern room of J-18 (Figs. 5.33, 5.34, 5.35). The first lot consisted of the 10cm of humus overlying the building collapse within the room. It was impossible to date the ceramics recovered from this lot because of their poor state of preservation.

Lot 2 consisted of an approximately 1.00m thick layer of debris formed of collapsed wall and vault stones. Several large vault stones were found but there was no evidence of lintels. The absence of stone lintels anywhere in the Acropolis has led Stephen Houston (personal communication, 2000) to suggest that wooden lintels were used at Piedras Negras. The few sherds recovered in Lot 2 belonged to the Chacalhaaz Phase. The interior floor of J-18 was well preserved beneath the collapse. The plinth of the superstructure was 90cm wide and two stairs, 20cm wide, stepped down to the patio.

A probe was made just off of the southwest side of the basal skirting was excavated in order to make probe within the superstructure. This material constituted the third lot, 50cm of pebbles and soil. All of the ceramics from within this probe were from the Yaxche Phase. The lot ended at the level of the patio floor, which was preserved only where it touched the plinth.

The fourth lot consisted of 60cm of fill below the level of the floor of the basal skirting itself. All of the ceramics recovered were of the Yaxche Phase. The fill was lying on top of a well-preserved stucco floor. On the southeast side of the sounding another platform or stair was exposed. The associations of this feature are unclear, but in keeping with structural designations, this feature would probably represent part of Str. J-18-2nd.

The fifth lot consisted of the fill encountered in a probe made into the interior floor of J-18. This lot was 1.20m deep, ending at a poorly preserved stucco floor. Lying just 20cm below the interior floor of J-18-1st on the southeastern side of the probe was the edge of a platform. This platform was well preserved, but lacked any remaining facing stucco. The platform was 70 cm high and sat upon a layer of pebbles and soil that clearly constitutes the ballast for a floor, the stucco of which has been entirely destroyed. This platform is designated J-18-3rd. All of the sherds encountered in this probe were assignable to the Yaxche Ceramic Phase.

PN-11J-2

This was a 2.00 x 2.00m unit, placed along the northwestern edge of PN-11J-1 on the exterior edge of Str. J-18-1st. The first lot consisted of the 10 cm deep humus level,

overlying collapse from the walls and vaults of the structure. It was impossible to securely date the ceramics from this lot as they were heavily eroded.

The second lot consisted of approximately 70cm of collapse from the walls and roof of Str. J-18. Numerous Late Classic ceramics were found with fragments of stucco adhering to them, and they clearly represent part of the structure of the façade of J-18. Both unslipped and slipped ceramics were used to build the façade decoration. The lot ended at the level of the patio floor, which was preserved only near the base of J-18.

The fill below the level of the patio floor consisted of dark soil that constituted the third lot, 30cm thick. Three walls were uncovered in this lot, each of which was aligned at a slightly different angle. The wall closest to J-18 followed an angle of 24 degrees. Because this wall is not clearly associated with earlier phases of construction of J-18, it was designated J-18-sub-1.

The other two walls appear to represent two phases of construction of a low platform that lies largely beneath J-19. These platforms were designated J-19-sub-1-1st and J-19-sub-1-2nd. The wall of J-19-sub-1-1st, closest to J-18, follows an angle of 24 degrees. J-19-sub-1-2nd follows a slightly different angle of 29 degrees. There is no evidence of a superstructure.

PN-11J-3

This was a 2.00 x 2.00m, placed along the northeast side PN-11J-2. The first lot consisted of the 10cm thick humus layer. The sherds recovered from this lot were too eroded to date. The second lot consisted of approximately 80cm of collapse from the walls and roof of Str. J-18. The ceramics recovered represented a mix of Late Classic

materials. Many sherds had stucco adhering to them, indicating their use in the façade of J-18.

Lot 3, 30cm thick, was composed of dark brown soil within which were exposed the walls of J-19-sub-1-1st and -2nd, as well as J-18-sub-1. The two walls that constitute J-19-sub-1-1st and -2nd unite in this unit to form one wall running at an angle of 24 degrees. The remains of the superstructure of J-18-sub-1 were also exposed in the form of a low step or platform of well-cut masonry, the greater portion of which extends under Str. J-18-1st.

PN-11J-4

PN-11J-4 is a unit measuring 2.00 x 2.00m, placed along the southwest side of PN-11J-2. The first lot consisted of 15 cm of humus overlying the collapse from the roof and walls of J-18. The ceramics from this lot were impossible to date as a result of heavy weathering.

The second lot was defined by approximately 80cm of collapsed materials from J-18. The ceramics from this lot represented a mix of Late Classic materials, many of them with façade stucco.

The corners of Strs. J-18-sub-1 and J-19-sub-1-1st were exposed within the third lot (30cm of dark brown soil). It appears as though J-18-sub-1 may have been joined with another platform, although it is difficult to reconstruct the complete construction sequence of these platforms. It is possible that the new platform was an addition in order to level a floor, over which were built the final versions of Str. J-18. The corner of J-19-sub-1 crosses to the northwest and runs below Str. J-19-1st.

PN-11J-5

This was a 2.00 x 2.00m unit, located along the northeast side of PN-11J-3. Lot 1 is defined by 15cm of humus overlying the collapse from J-18. The ceramics from the humus layer were too weathered to allow for dating.

The second lot consisted of 80cm of collapse from the walls and roof of J-18. Ceramics from this lot represented a mix of Late Classic types, many of which were covered in stucco from the façade of J-18. The third lot (30cm of dark brown earth) revealed the northwest corner of J-18-sub-1. In addition, the remains of J-19-sub-1-1st and -2nd were exposed, and here they essentially formed a single wall two courses of stone wide.

PN-11J-6

This unit measured 1.00 x 2.00m, located along the southwestern side of PN-11J-4. This first lot consisted of 10cm of humus. The ceramics from this lot were too weathered to allow a date to be assigned.

The second lot consisted of 80cm of collapse from J-18. The ceramic found in this lot was assignable to the Yaxche Phase, and many of the sherds had façade stucco still adhering to them. A platform was exposed in this lot that appears to constitute another phase of J-18-sub-1, as well as another wall (30cm wide). The associations of the latter were not clear. The lot ended at a level of large, flat, cut stones.

A probe was made beneath these paving stones, and this defines the third lot. Immediately below the stones was a 10cm level of pebbles (perhaps ballast for the paving stones), followed by 60 cm of fill consisting of large cobbles. At the bottom of the

cobbles the lot ended at a well-preserved stucco surface. Sherds from Lot 3 were of the Yaxche Phase.

PN-11J-7

PN-11J-7 was a unit measuring 2.00 x 2.00m, and located along the southwestern edge of PN-11J-6. The first lot consisted of 10cm of humus overlying the collapse from the walls and roof of Str. J-18. The ceramic from this level was too eroded to allow for secure dating. The second lot consisted of 30cm of dark brown soil removed from overtop a wall that ran under the level of Str. J-18-1st. The ceramics from this lot were from the Yaxche Phase.

Lot 3 revealed two more walls that did not constitute part of the same construction phase. The platform that forms J-18-sub-1 also appeared in the eastern sector of the unit. A wall 30cm wide was exposed in the north side of the unit.

To the north of this wall (1.10m of PN-11J-7) the lot ended at the level of the floor uncovered in PN-11J-6-3. To the south of the all the same lot continued to a depth of 2.70m with no obvious change in the fill. Within this fill a large platform façade was exposed running at an angle of 24 degrees. The platform represents the edge of an earlier phase of the patio in this part of the Acropolis (Fig. 5.36). It was not possible to excavate any further for fear of collapse. The ceramics from this lot were, for the most part, from the Yaxche Phase, although several Naba Phase sherds were also represented in the fill.

PN-11J-8

This unit measured 2.00 x 2.00m, and was placed along the northeastern side of PN-11J-5. The first lot was defined by the 15cm of humus. The ceramics could not be assigned types because of heavy erosion.

The second lot consisted of the 80cm deep layer of collapsed material from the walls and roof of J-18. The ceramics from Lot 2 represent a mix of Late Classic types, many of which were covered in stucco. Exposed in this lot was a poorly made wall of cut stones that ran over the basal skirting of the J-18 platform and crossed only half of the distance between J-19 and J-18. It is difficult to ascertain the function of this wall, although it appears as though its function was to limit access to the southwest corner of J-18. Whether this low wall supported a higher perishable wall is impossible to determine.

Lot 3 consisted of 30 cm of dark soil, within which were exposed more modifications of J-19-sub-1. What appears to be a modified corner was encountered in the northeastern side of the unit. This extension follows the same angle of 24 degrees. All of the sherds from this lot are of the Yaxche Phase.

PN-11J-9

PN-11J-9 was a 1.00 x 1.00 m unit to the southeast of PN-11J-7, intended to expose the corner of the superstructure of J-18. The only lot consisted of 50 cm of humus and collapsed materials. The corner of the structure was revealed in the southern side of the unit, associated with Late Classic ceramics.

PN-11J-10

This was a unit measuring 1.00 x 2.00 m, located on the northwestern side of PN-11J-8. The purpose of PN-11J-10 was to define the relationship between Str. J-19 and the northwest-southeast wall exposed in PN-11J-8-2. The first lot consisted of the 15 cm of humus, within which were recovered ceramics representing a mix of Yaxche and Chacalhaaz phase materials.

Lot 2 is defined by 50 cm thick layer of dark brown soil overlying the edge of J-19. Ceramics from this lot that could be identified were from the Chacalhaaz Phase. It is clear that J-19 and the wall exposed initially in PN-11J-8-2 never intersected.

PN-11J-11

PN-11J-11 was a unit measuring 1.40 x 1.20m, excavated as a sounding intended to reveal more about the platform first exposed in PN-11J-7-3 (Fig. 5.36). The first lot consisted of 15cm of humus and collapse. Ceramics from the first lot were from the Chacalhaaz Phase.

The second lot is defined by the fill around and above the wall, 2.85m in depth. The fill was composed of loose, large cobbles. Very little Late Classic ceramic material was uncovered in this lot. The façade of the platform was not well preserved and no stucco was present. It is probable that the platform represents the southern limits of an earlier phase of Patio 3, and functioned to level the patio thereby eliminating the natural contours of the hill.

5.15: PN-11K

The objective of sub-operation PN-11K was to define the northern limits of J-18-sub-2.

PN-11K-1

This was a 2.00 x 2.00m unit, running at an angle of 10 degrees, in the northeastern side of Patio 3 in front of the northwest room of Str. J-18 (Fig. 5.2, 5.33, 5.37). Lot 1 was defined by the humus layer, 20cm thick, which contained Chacalhaaz Phase ceramics as well as a few fragments of modeled façade stucco from J-18.

The second lot consisted of a level of dark soil and collapse (including more fragments of the stucco façade of J-18). This lot was 40cm thick and contained Chacalhaaz Phase ceramics. Lot 2 ended at the level of the First Patio Floor. Lot 3 consisted of the 12cm of pebble and earth fill immediately below the patio floor, and ending at the level of the Second Patio Floor.

The fourth lot is defined by the 18cm of fill below the Second Patio Floor. The fill consists of pebbles and soil and contained Yaxche Phase ceramics. Lot 4 also ends at the level of another patio floor.

The fill below the Third Patio Floor represents Lot 5. The floor itself was well preserved across the unit. The fill consisted of a layer of compacted stones, 60cm deep. A wall was exposed in the northwestern side of the test. This was a platform running 15 degrees and stood 1.70m high. It is obviously the continuation of Str. J-18-sub-2. In this unit the platform is constructed almost immediately over the bedrock, acting almost as a

façade for the bedrock. Some fragments of stucco were preserved on the outer surface of the platform. It was not possible to assign a date to the ceramics recovered from Lot 5.

A layer of compact dark brown soil was uncovered below the level of compacted rock fill, and this defined the sixth lot. Lot 6 measured 1.20m thick and contained Yaxche Phase ceramics. The seventh lot consisted of moderately sized cobbles with Naba Phase ceramics. Lot 7 continued 30 – 35cm, ending at the base of the platform.

Lot 8 consisted of a level of dark clay with pebbles, fragments of stucco, bajareque, and ceramic. This layer is identical in appearance to the clay that covers the Early Classic levels in PN-11A. The Naba Phase ceramics found in this lot, too, confirms the contemporaneity of the deposits. Excavations were halted only 15cm into this layer for lack of space to continue.

5.16: PN-11L

Excavations were initiated in the corner of the patio floor between Strs. J-18 and J-21 with the objective of clarifying the role of that space as an entrance into Court 3. Table 3, Appendix II provides a detailed summary of the architectural sequence encountered in this sub-operation.

PN-11L-1

PN-11L-1 was a unit measuring 2.00 x 2.00m, and was placed at an angle of 10 degrees in the corner between J-18 and J-21 (Fig. 5.1, 5.38). The first lot consisted of the

humus level, which at 34cm was quite thick in this area and contained collapse from both J-21 and J-18. Ceramics were from the Chacalhaaz Phase.

The second lot consisted of soft, brown soil and collapse from the aforementioned structures. This lot extended to a maximum thickness of 40 – 50cm, and a minimum of 5cm on the southeast side of the unit. A low staircase of three risers was also exposed in this side of the unit. This staircase probably represents a principle entrance to the patio from the area between J-18 and J-21, whose platforms are higher than the level of the patio. The 1st Patio Floor was not well preserved in this unit, although it was in a somewhat better condition closer to the staircase. The 1st Patio Floor was measured at an absolute elevation of almost exactly 128.00m (that is, 28.00m above the grid origin established by Zachary Nelson in the West Group Plaza). The ceramics from this unit were Late Classic in date.

The fill below the floor consisted of brownish-gray soil and constituted the third lot. Lot 3 was 20cm thick. Ceramics from this lot were from the Yaxche Phase. The lot ends at the surface of the 2nd Patio Floor.

Lot 4 consisted the 10cm of fill below the Second Patio Floor, which contained Late Classic ceramics. There was no change in color between the third, fourth and fifth lots. Lot 4 ended at the level of the 3rd Patio Floor.

The fifth lot consisted of the 5 – 7cm of fill below the 3rd Patio Floor. The ceramics from Lot 5 were assignable to the Yaxche Phase. 4th Patio Floor was exposed at the bottom of the lot.

The sixth lot consisted of 60cm of fill below the Fourth Patio Floor. The top of the fill had formed a cemented layer as the result of water seeping through the loose

rubble. This cemented layer capped 2cm of soil that in turn covered large and medium sized cobbles that lacked any matrix. The few ceramics recovered were Late Classic in date, although no more specific assignment could be made. The lot ended at a 2-5cm layer of soil, which in turn topped another layer of cement.

Lot 7, located below the level of cement, consisted of 65 – 70cm of large and medium cobbles without a matrix. Excavations were halted at this level due to the possibility of collapse. The minimal ceramics yielded by the seventh lot could not be dated on the basis of typology.

5.17: PN-11C and PN-11E: Excavations Associated with Str. J-19 and the Bedrock Outcropping

As described above (see section 5.8 above) Linton Satterthwaite had excavated Str. J-19 during the 1930s. The results of these excavations, however, were minimally published and Satterthwaite's report attests to the lack of supervision given to the excavations. Published excavation drawings were produced from field-notebook sketches long after fieldwork had been completed (Satterthwaite 1954: 85-87). Given the lack of security regarding this earlier work a re-excavation of the published trench within Str. J-19 was conducted in order to confirm the earlier findings.

A portion of the trench 1.00m wide by 4.20m long was cleared of detritus in order to obtain a clean profile. This profile revealed two phases of construction (Str. J-19-1st and J-19-2nd), confirming Satterthwaite's preliminary findings (Fig. 5.39). Also confirming Satterthwaite's original interpretation, no evidence for a vaulted masonry superstructure was encountered. Rather the superstructure appears to have consisted of a

low masonry platform with masonry wall bases that supported a largely perishable building.

Although no further excavations were made within Str. J-19 itself, a short trench - designated as the PN-11E sub-operation - was excavated in the patio between the platform and the bedrock outcropping at the center of Court 3. The intent of this trench was to reveal more of the development of Court 3 over time, as well as to obtain evidence for buried substructures beneath Str. J-19. Finally, it was also hoped that the trench would make clear any associations between the chasm uncovered in sub-operation PN-11A and any buried substructures. The bedrock outcropping itself was cleared of topsoil, and this excavation was designated PN-11C. A detailed summary of the architectural sequence encountered in these sub-operations is provided in Table 5, Appendix II.

PN-11C-1-1

In the center of Court 3, there is an outcropping of bedrock that rose slightly above even the final stages of the patio floor, and still emerges above the ground surface today. Almost every hill in the region of Piedras Negras has such an outcropping, but in the Acropolis only the uppermost point of the bedrock is visible.

Excavations were begun by cleaning out a hole to the west side of the outcropping. This crude trench could be the remains of a looter's pit, or a test-pit not reported by the archaeologists of the University of Pennsylvania Project. After removing the leaves and wood within the hole, it became clear that the walls of the pit had entirely

collapsed. No architectural features were visible in the profile and no artifacts could be securely associated with a stratigraphic context.

A semicircular probe was made on top of the outcropping, following the west side of the rock formation and removing only the 10 - 20cm deep layer of humus, which was designated Lot 1. To the east side (north-south) it was 3.69m long and to the south (east-west) 2.13m wide. The bedrock had been worked and its natural form rounded, though to what purpose is unclear.

PN-11E-1

This is a 2.00 x 1.00m unit beginning just off of the northeastern edge of the J-19 platform (Fig. 5.2). The first lot consisted of the humus layer (0 - 25cm). This level yielded a moderate quantity of sherds assignable to the Chacalhaaz Phase. Below the humus a layer of darker soil that contained more clay was encountered. Few sherds were found in this second lot (25 - 65cm), but those diagnostics that were found represented a mixture of both Early and Late Classic (Naba and Yaxche) ceramic phases.

The third lot (65 - 72cm) was defined by a level of large cobbles within a matrix of soft soil that was somewhat lighter in color than the preceding lots. Almost no artifacts were recovered from this level. Excavations were not carried any deeper as it was obvious that Str. J-19 had been built directly above the filled-in chasm, and as noted in PN-11A-7 and PN-11A-8 the depth of this natural feature was impossible to determine.

PN-11E-2

This unit (2.60 x 1.00m) was placed between PN-11E-1 and the bedrock outcropping at the center of Court 3. The first lot consisted of the humus layer (0 - 25cm), which yielded sherds assignable to the Chacalhaaz Phase. The second lot, consisting of darker earth with a good deal of clay in it yielded a mixture of sherds assignable to the Naba, Yaxche and Chacalhaaz phases.

The limestone sides of the limestone feature sloped downwards at an angle towards Str. J-19. Therefore the second lot began at 10 - 20cm below the ground surface at the edge of the outcropping, but dipped to 1.20m at various points in the unit. Similarly the third lot, the layer of large cobbles with soft, light brown soil, began at 20 - 60cm near the outcrop and dipped as low as 2.00m. This unit served to reinforce the conclusion drawn from PN-11E-1, that no Early Classic substructures lay beneath Str. J-19. It was clear that Str. J-19-2nd had, in fact, been built over the filled-in chasm.

5.18: PN-50: Excavations at the Intersection of Str. J-18, Str. J-8 and Str. J-3

PN-50 consists of two test pits excavated during the 1999 field season in the area between Strs. J-3 and J-18. In order for project artist Heather Hurst to complete her reconstruction of the Acropolis it was necessary to conduct excavations in this area to answer two principle issues about the final phases of the palace that had not been resolved by the excavations conducted during the 1930s: (1) did a staircase exist on the southeast corner of Str. J-18, and (2) what were the associations between the development of Strs. J-18, J-3 and J-8?

PN-50A-1

This was a unit measuring 2.00 x 2.00m, and running at an angle of 25 degrees, located in the northwest corner of the rear of Str. J-3, and above J-8 (Figs. 5.2, 5.33, 5.40). The first lot consisted of the humus layer, 10cm thick. Although heavily eroded it was possible to determine that the ceramics from this lot were largely from the Chacalhaaz Phase.

The second lot consisted of a level of dark brown soil with roughly cut stones, some 50 – 60cm thick. It is possible that these blocks represent the remains of low and poorly built platforms, although it is impossible to confirm this with the data at hand. The ceramics from Lot 2 were from the Chacalhaaz Phase.

Lot 3 was a level of large stones, some cut, as well as pebbles within a matrix of loose gray soil. The lot was 30 – 55cm thick, and contained Late Classic ceramics. The fourth lot consisted of a layer of fine, loose, soil on the northwest side of the unit that lay directly over a wall. This layer contained numerous Yaxche Phase sherds, obsidian and animal bones (at least one of which was worked). It was not clear what this unusual deposit represented.

The fifth lot was a level of large rocks with very little soil, 1.80m deep. Many of the stones were crudely cut and formed several retention walls within the otherwise unstable fill. The few ceramics recovered were assignable to the Yaxche Phase.

A well-built wall was exposed on the northwest side of the unit. This wall measured over 1.80m in height, although it was impossible to determine its total stature because of the threat of immanent collapse. The associations of the wall were unclear, but it was not battered and therefore appears to be the interior or exterior wall of a

superstructure rather than a platform façade. It may represent an earlier phase of Str.

J-8, antedating the construction of Str. J-3.

Below the level of the retention walls there was a layer of soft gray soil. Because of the danger of collapse presented by the loose rubble fill only 5cm of this layer, Lot 6, was excavated. All of the ceramic material from Lot 6 was from the Yaxche phase.

PN-50B-1

PN-50B-1 was excavated as a 2.00 x 2.50m unit, running 16 degrees, placed on the southeastern corner of the platform that forms the base of Str. J-18 (Figs. 5.2, 5.33, 5.41). The objective of this unit was to clarify the presence or absence of a stairway visible in the drawings of Tatiana Proskouriakoff, but not present on the map produced by the University Museum project, and not previously confirmed by excavation.

The first lot consisted of the 25 – 30cm of humus overlying the collapse from the platform and superstructure of J-18. The ceramics produced by this lot were from the Chacalhaaz phase. Below the humus layer, root action and erosion had heavily damaged the platform. 20 – 60cm of collapse was removed as Lot 2, revealing some interesting details of the J-18 platform. Although it was poorly preserved, three risers of a corner staircase were still articulated. This is the only example of such an oblique staircase at Piedras Negras. In addition, a low platform attached to the base of the same corner of the J-18 platform was exposed in this lot.

Excavating further, the lower limits of this newly found platform were exposed in Lot 3. This third lot was composed of loose brown soil, 1.17m thick. The ceramics recovered in this lot represented a mix of Chacalhaaz and Yaxche phase materials. The

platform itself stood 65cm high and was located over a layer of soft earth. A stucco floor was exposed at the foot of the platform in the southwest side of the unit, but was not preserved in the northeast. Excavations were terminated at this point with the conclusion of the field season. It is probable that the platform of J-18 continued below the limits of excavation, and it obviously antedates the low platform attached to it.

5.19: Conclusions: A Synthesis of Excavations in Court 3

It is clear that the arrangement of architecture and natural landscape that lies below Court 3 was, during the Early Classic, dramatically different than what is visible on the surface today (Fig. 5.42 provides an overview of the platform construction sequence in Court 3).¹⁷ There were at least two masonry structures built in this area during the fifth and sixth centuries AD, but these lay across a deep chasm from one another, rather than facing each other across an open patio. On the northwestern side of the chasm lay Str. J-20-sub-1 and to the southwest was Str. J-18-sub-2.

It is not possible to state definitively when the initial phases of these structures were built, though it is highly unlikely that this occurred before the mid-5th century AD with the advent of Naba phase ceramics. Only one sherd of a pre-Naba phase vessel was found (PN-11I-6-6), and this was not directly associated with any architecture other than the patio floor. Str. J-18-sub-2 had at least three major episodes of renovation evident, all of which were clearly associated with Naba phase ceramics and buried by fill that contained Naba phase ceramics.

¹⁷ See Appendix II for detailed summaries of the architectural phases of Court 3.

The construction of a masonry staircase climbing from J-20-sub-1 to the edge of the chasm is evidence of activities that were central to the use life of that building. It is possible to follow the sequence of events leading to the termination of the building in the following steps:

- 1) Large, uncut cobbles were used to cover the area surrounding J-20-sub-1. This included the burial of the staircase leading to the chasm, and the sides of the platform, but not the superstructure. No material was used to stabilize this fill.
- 2) Smaller, poorly made stairs were built on top of the now buried staircase, thereby maintaining the connection between the chasm and J-20-sub-1 throughout the termination activities.
- 3) The wattle-and-daub superstructure of J-20-sub-1 was burned. As the ruins still smoldered, ceramic vessels - or large portions of such vessels - were smashed over its surface. At the same time, a cap of dark clay that had been prepared was placed over the burning remains, extinguishing the fire and leaving a thin layer of ash and burned clay at the interface.
- 4) The rest of the area was capped with more clay. The area was left architecturally fallow for decades.

Although the location of J-19-2nd indicates that the building postdates the filling in of the chasm, it is not clear precisely when the gap was sealed. However, with the termination of the Early Classic buildings, the form of Court 3 developed without any particular reference to the chasm.

The excavations in J-20 (PN-11F, PN-11H) and the corner of J-20, J-23 and J-21, revealed a great deal about the development of Court 3 in its final phases. The architecture of J-20-1st was in an extremely poor state of preservation. The most important modification to J-20-1st, was the addition to J-20-2nd of a staircase on its eastern side, changing the axis of access from northwest to southeast. The staircase was

not well built, being little more than a stone veneer over loosely consolidated soil and rubble fill, and the greater part of J-20-2nd was not covered by J-20-1st.

The façade of the east side of the platform of J-20-2nd continued beneath the south façade of the platform of J-23-1st. Thus, J-20-2nd was built before J-23-1st. The same wall of J-20-2nd touches the southern wall of J-23-2nd. Therefore, J-23-2nd was built before J-20-2nd.

It is not possible at present to say whether J-23-1st or J-20-1st represents the earlier construction episode. Yet, the poor quality of J-20-1st, and the fact that the masonry of J-23-1st is of a higher quality similar to other standing architecture in the Acropolis, makes it a safe guess that the J-23-1st structure was the earlier. Excavations conducted as PN-11D, as well as excavations conducted during the 2000 field season by Stephen Houston and Ernesto Arredondo Leiva (2000a), revealed only one episode of construction in the superstructure of Str. J-23.

Although it is not possible to say whether J-23-2nd or J-21-2nd was the earlier structure, it is possible to say that J-23-1st was built before J-21-1st. The platform of J-23-1st touches the western wall of J-21-2nd, and the addition to J-21 that constitutes J-21-1st was built over this corner. Excavations conducted within rooms on the northeastern side of J-21 (Houston and Arredondo Leiva, 2000a) revealed a brief construction sequence for the building that is entirely consistent with the findings of the excavations in sub-operation PN-11G, suggesting a construction history extending back to the mid-7th Century, at the earliest.

In the case of Str. J-19, Satterthwaite (1954: 85) concluded that there only existed evidence for two construction phases, and the evidence from the re-excavation of the

trench from the 1930's is in agreement with this assessment. The platform of the structure was built directly atop the chasm and no buildings could lie beneath the central portion of Str. J-19-2nd.

In front of J-18, the earliest structure building, Str. J-18-sub-2-3rd, was built as little more than a façade for the natural form of the bedrock. The bedrock may have been shaped somewhat, but the platform relies upon the hill itself for its mass, having only minimal fill between the facing stones and the underlying hillside. This structure had a masonry staircase descending to the southeast that arrived at a landing. Though no evidence of a superstructure was found the orientation of the staircase almost certainly provides the orientation of the superstructure.

Because there is no evidence that the height of the platform itself had been dramatically altered prior to its interment, it appears as though the bottom of the superstructure was never raised more than 40cm above the bedrock. Immediately to the front, and extending to the sides, of this landing was another, lower platform. This lower platform may have had two lateral staircases – a common feature at Piedras Negras (e.g., Fig 5.22) – or it may simply have had a central staircase descending to an unknown point below.

Str. J-18-sub-2-2nd saw an increase in the width of the platform, but no real modifications to its form or orientation. A new staircase was built to replace that of the earlier structure and the landing was amplified. A third episode of construction, Str. J-18-sub-2-1st, represented a change in the angle of the structure and it was widened again (Figs. 5.28, 5.30). The staircase of J-18-sub-2-2nd was maintained in the third and final phase.

Sometime during the early to mid-6th century, the superstructure of Str. J-18-sub-2 was destroyed. It may also have been burned, but apart from a minimal amount of bajareque there is no evidence to say if this was the case. The staircase was completely removed, leaving its form visible only in negative against the platform façade. The masonry and stucco veneer of the landing was left largely intact, but the fill was removed. This may have been to remove a cache that lay beneath the staircase. The remains of the platform were buried by fill composed of loose rubble. Although this pattern of destruction is distinctly different from that associated with J-20-sub-1, it is most probable that the demolition of both structures took place within a brief time period. The dark clay layer that covers some parts of the J-18-sub-2 platform (e.g., as revealed in PN-11K-1) is strikingly similar to that covering J-20-sub-1, and both structures are associated exclusively with Naba phase ceramics.

The function of Str. J-18-sub-2 is not clear. No use-related deposits were found in association with the platform and, as mentioned above, the superstructure was eliminated entirely. However, the form of the building – a platform with a long staircase that descends to a landing with smaller lateral staircases – is reminiscent of many temple-pyramids at Piedras Negras, although it is quite small in comparison to others at the site. Moreover, the location of the platform immediately atop the bedrock and adjacent to the chasm that formed the focus of the area that would become Court 3 reinforces the notion of some ritual function to this structure.

Following this episode of destruction it appears that construction in this area during the period from the mid-6th through mid-7th Centuries (contemporary with the use of Balche and Yaxche phase ceramics) was limited in size and scope. The platforms

designated J-18-sub-1, J-19-sub-1-1st, and J-19-sub-2nd were all low, poorly made structures.¹⁸ The construction sequence was not entirely clear, although it is obvious that these structures were more or less contemporaneous and each had a perishable superstructure.

At some point during the 7th Century, Patio 3 finally began to acquire its final form. The platform that forms the southeastern border of the patio was built, and soon afterwards came the construction of Str. J-18-3rd and J-18-2nd. It was not until the 8th Century, in association with Chacalhaaz phase ceramics, that the patio around J-18 achieved its final form. The entrance to Court 3 between Strs. J-18 and J-21 took the form of a low staircase used to descend from the level of the building superstructures to that of the patio.

When Str. J-19-2nd was built is unclear, although it certainly postdated the construction of J-18. Given the apparent similarity of J-19 and Str. J-33 (see Chapter 6) prior to excavation, it may be that the former was contemporary with the latter, being built sometime after the turn of the 9th Century AD. The construction of J-19, however, clearly limited access to portions of J-18, and blocked off the view of the river from Court 3.

The exterior of J-18 was covered in a modeled stucco façade. In addition to vegetal forms, at least one large stucco fragment from J-18 resembles a human arm or leg, and the fact that stucco renderings of human heads are well known from elsewhere in the Acropolis, this suggests that human forms at one time graced the façade of this

¹⁸ The naming of Strs. J-18-sub-1 and J-18-3rd presents something of a dilemma. The relationship between Str. J-18-sub-1 and the sequence directly beneath Str. J-18-1st is unclear, and for this reason the former was designated as –sub-1. However, it may have been contemporary with either Str. J-18-2nd or J-18-3rd. These

structure.¹⁹ That no further pieces were found may suggest the active destruction of human figures in the façade, a practice well in keeping with the elimination of figures on monuments.

By the end of the 8th century Court 3, like other parts of the Acropolis, appears to have been suffering from a lack of living space. The construction of J-19, a comparatively poorly made building with a perishable superstructure, was part and of an attempt to amplify the living quarters in Court 3. It is possible that J-19 even post-dates the abandonment of J-18, for the former restricts access to the southwestern rooms of J-18. Later, a low wall was built that crossed the half of the gap between J-18 and J-19, further limiting access to the former. No later occupation has been identified in Court 3.

relationships would require further excavations to clarify.

¹⁹ A human digit rendered in stucco, now in the collections of the University Museum, was excavated in the Acropolis, though its precise point of origin is not recorded.

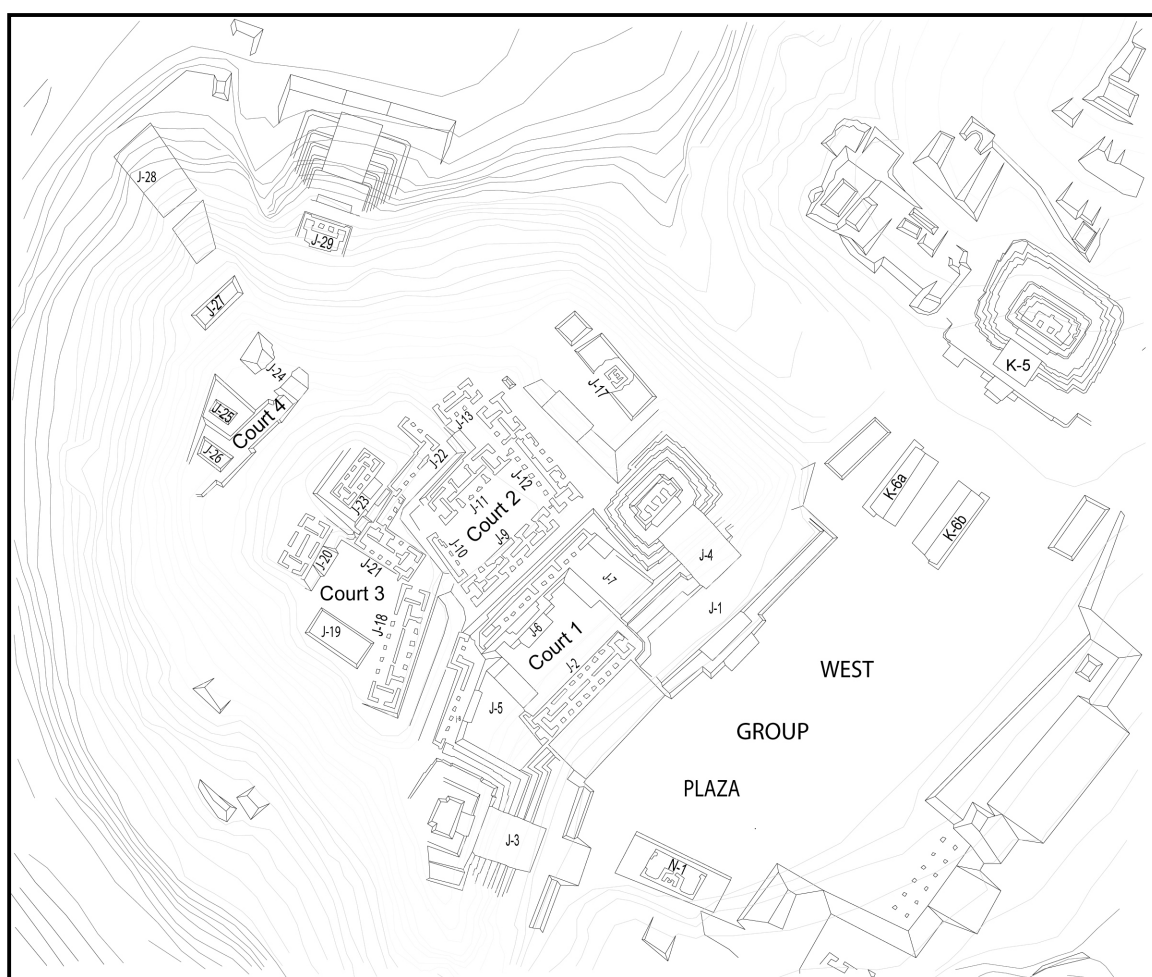


Fig. 5.1: Map of the Acropolis, Piedras Negras, Guatemala.



Fig. 5.2: Map of Piedras Negras, Guatemala with detail of Court 3, plans of excavations marked in gray.

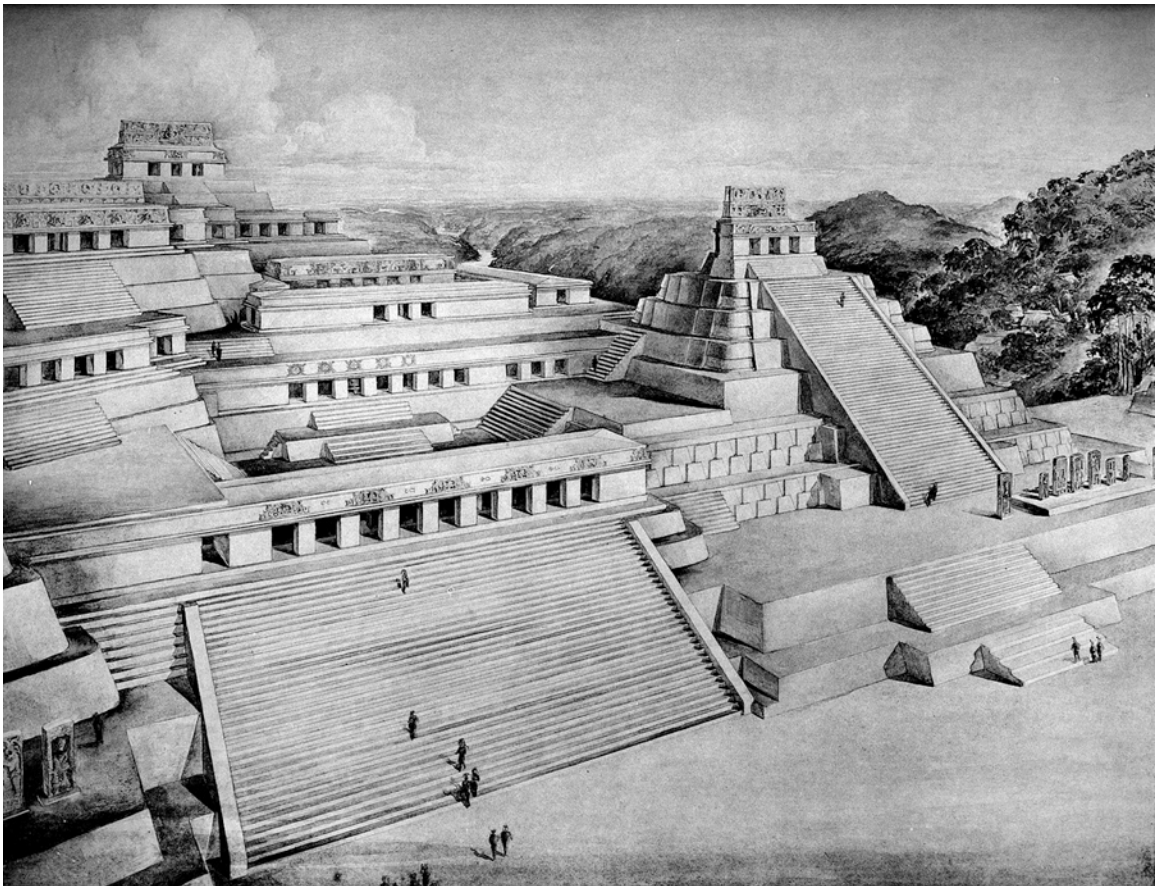


Fig. 5.4: Reconstruction painting of the Acropolis, Piedras Negras, Guatemala, as it appeared in the 8th Century AD (from Proskouriakoff, 1950).

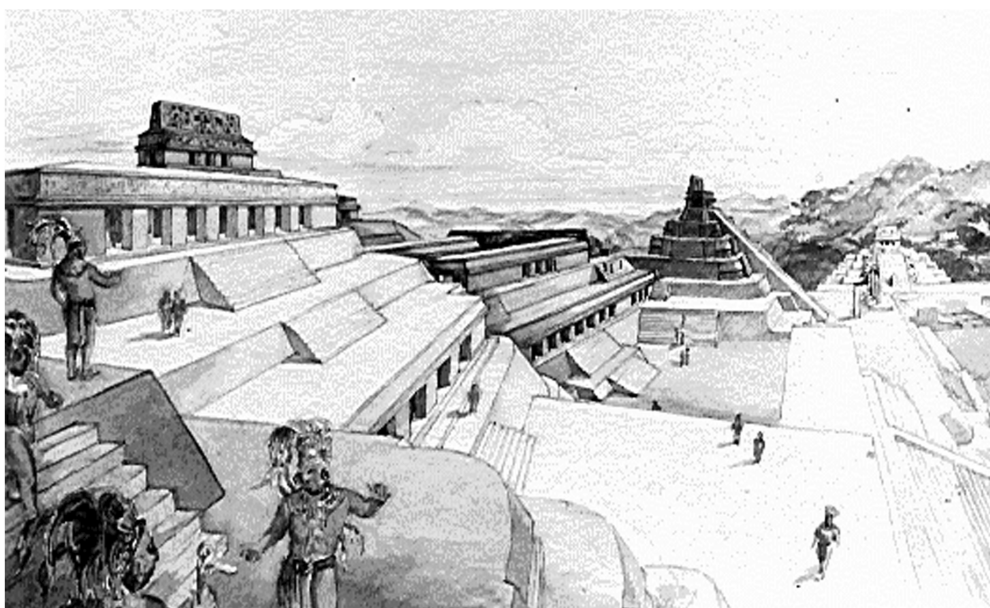


Fig. 5.4: Unpublished reconstruction painting by Proskouriakoff of Piedras Negras in the 8th Century AD (from the Shook Archives of Universidad del Valle de Guatemala). View is to the north from Str. J-3, with ballcourt and Str. K-5 in the upper right (above). Photograph from 1939 showing Str. K-5 as viewed from the West Group Plaza, through the ballcourt Str. K-6a and K-6b (below; photo field number 1939-39, University Museum Archives).

GREGORIAN DATE	MAYA CALENDER	PIEDRAS NEGRAS	PALCENQUE	UAXACTUN	ALTAR DE SAC.	TIKAL	SEIBAL	BECAN	TONINA
900	10.4.0.0.0		POST-BALUNTE		JIMBA	CABAN			CHENEK
		KUNCHE		TEPEU 1		EZNAB	BAYAL	XCOCOM	
800	10.0.0.0.0								
		CHACALHAZ	BALUNTE		BOCA				
700	9.18.0.0.0								
			MURCIELAGOS	TEPEU 2		IMIX		CHINTOK	
600	9.12.0.0.0						TEPEJILOTE		
		YAXCHE	OTOLUH	TEPEU 1	PASION	IK		BEJUCO	IXIM
500	9.7.0.0.0	BALCHE							
				TAZOL 1	CHIXOY				
400	9.0.0.0.0	NABA	MOTIEPA		VERENOS			SABUCAN	
					AYN				
300	8.12.0.0.0			TAZOL 2		MANIK	JUNCO		MAY
			PICOTA		SALINAS			CHACSIC	
				TAZOL 1					
		CHICANEL	CHICANEL	CHICANEL		CIME	CANTUSTE	PAKLUM	WACH

Fig. 5.5: Ceramic chronology as developed by George Holley (1983) for Piedras Negras.

PRINCIPAL PERIODS	YEARS	UAXACTUN	TIKAL	CEIBAL	ALTAR de SACRIFICIOS	PIEDRAS NEGRAS
POST CLASSIC	1000 900		CABAN		JIMBA	?
TERMINAL	800 700	3	EZNAB	BAYAL	BOCA LATE EARLY	KUMCHE
LATE	600 500	TEPEU 2	IMIX	TEPEJLOTE	PASION LATE EARLY	CHACALHAAZ
EARLY	400 300	1	IK	?	CHIXOY	YAXCHE LATE EARLY
	200 100	3	LATE EARLY		AYN	BALCHE
	0	TZAKOL 2	MANIK	JUNCO	VEREMOS	NABA LATE EARLY
	100 200	1			SALINAS	?
PROTO-CLASSIC	200 100		CIMI			
	0	CHICANEL	CAUAC	LATE EARLY		
LATE	100 200		CHUEN	CANTUTSE	PLANCHA	ABAL
	300 400		TZEC			
MIDDLE	500 600	MAMON		ESCOBA	SAN FELIX	HOL
	700 800		EB			
	900			REAL	XE	?

MUÑOZ 2001

Fig. 5.6: Revised ceramic chronology by René Muñoz (table by René Muñoz).

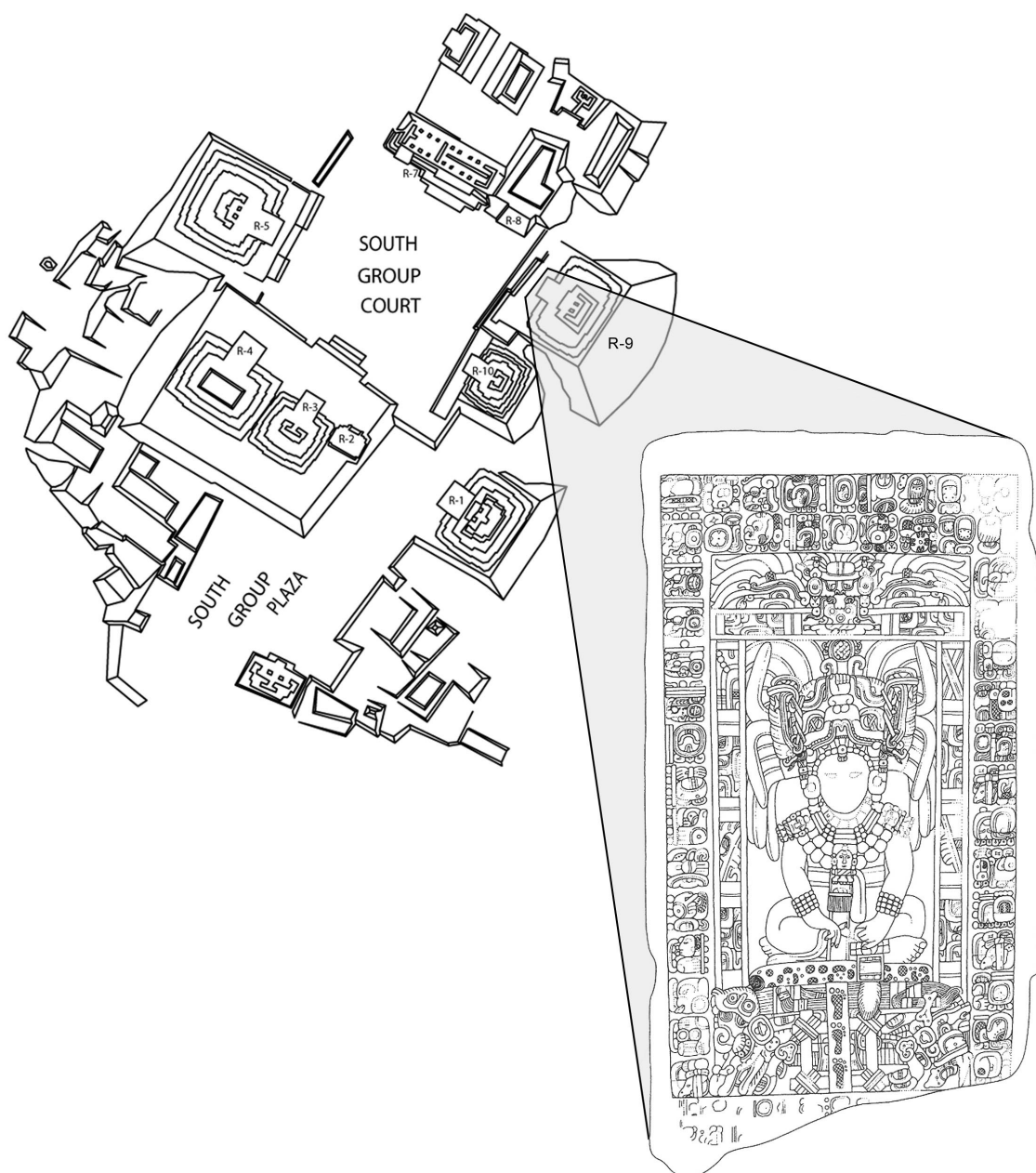


Fig. 5.7: Piedras Negras Stela 25, dated to AD 608 and found in front of Str. R-9, associated with Balche phase ceramics (drawing by John Montgomery, from Martin and Grube, 2000: 143).

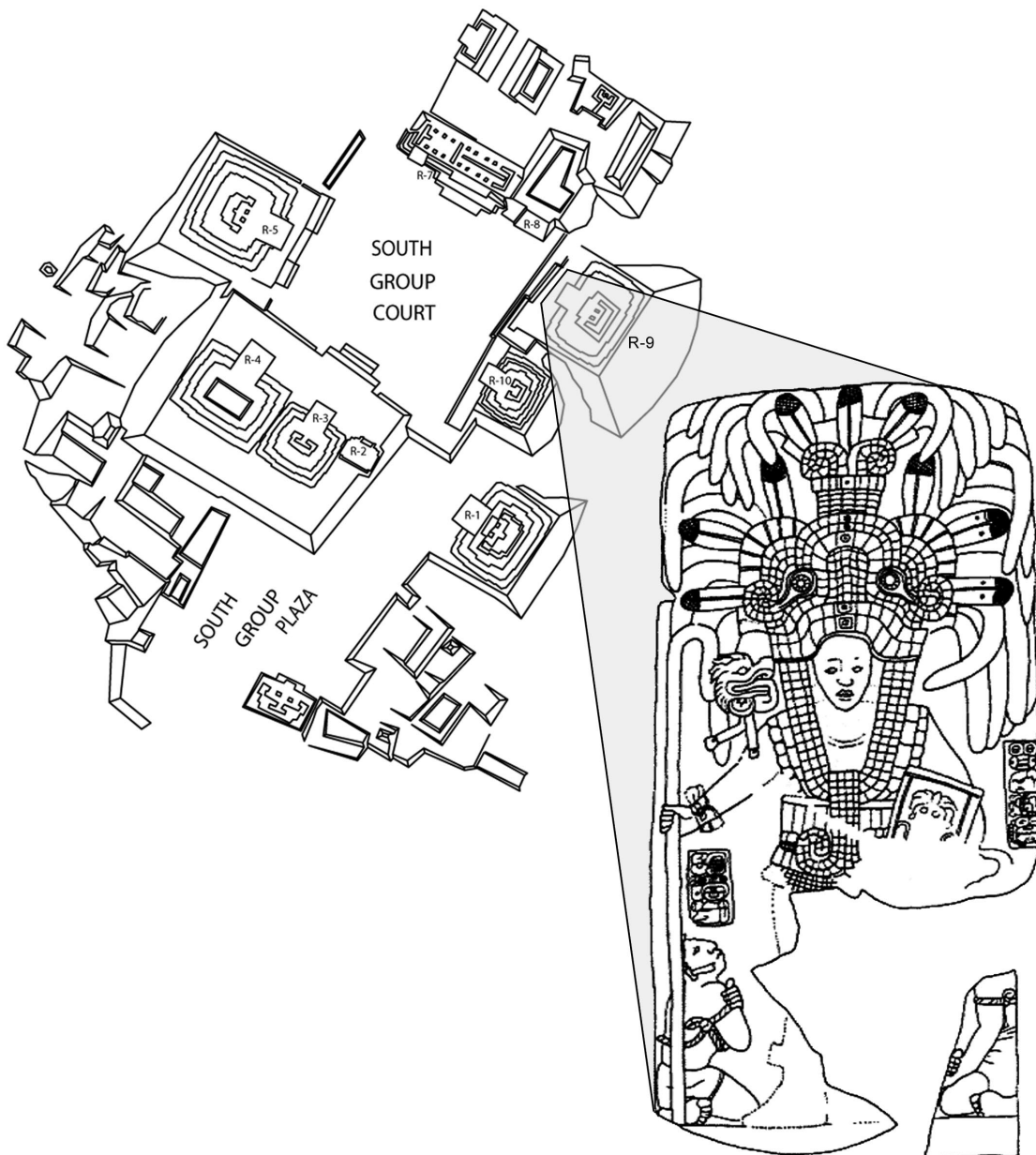
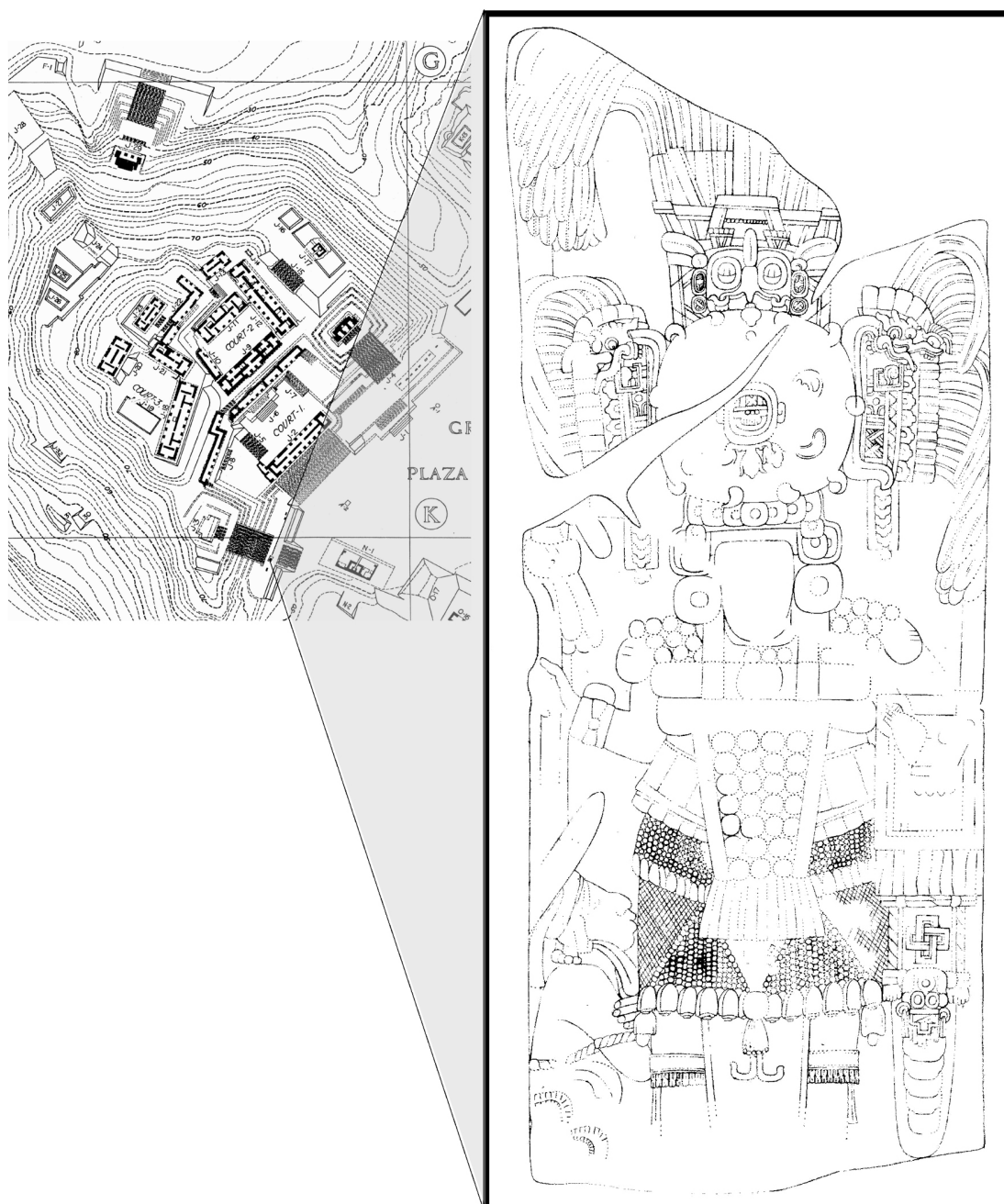


Fig. 5.8: Piedras Negras Stela 26, dated to AD 628 and found in front of Str. R-9, associated with Yaxche phase ceramics (stela drawn by John Montgomery, from Martin and Grube 2000: 142).



**Piedras Negras, Stela 9,
Front**

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John Montgomery

Fig. 5.9: Piedras Negras Stela 9, dated to AD 736 and found in front of Str. J-3, associated with Chacalhaaz phase ceramics (stela drawn by John Montgomery).

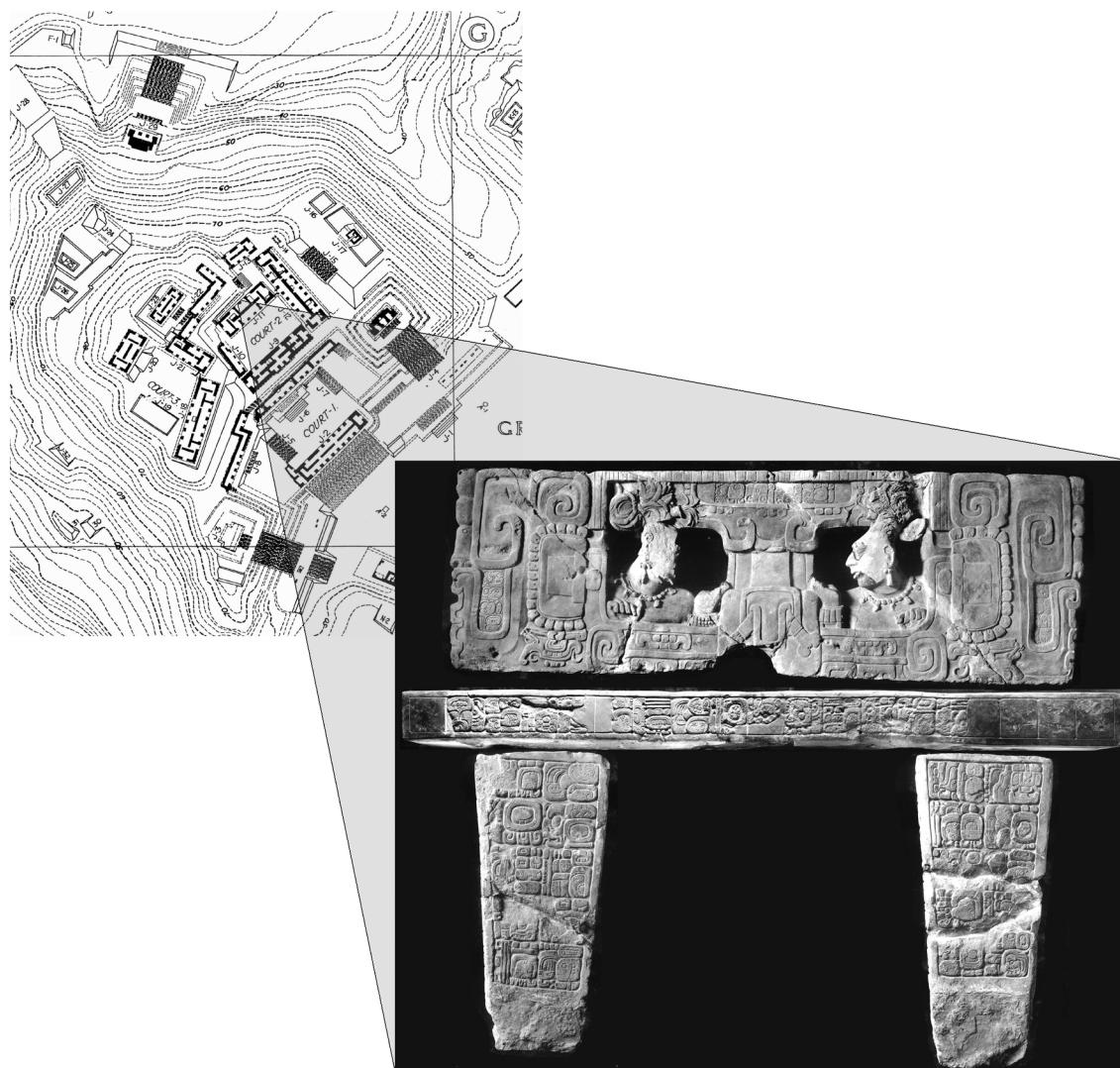


Fig. 5.10: Piedras Negras Throne 1, found smashed inside Str. J-6, dated to AD 785 and associated with Chacalhaaz phase ceramics.

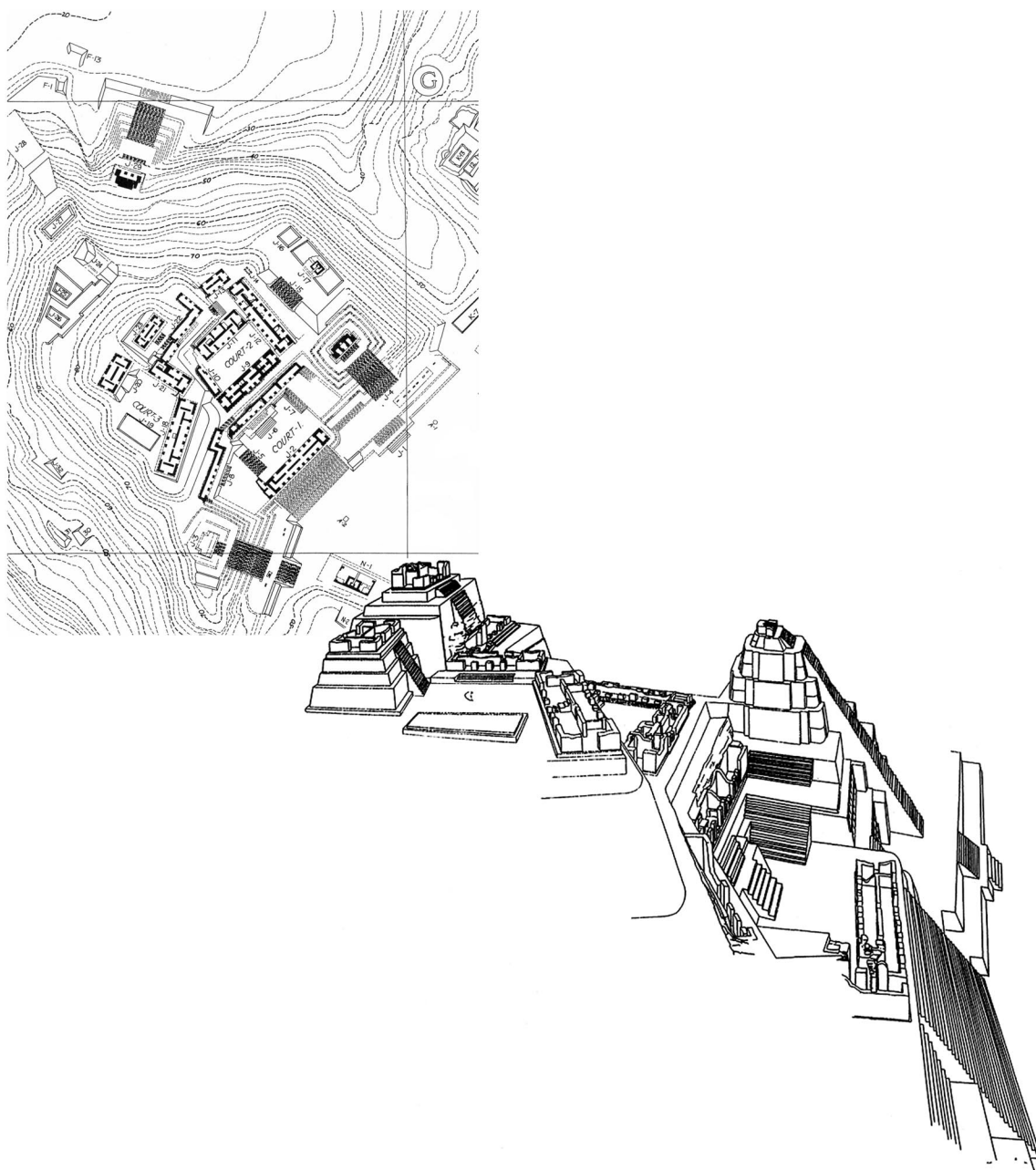


Fig. 5.11: Reconstruction drawing of the Acropolis, Piedras Negras. View is to the north from Str. J-3 (drawing by Heather Hurst, 1998).

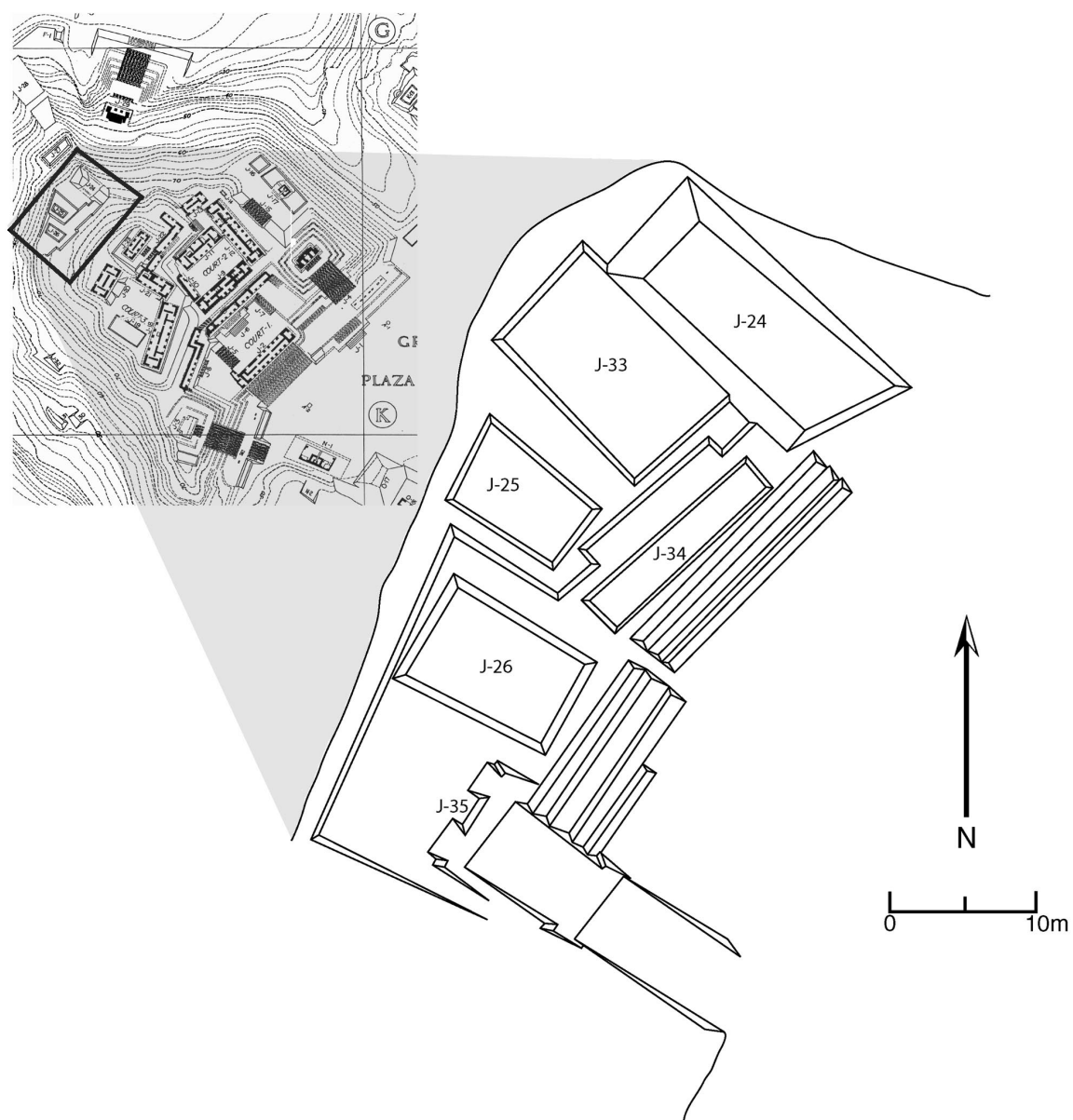


Fig. 5.12: Revised map of Court 4 of the Acropolis of Piedras Negras, shown with original (above left).

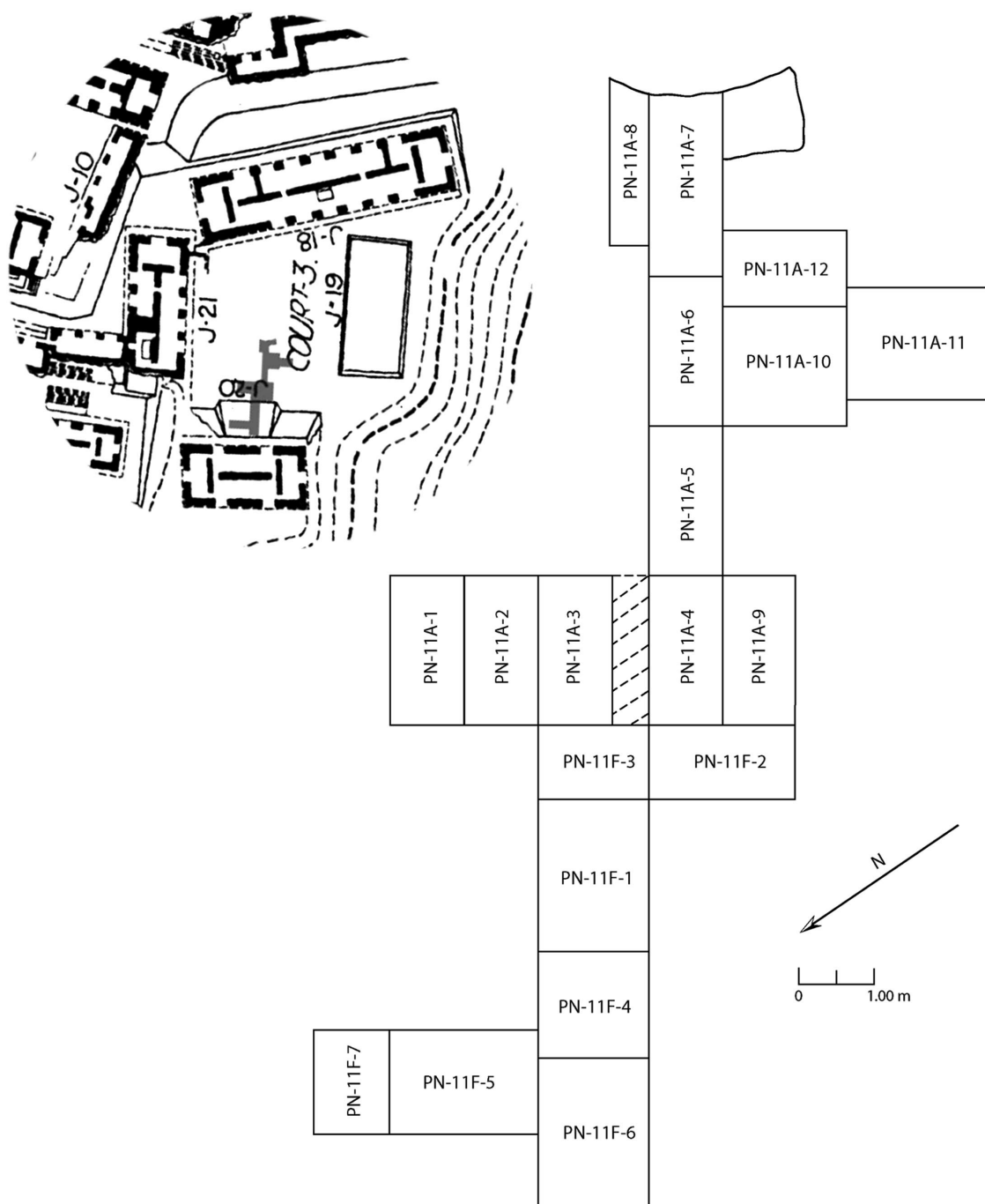


Fig. 5.13: Schematic plan of PN-11A and PN-11F units, with map of Court 3 inset. Hachure in PN-11A-4 indicates the portion of the unit excavated in 1997, but not in 1998.

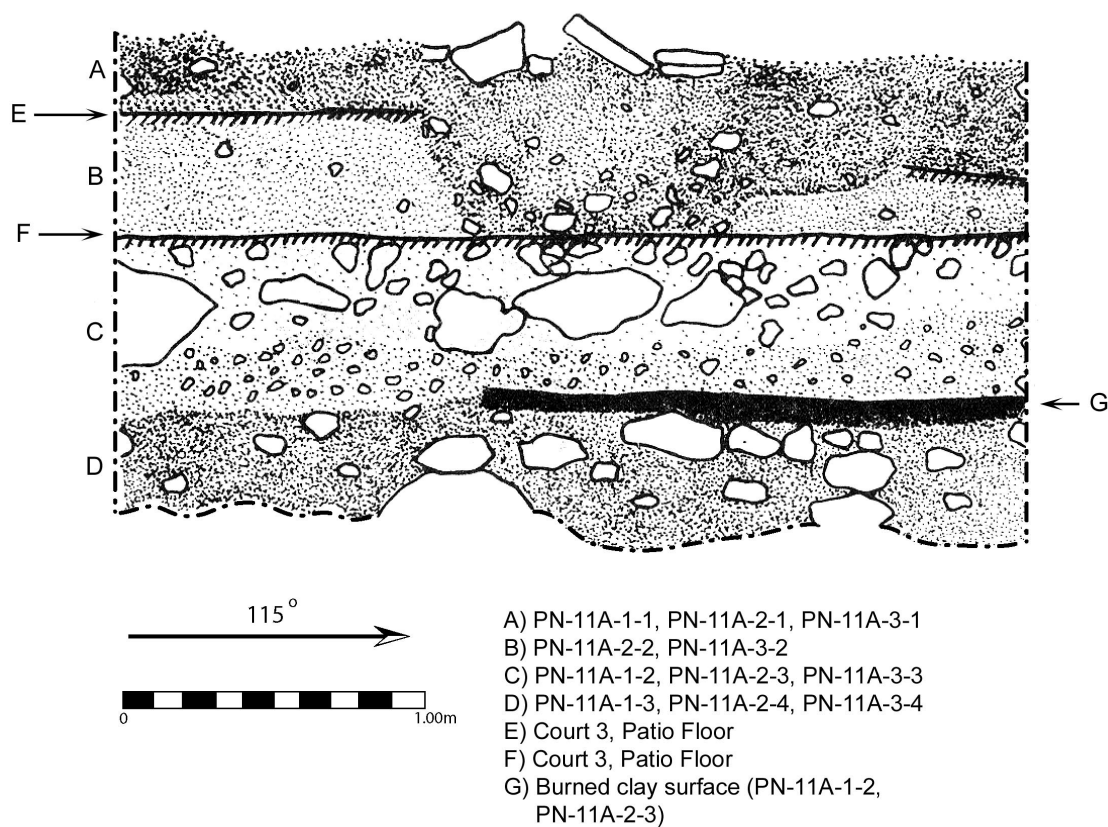


Fig. 5.14: Section showing PN-11A-1, PN-11A-2, and PN-11A-3.

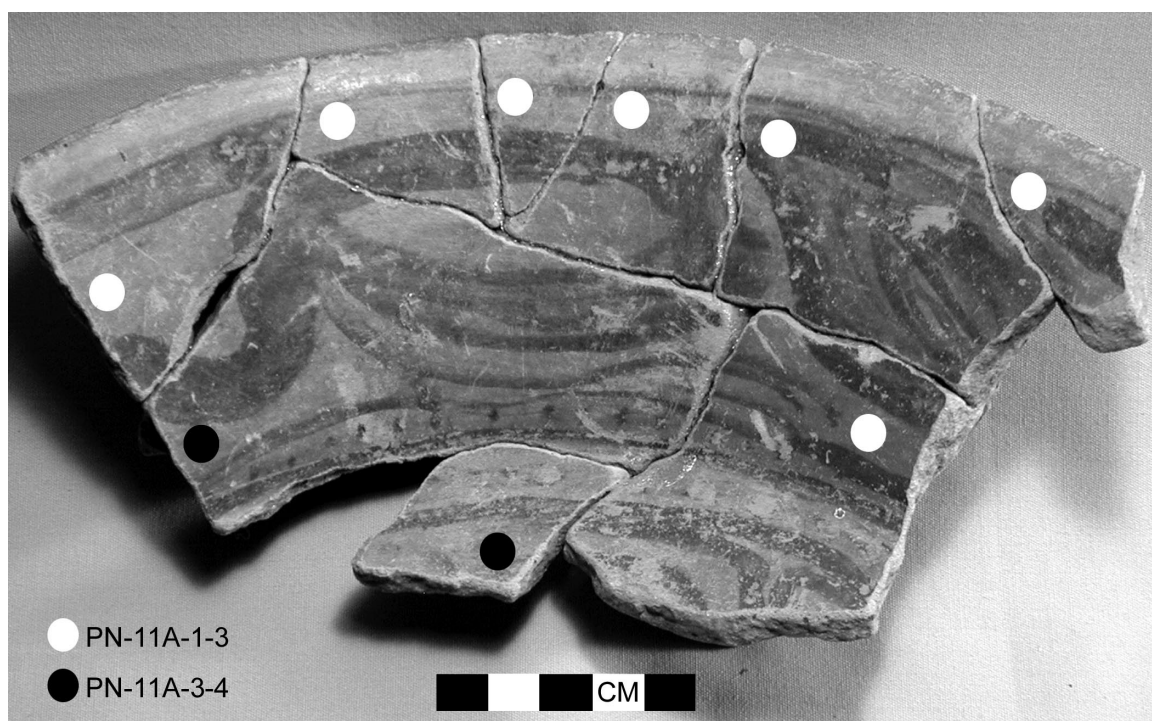


Fig. 5.15: Dos Arroyos Polychrome dish from the termination deposit associated with Str. J-20-sub-1. Refitted fragments come from loci (PN-11A-1-3 and PN-11A-3-4) over two meters distant from one another.



Fig. 5.16: Polychrome, basal flange plate from the termination deposit associated with Str. J-20-sub-1 (PN-11A-3-4).



Fig. 5.17: Teotihuacan-style ocarina/figurine, found in the termination deposit associated with Str. J-20-sub-1 (PN-11A-4-4). Head was broken off and deposited near the body.



Fig. 5.18: Assortment of earspools representing an MNI of 20 such artifacts recovered in the termination deposit associated with Str. J-20-sub-1 (above). Detail of zoomorphic earspool from PN-11A-3-4 (below).

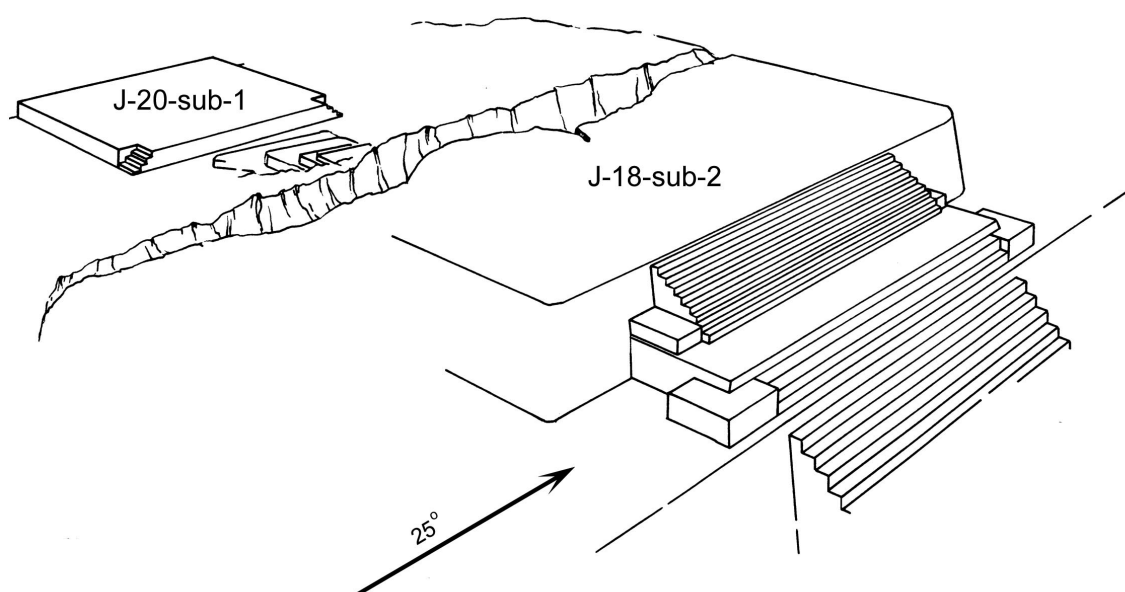


Fig. 5.19: Reconstruction by Heather Hurst of Early Classic structures underlying Court 3.

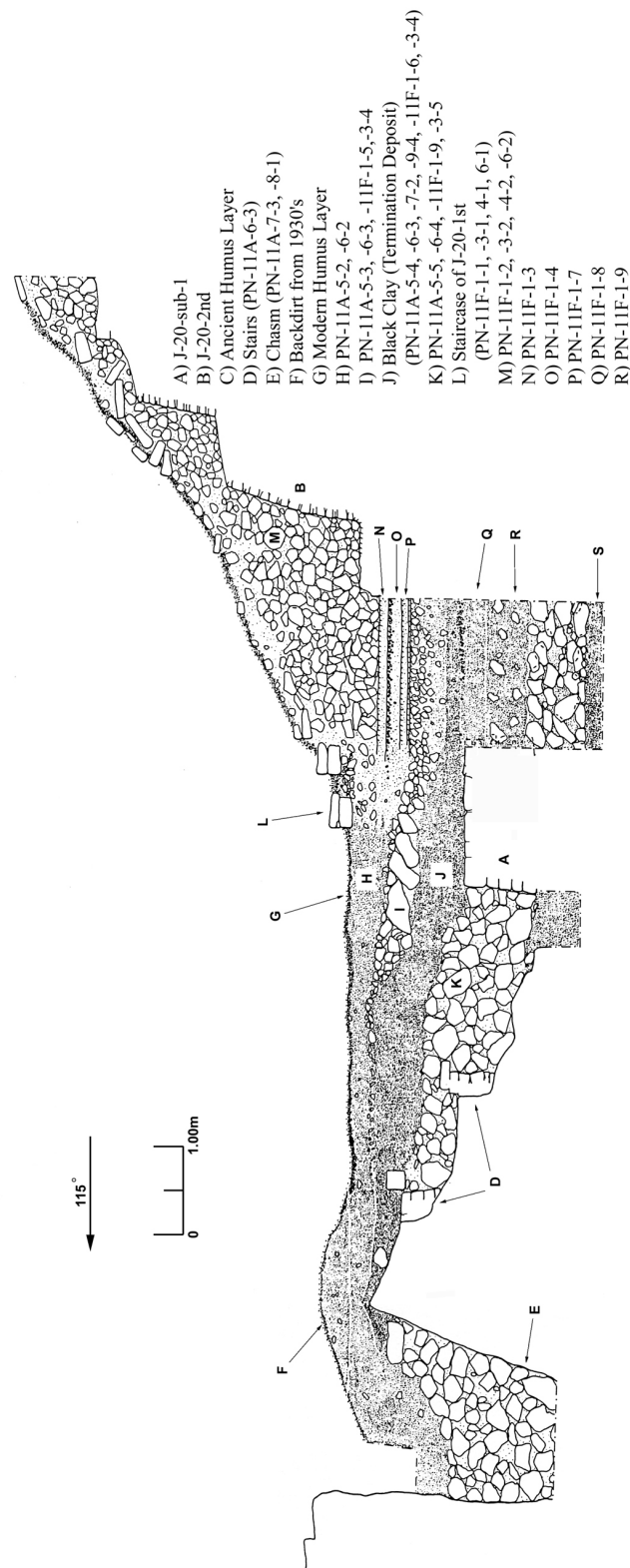


Fig. 5.20 Section of PN-11A/F trench, showing cut from chasm to Str. J-20.

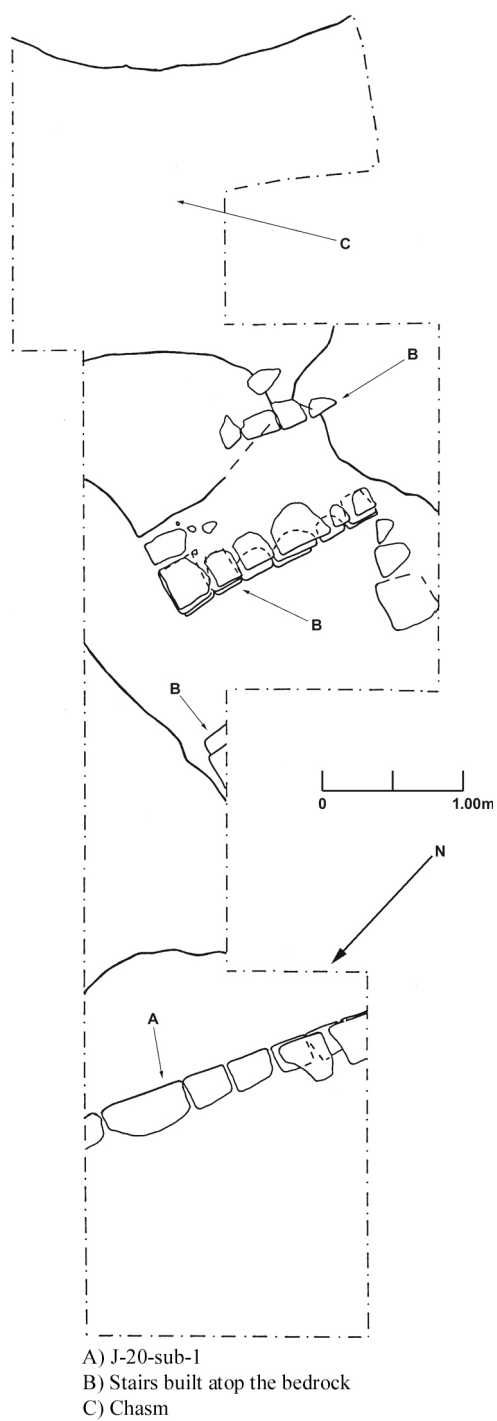


Fig. 5.21: Plan view of PN-11A trench between J-20-sub-1 and chasm.

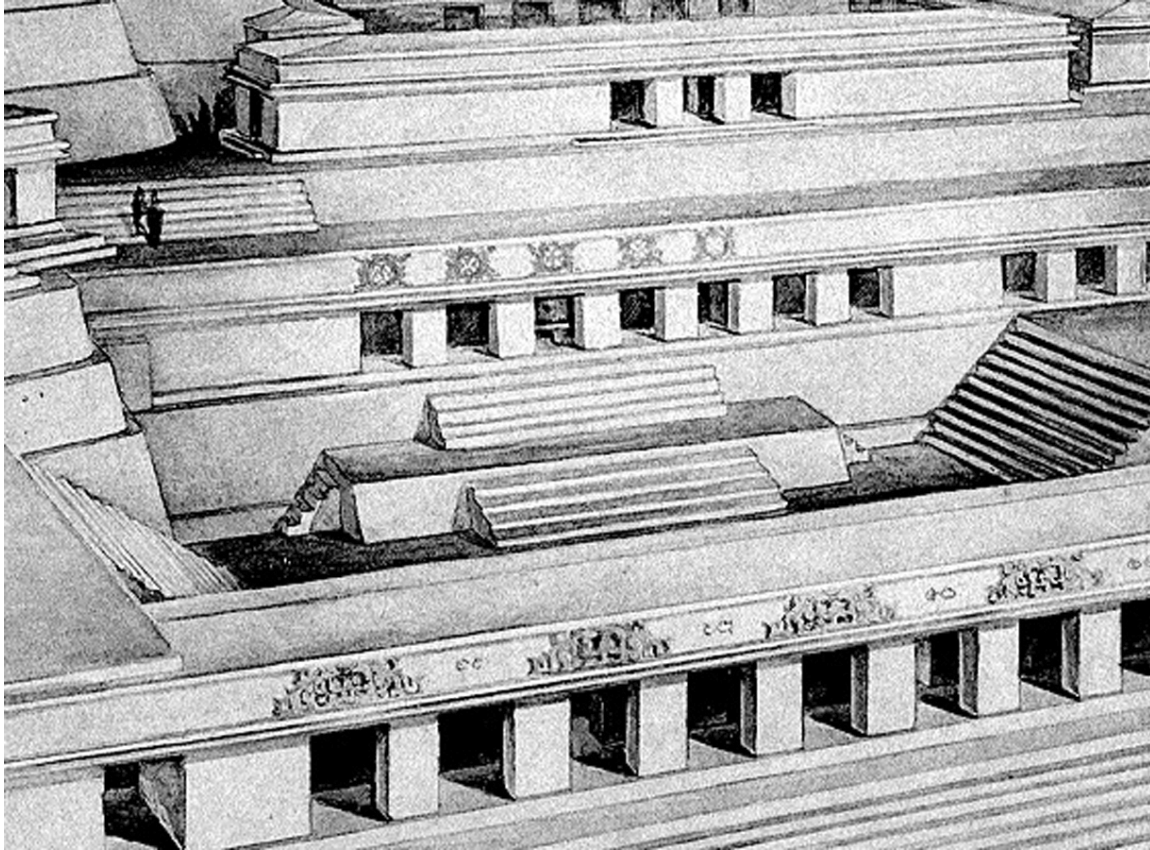


Fig. 5.22: Detail of reconstruction painting by Tatiana Proskouriakoff (1950), showing staircase of Str. J-6 with flanking staircases at landing, similar to those on J-20-sub-1.



Fig. 5.23: Photograph showing the plaque placed above the remains of Tatiana Proskouriakoff, Str. J-23.

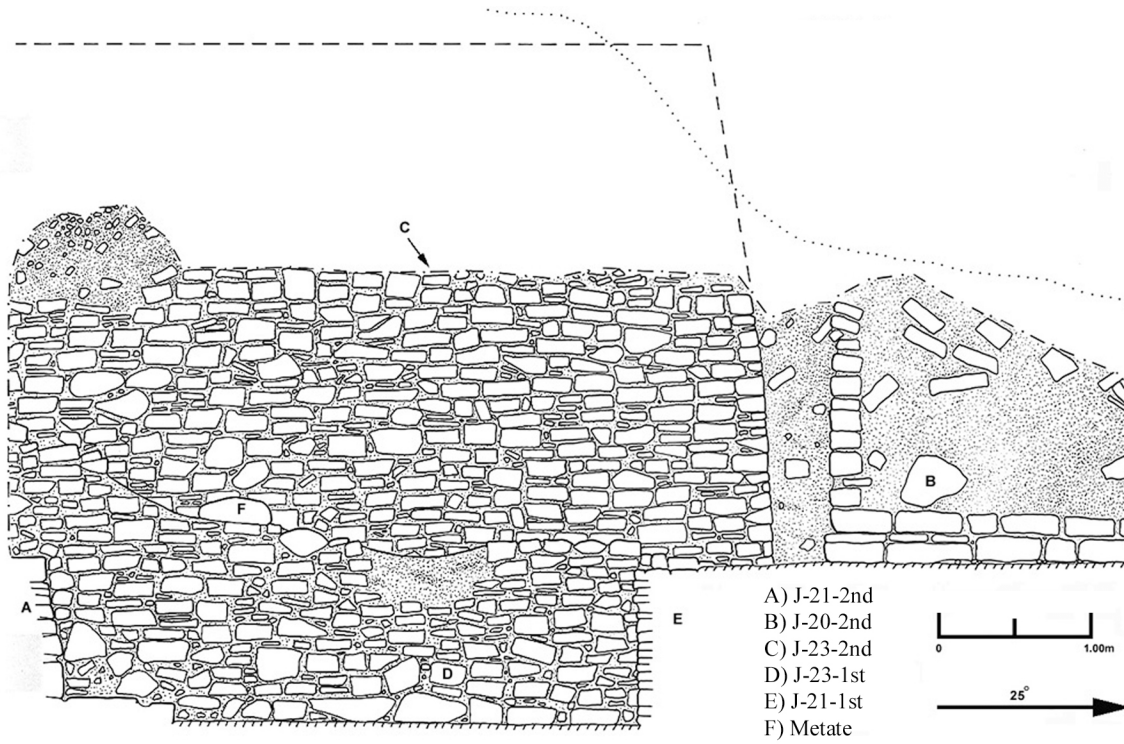


Fig. 5.24: Section showing multiple phases of Strs. J-18, J-21, and J-23.

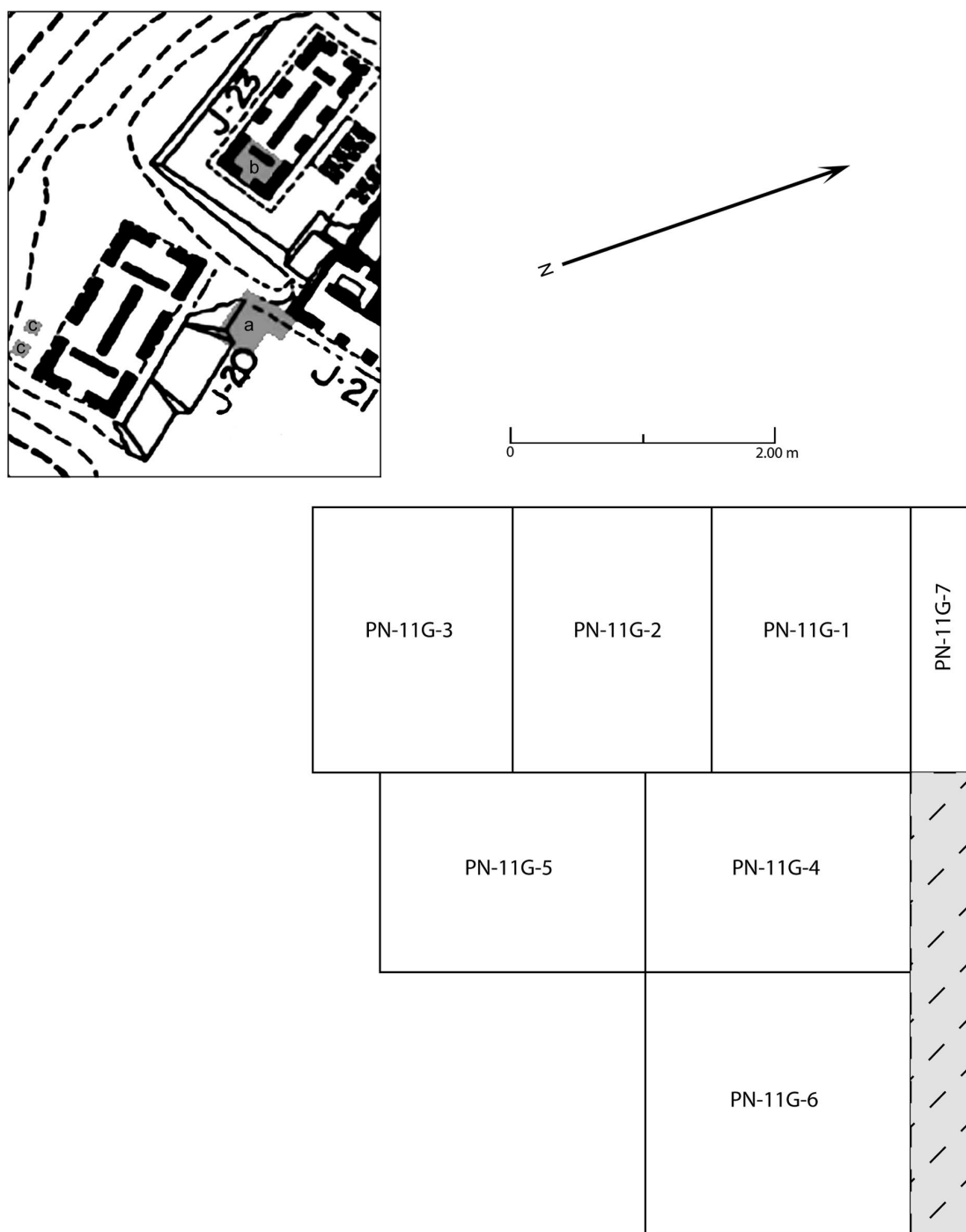


Fig. 5.25: Schematic plan of PN-11G excavations. Inset shows relative locations of (a) PN-11G, (b) PN-11D, and (c) PN-11H. Shaded area indicates irregular excavation limits.



Fig. 5.26: Large stucco disk and small stone disk found in PN-11G-6-3. Contrast is digitally enhanced.

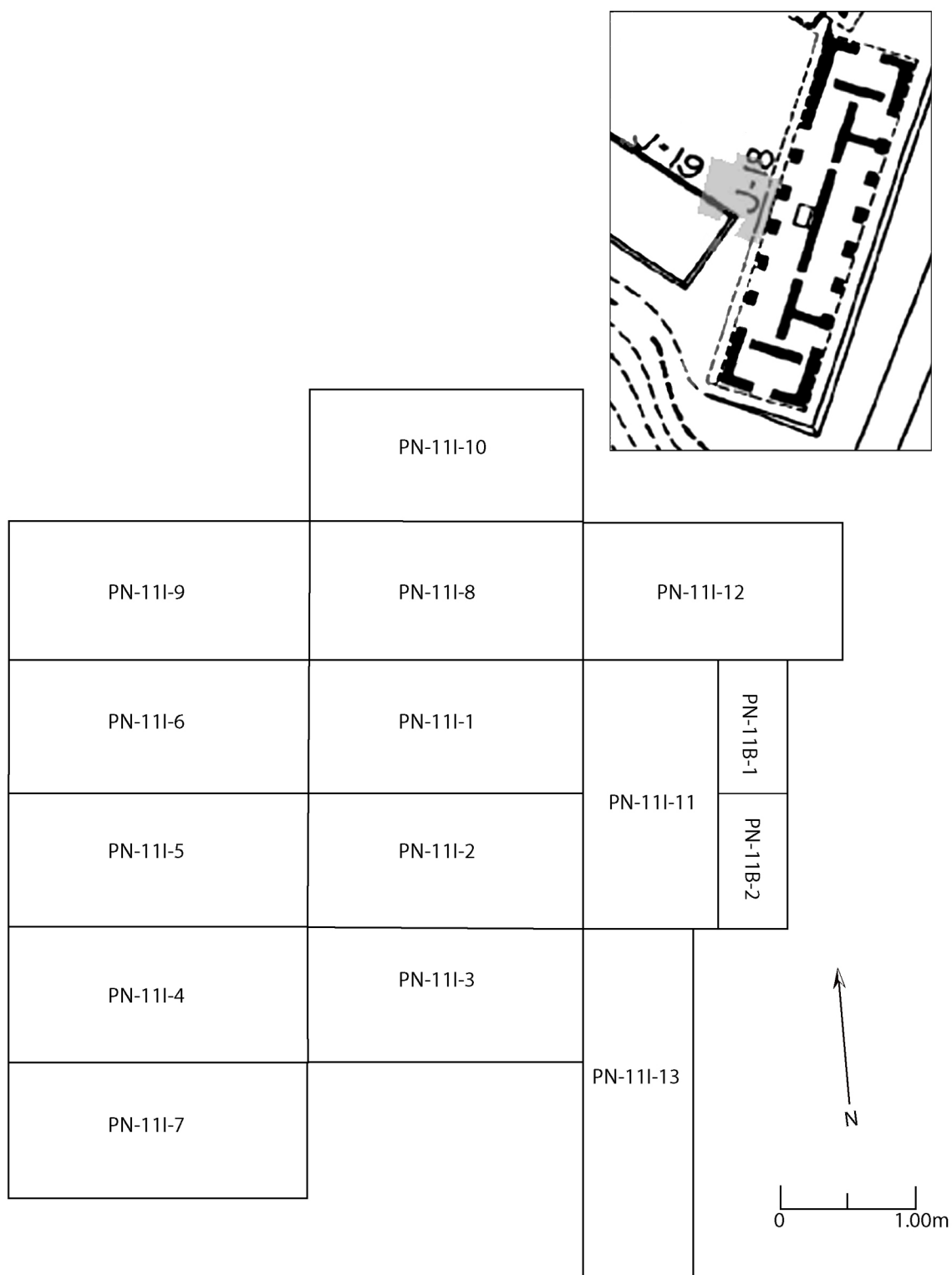


Fig. 5.27: Schematic plan view of units comprising PN-11I.

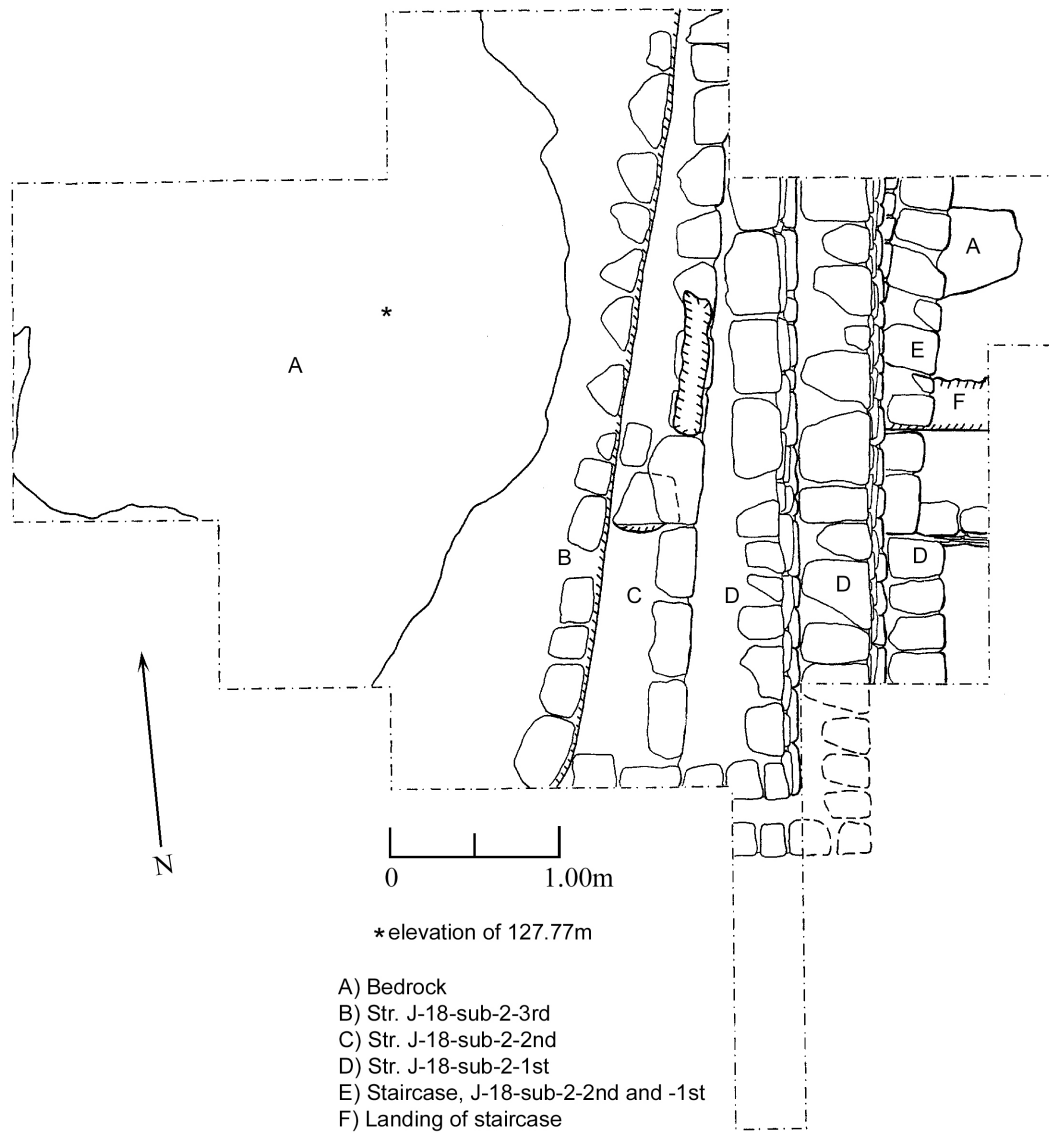


Fig. 5.28: Plan view of PN-11I excavations showing three construction phases of Str. J-18-sub-2.

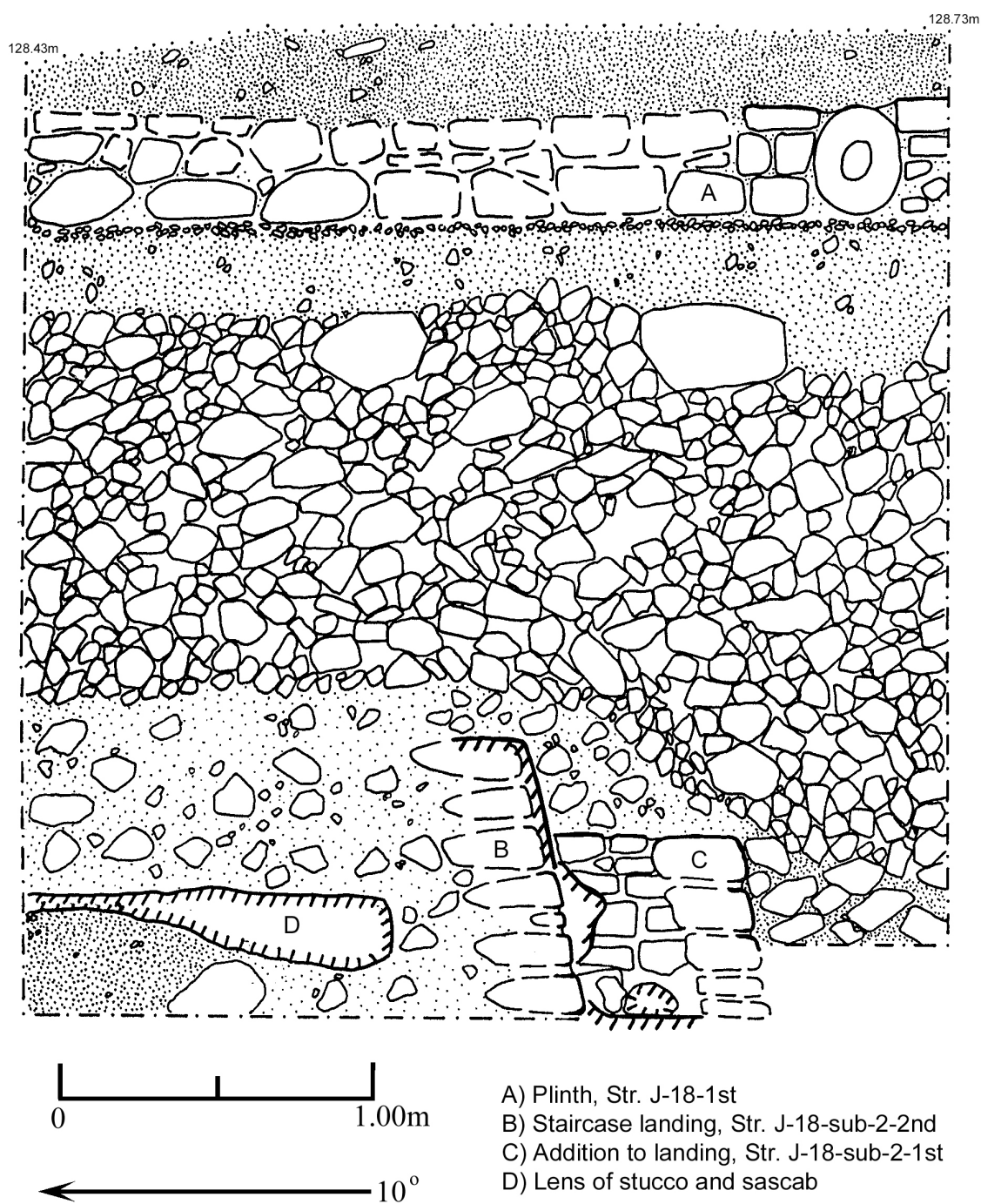
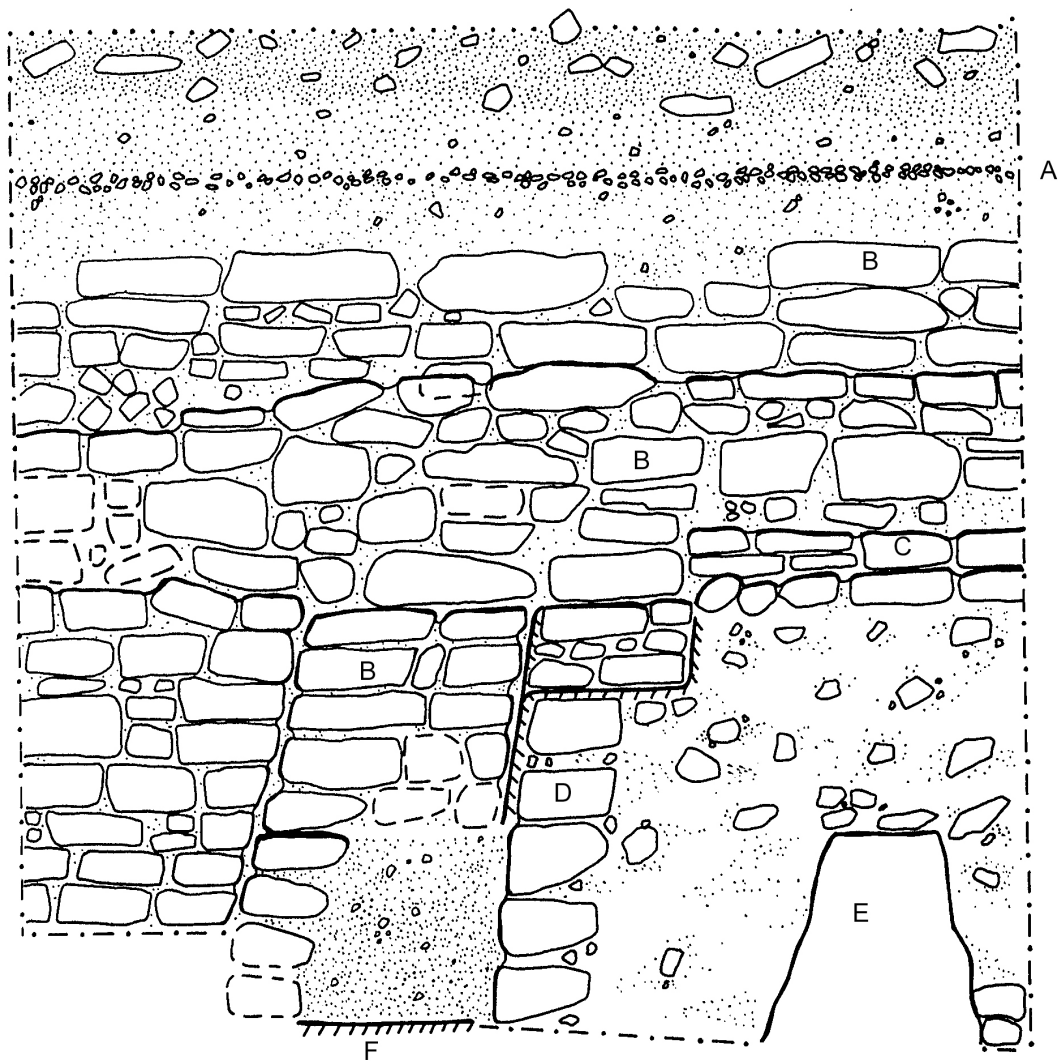


Fig. 5.29: Section of PN-11I-11 (see also PN-11B-1, PN-11B-2) and PN-11B-12.



- A) Court 3, Patio Floor
- B) Str. J-18-sub-2-1st
- C) Remnant of staircase, Str. J-18-sub-2-3rd
- D) Landing, Str. J-18-sub-2-2nd
- E) Bedrock
- F) Exterior floor associated with Str. J-18-sub-2-2nd

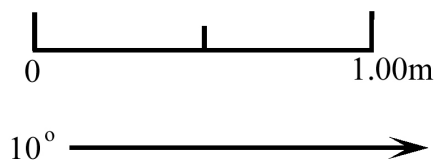


Fig. 5.30: Section of PN-11I-11 and PN-11I-12, showing three construction phases of Str. J-18-sub-2.

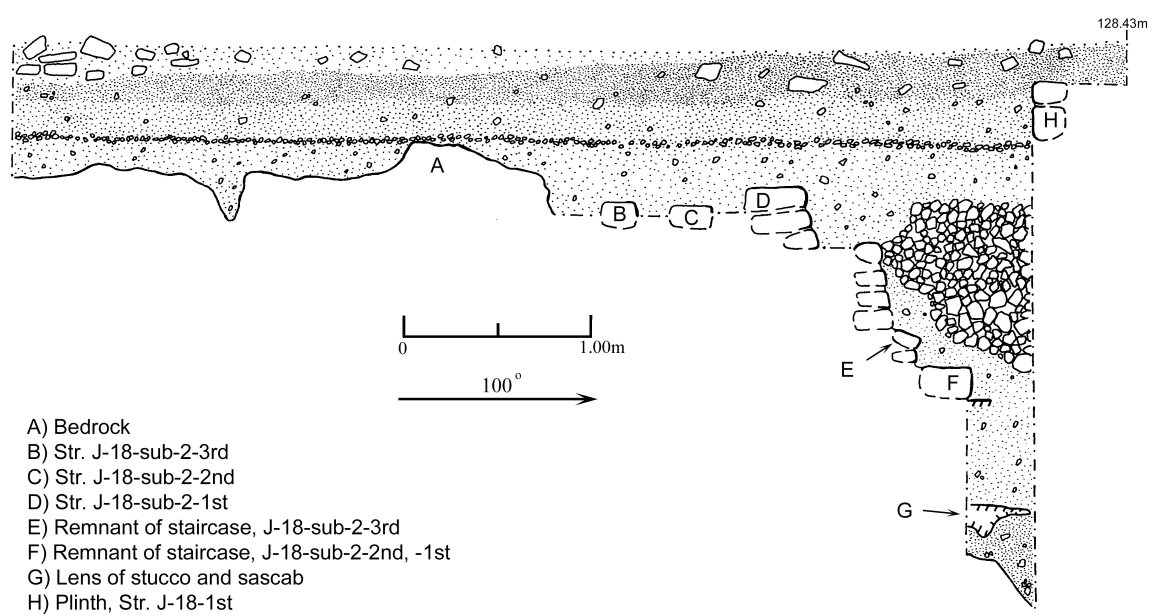


Fig. 5.31: Section of PN-11I-9, PN-11I-8 and PN-11I-12.

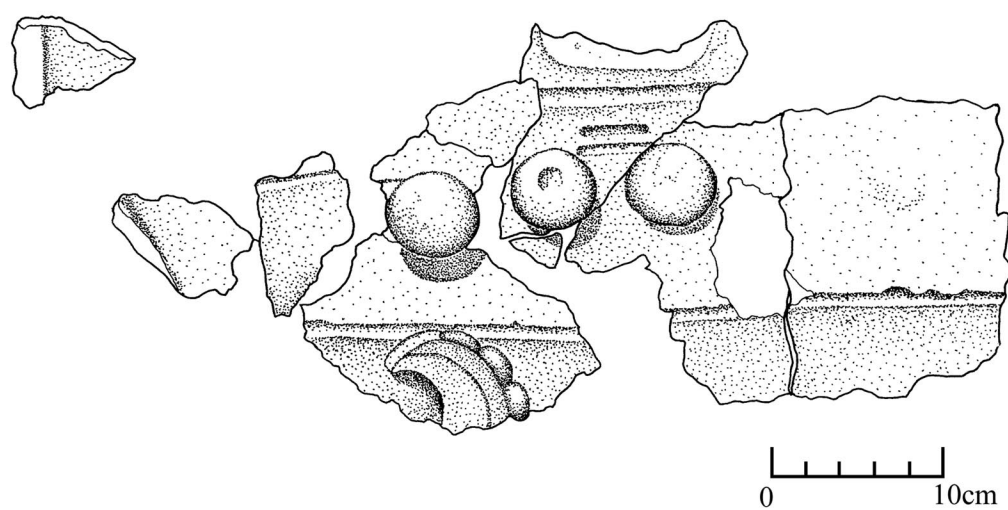


Fig. 5.32: Modeled stucco façade fragment from Str. J-18, excavated in PN-11I-13-2 (drawing by Zachary Hruby).

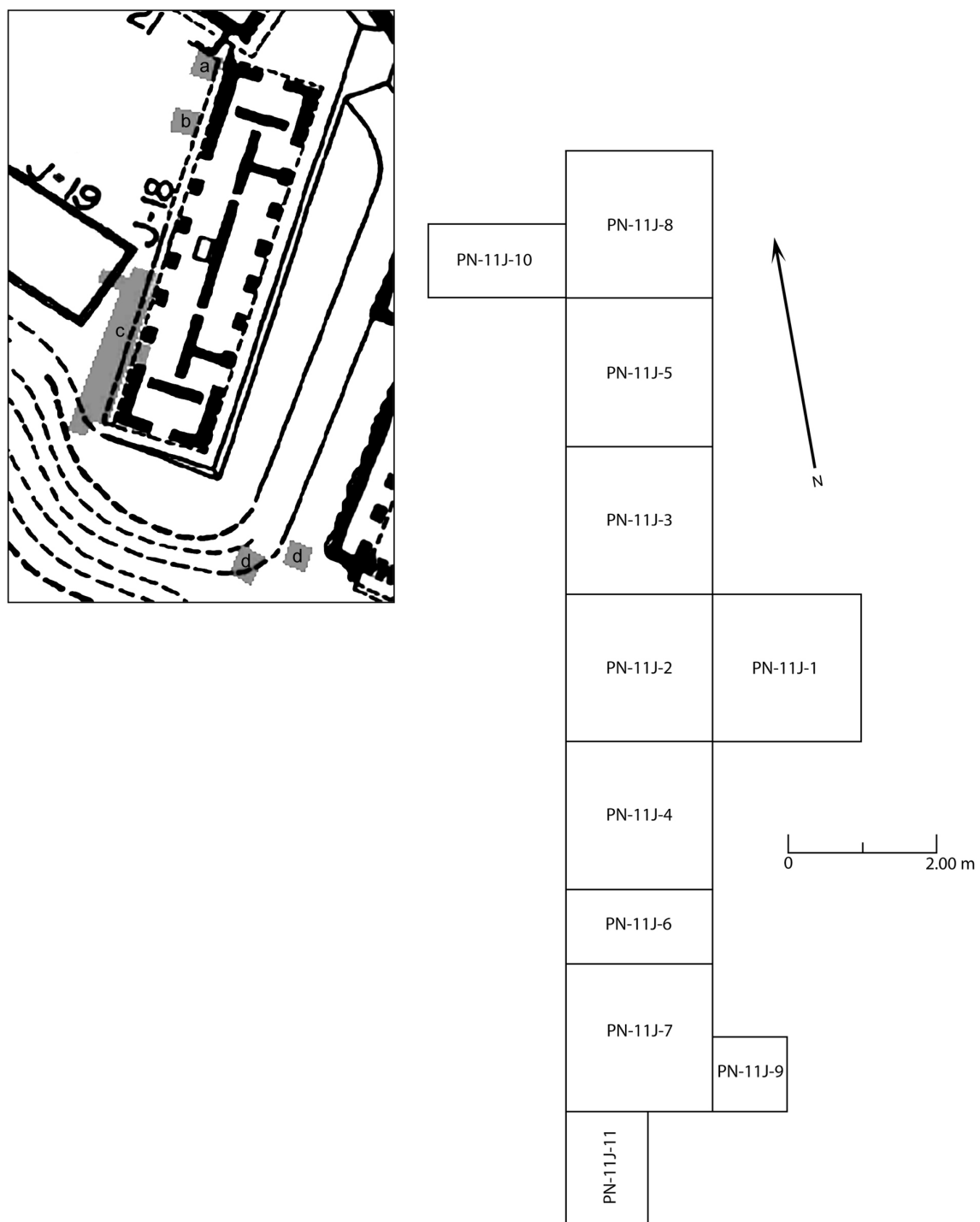


Fig. 5.33: Schematic plan view of units excavated as PN-11J. Inset shows relative locations of (a) PN-11L, (b) PN-11K, (c) PN-11J, (d) PN-50A and PN-50B.

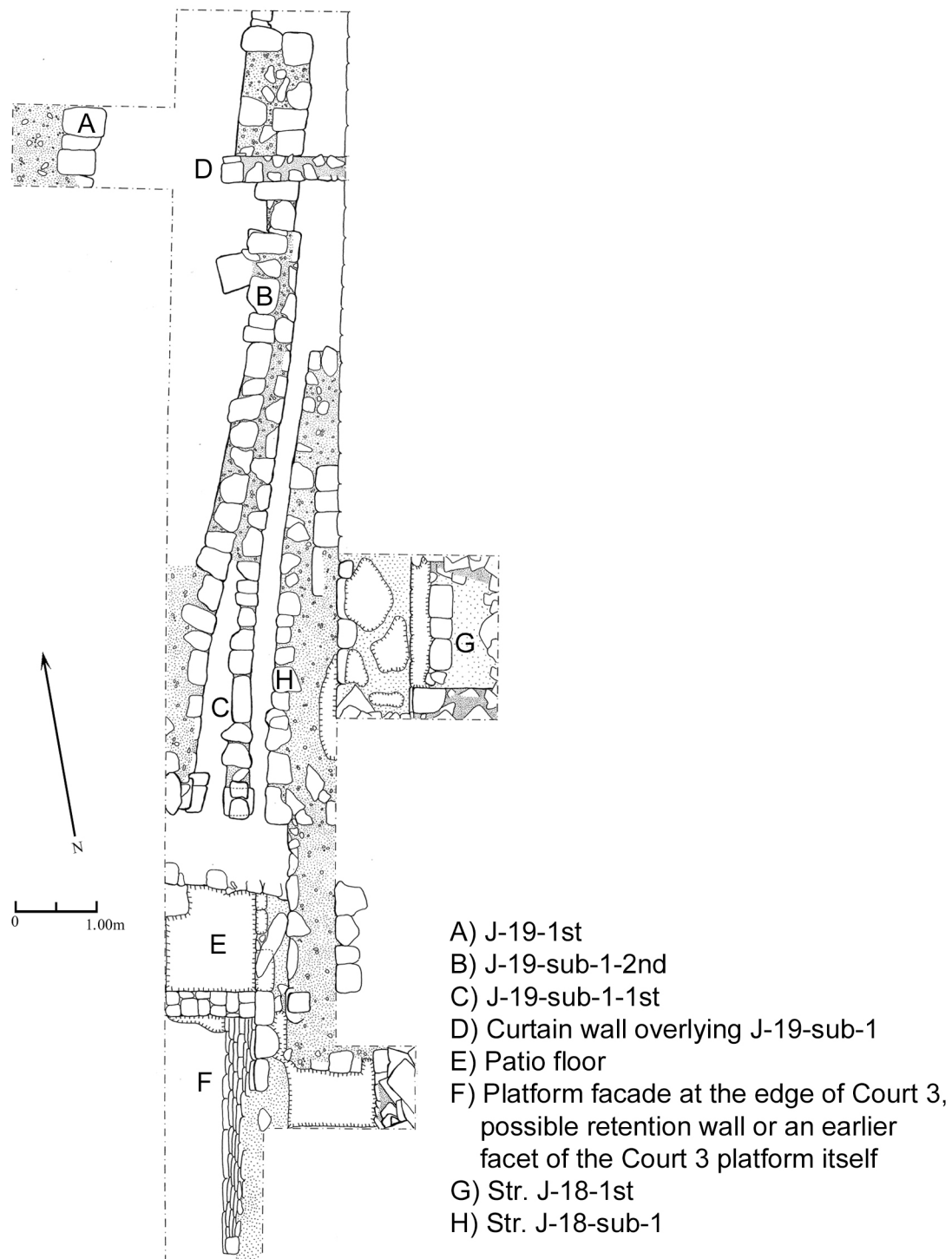
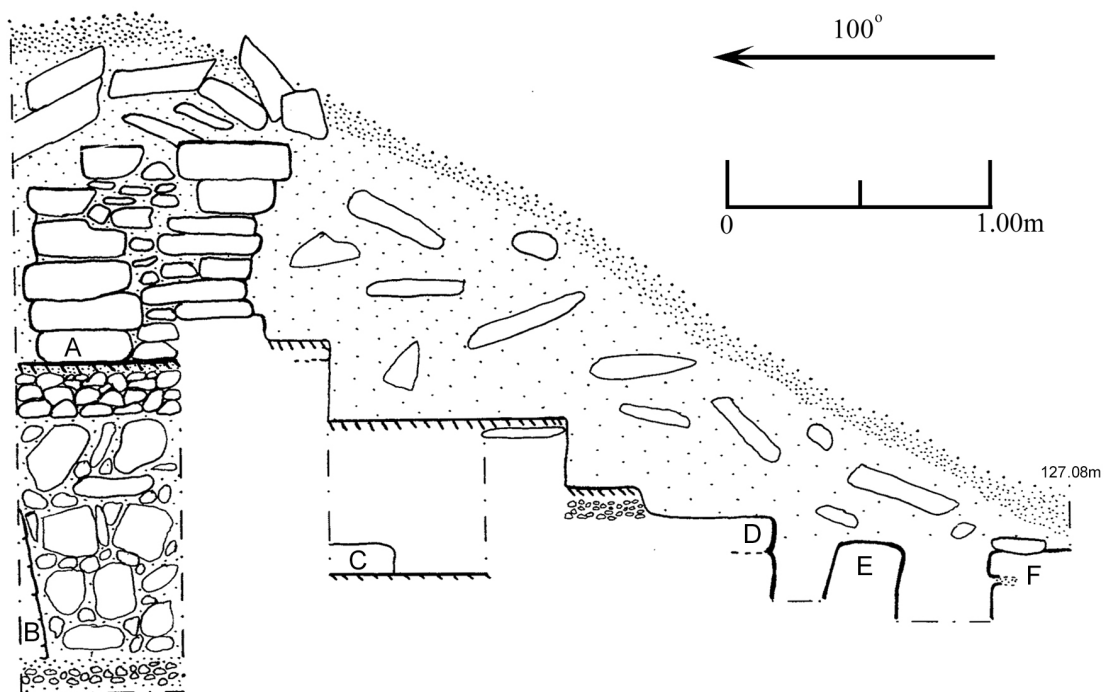


Fig. 5.34: Plan view of PN-11J, showing multiple construction phases associated with Strs. J-18 and J-19 (drawing by Mónica Pellecer).



- A) Interior floor and column, Str. J-18-1st
- B) Platform facade, J-18-3rd
- C) Step associated with J-18-2nd
- D) J-18-sub-1
- E) J-19-sub-1-1st
- F) J-19-sub-1-2nd

Fig. 5.35: Section of PN-11J-1 and PN-11J-2.

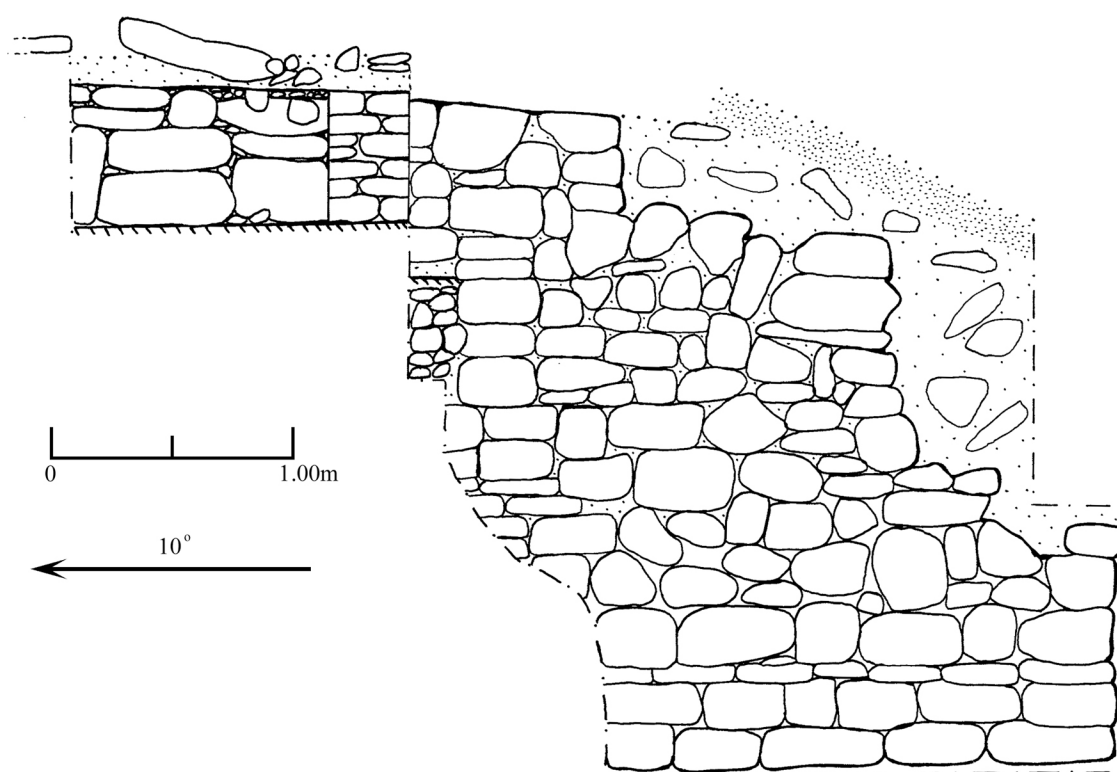


Fig. 5.36: Section of PN-11-J-6, 11J-7 and 11J-11, showing terrace façade, Court 3 (drawing by Mónica Pellecer).

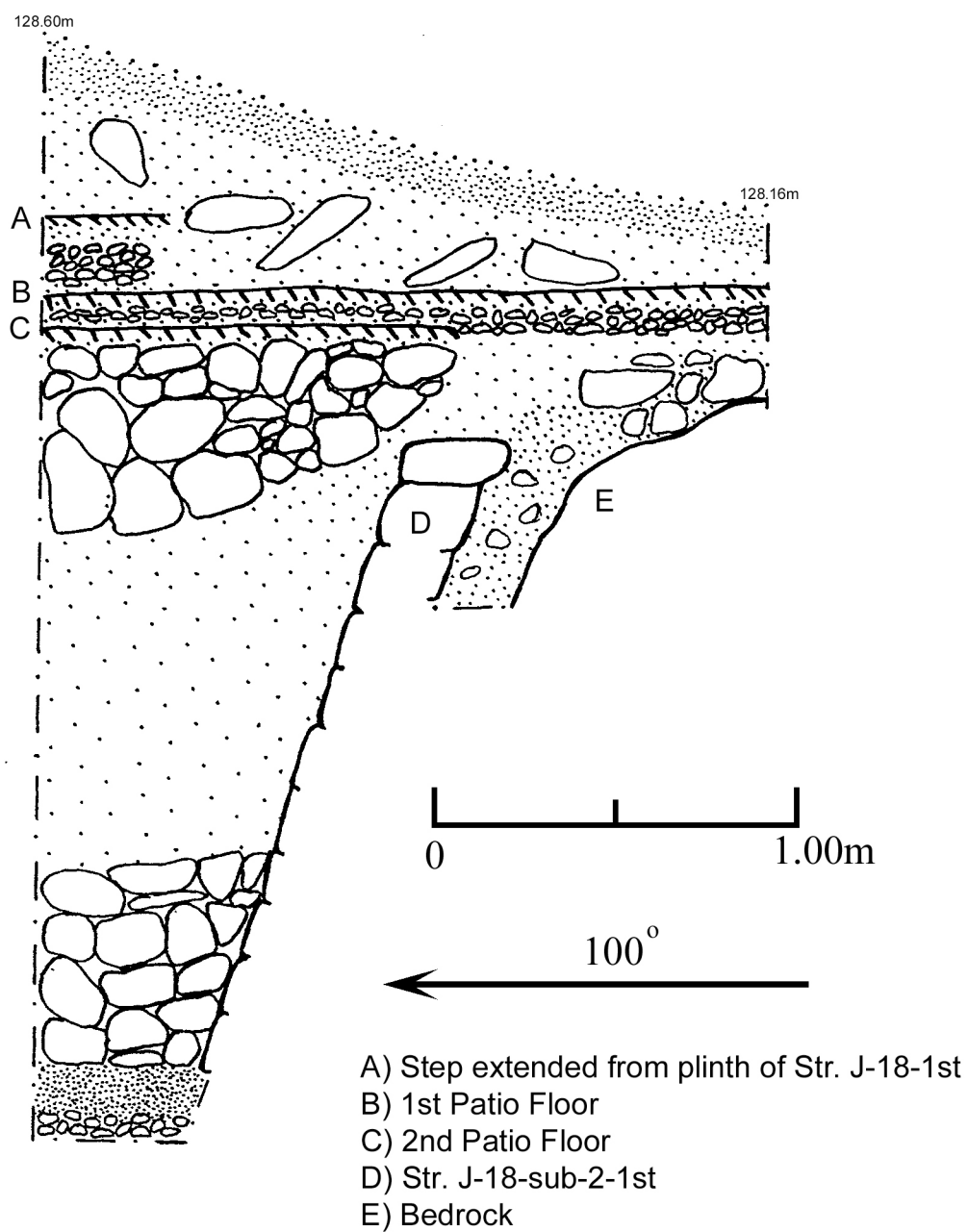


Fig. 5.37: Section of PN-11K-1, showing platform façade of Str. J-18-sub-2-1st (drawing by Mónica Pellecer).

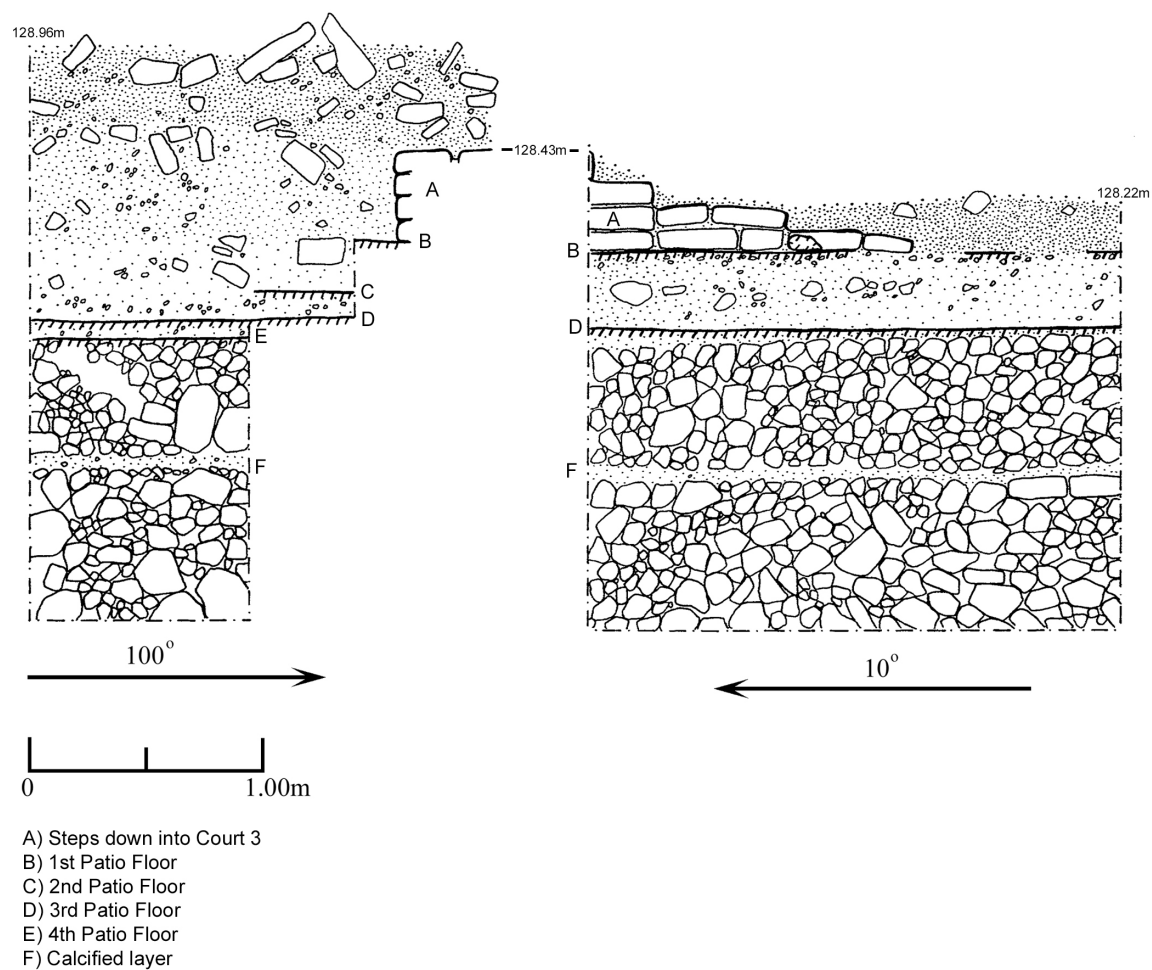


Fig. 5.38: Northern (left) and eastern (right) sections of PN-11L-1.

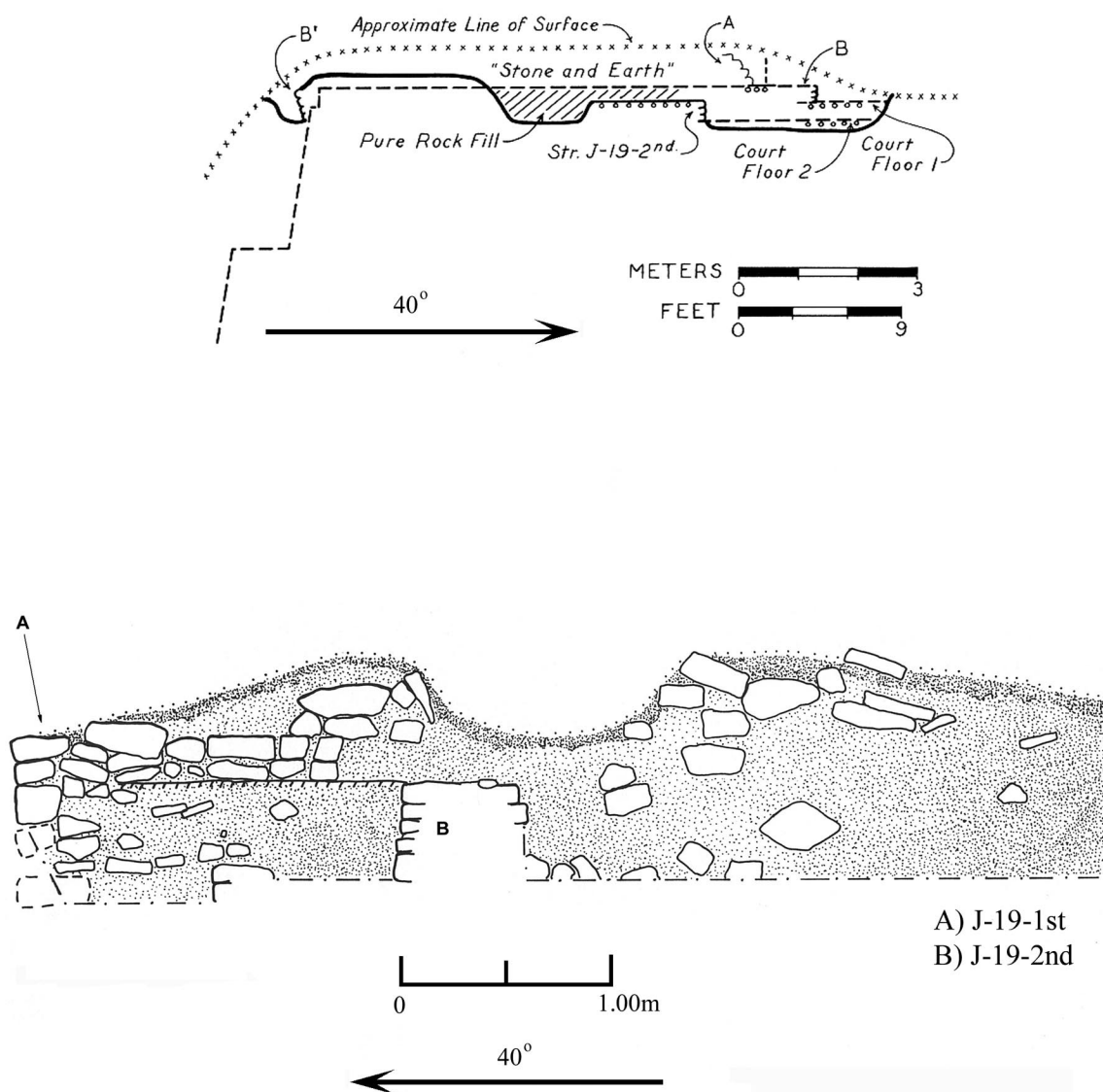
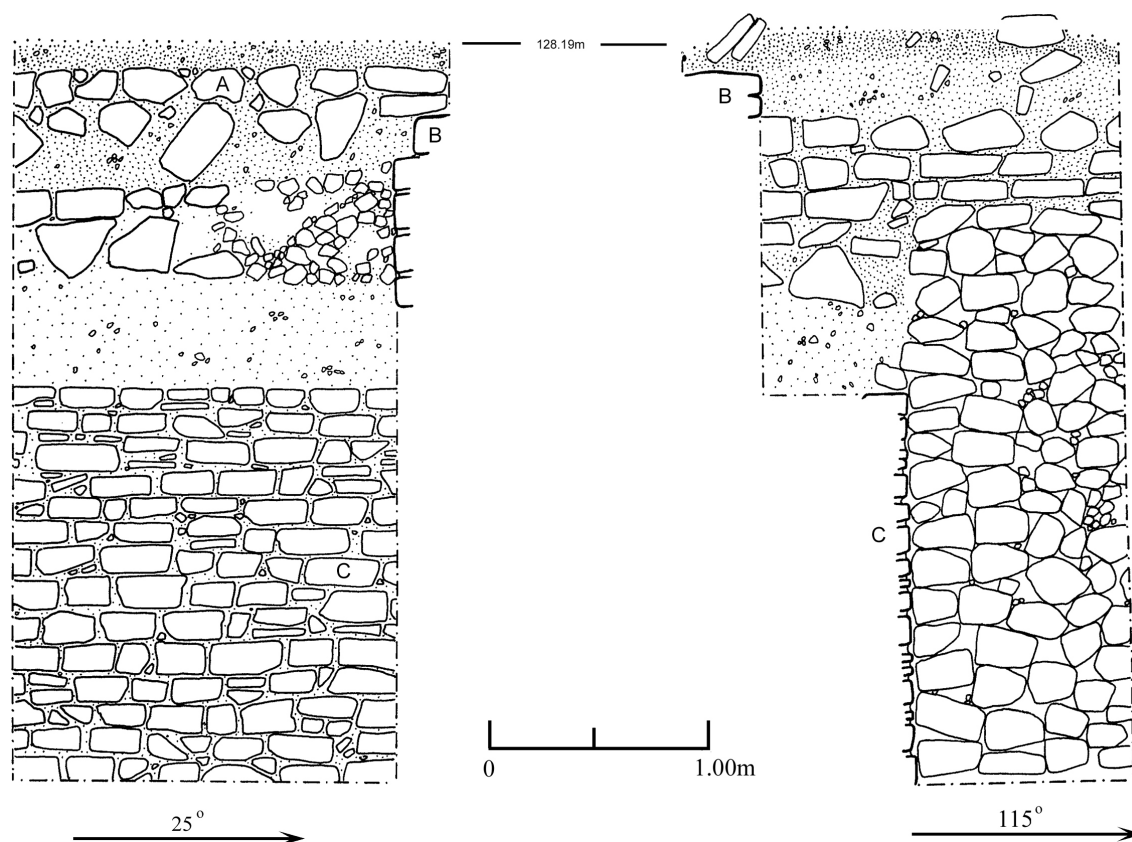
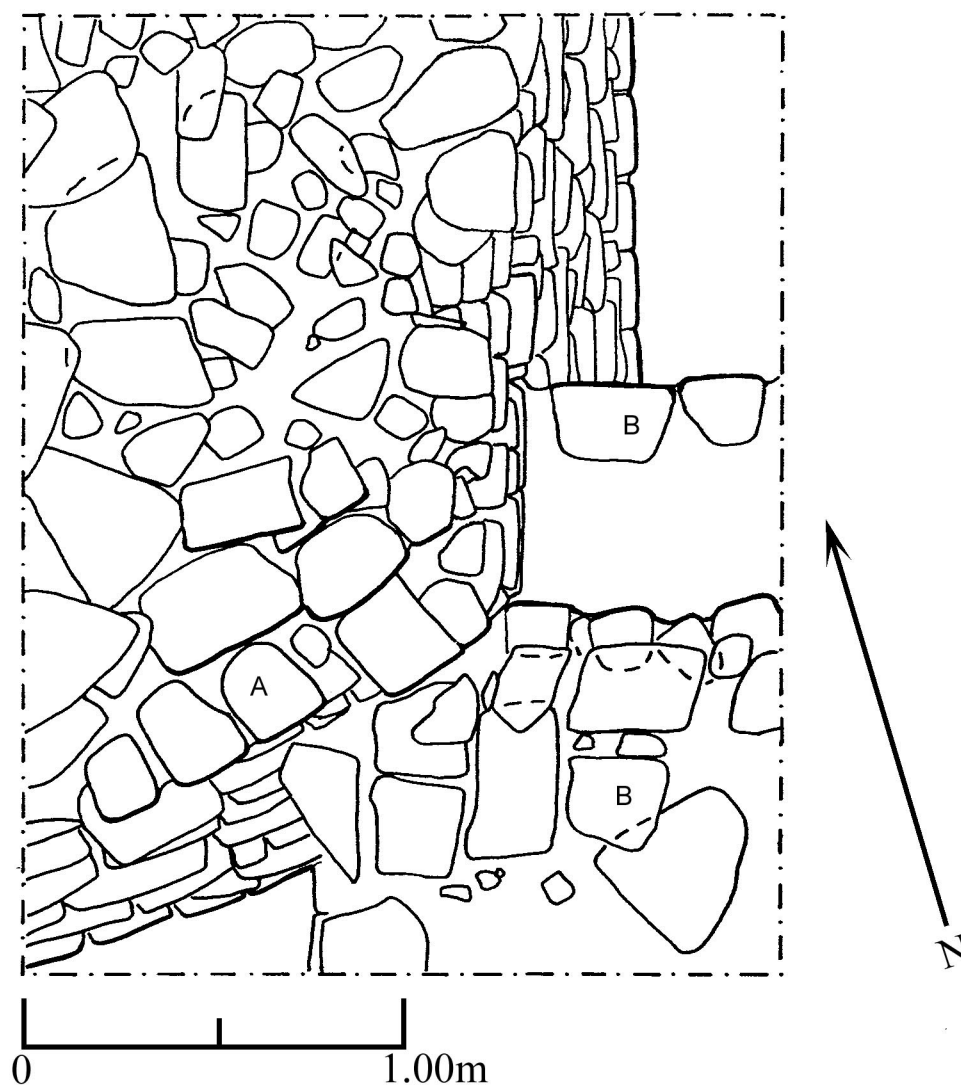


Fig. 5.39: Section of re-excavated trench through Str. J-19 (bottom), with Satterthwaite's (1954: 87) reconstructed field drawing (top).



- A) Possible platform, undesignated structure
- B) Upper edge of Str. J-8
- C) Possible exterior wall of buried superstructure, undesignated structure adjacent to J-8

Fig. 5.40: Northern (left) and eastern (right) sections of PN-50A-1.



- A) Oblique staircase, Str. J-18-1st
B) Undesignated platform, possibly an extension
of Str. J-3.

Fig. 5.41: Plan view of PN-50B-1, showing poorly preserved corner staircase of the Str. J-18 platform.

<i>Regional Chronology</i>	<i>Ceramic Phases</i>	<i>YEARS, AD</i>	<i>J-18</i>	<i>J-19</i>	<i>J-20</i>	<i>J-21</i>	<i>J-23</i>
POST CLASSIC	---?----- KUMCHE	1000 900					
C L A S S I C	TERMINAL ----- CHACALHAAZ	800 700	J-18-1st	J-19-1st J-19-2nd	J-20-1st J-20-2nd J-20-3rd(?)	J-21-1st J-21-2nd	J-23-1st J-23-2nd
	LATE ----- YAXCHE LATE EARLY	700 600	J-18-2nd J-18-3rd J-18-sub-1	J-19-sub-1-1st J-19-sub-1-2nd			
	----- BALCHE	600 500					
	----- NABA LATE EARLY	500 400	J-18-sub-2-1st J-18-sub-2-2nd J-18-sub-2-3rd		J-20-sub-1 ↓		
	----- EARLY	400 300					

Fig. 5.42: Overview of construction sequence of structures in Court 3, showing the major construction episodes. See Appendix 2 for a detailed summary of Court 3 excavations.

Chapter 6: Excavations in Court 4 of the Acropolis and Str. J-27

6.1: Introduction

Court 4 is a grouping of platforms on the northwestern slope of the Acropolis. Archaeologists mapping this part of the Acropolis during the 1930s identified only three structures associated with this court: Strs. J-24, J-25 and J-26 (Fig. 6.1). These three buildings do not form a formal patio as such, and for this reason Satterthwaite did not designate the area as a court complex. My own mapping of the same area, however, revealed two additional platforms designated Str. J-33 and J-34 (Fig. 6.2). Moreover, Strs. J-24, J-34 and J-26 are organized around a formal patio, upon which J-33 and J-25 are late additions. Therefore, although these buildings lack the impressive masonry superstructures found in the other courts of the Acropolis, I deemed it reasonable for the purpose of consistency to identify this grouping as Court 4.

Court 4 sits below a system of masonry terraces, some of which are well preserved. Descending from Court 4, the limestone of the hillside has clearly been modified, but to what extent is unclear. Natural bedrock exposures and masonry terraces are interspersed with one another along the entire slope, but the state of preservation of most of these lower terraces is extremely poor. Tree-roots, erosion and gravity have sent the crudely cut masonry tumbling down onto the buildings of Court 4.

The location of Court 4 isolates it from much of the rest of the Acropolis. Access to and from Court 3 was possible via a staircase that descended from Str. J-20 (Figs. 6.2, 5.11). There may also have been a staircase rising from behind J-34 to J-23, but this has not been definitely ascertained, and the preservation of the architecture is poor. Access

along the terraces from Court 2 would also have been possible. Below J-24, Strs. J-27 and J-28 may have provided access to and from the Northwest Group plaza, but the route of access between J-27 and J-24 is not clear.

Structure J-24

Str. J-24 is the largest platform on the court and sits on the northeastern side of the patio. This is the only building in Court 4 that was excavated in the 1930s (Satterthwaite, 1954: 88). A trench was cut across the width of the platform, intended only to cut through the surface debris and expose the terminal architecture of the superstructure in order to determine whether or not the structure was vaulted. Satterthwaite's assessment of the debris load allowed him to determine that, in fact, the platform had held a largely perishable superstructure (Fig. 6.3).

Structure J-34

Str. J-34, on the southeastern side of the patio, has a platform joined to that of J-24. Its appearance from the surface is that of a low superstructure atop a rather massive masonry platform. This structure was neither excavated nor reported as a separate building by Satterthwaite. A series of masonry terraces rises up from behind J-34, and it is possible that J-34 served as the landing for a staircase descending from J-23. However, as elsewhere along the hillside above and below Court 4, the masonry is in an extremely poor state of preservation.

Structures J-26, J-35, and J-36

Str. J-26 forms the southwestern side of the patio. This structure was mapped as a simple platform and excavation is currently impossible without the destruction of a large tree whose roots completely engulf the platform. It is therefore impossible to determine much of the building's form beyond its general outlines. The low platform upon which J-26 sits is Str. J-35. Also built up from J-35 is the landing of a staircase that descends from Str. J-20. This landing is itself a small platform with two small staircases descending and is designated Str. J-36.

Structures J-25 and J-33

Situated on the patio floor itself are two low platforms, Strs. J-25 and J-33. Str. J-25 was mapped but not excavated by the University Museum project. Str. J-33 was not identified or mapped as a structure during the 1930s. It is a large, low platform that prior to excavation appeared joined to J-24 by overlying layers of collapse. No details of the superstructures of either Str. J-25 or Str. J-33 could be discerned prior to excavation.

6.2: PN-46A through PN-46D, and PN-46F through PN-46I: Excavations Associated with Str. J-24, Str. J-25, Str. J-33 and Structure J-34¹

This set of excavations was begun during the latter part of the 1999 field season as a series of test pits designed to reconstruct an initial chronology for Court 4, as well as to test the utility of a rapid soil-phosphate testing program developed by Richard Terry of

¹ Excavations conducted as PN-46A through 46E were conducted under the joint supervision of the author and Mónica Pellecer. Excavations conducted as PN-46F and 46H were conducted under the direct supervision of the author. Excavations conducted as PN-46G and 46I were conducted under the joint

Brigham Young University (Golden et al., 1999; Parnell, Terry and Golden, 2001; Terry, et al., 2000; Wells et al., 2000). The PN-46A through 46D sub-operations represent those units initiated as part of the soil-phosphate testing program. During the 2000 field season excavations were expanded as PN-46F, -46H, and -46I (as well as PN-46G discussed below) to include the horizontal excavation of much of Court 4 (Fig. 6.4). Table 6, Appendix II provides a detailed summary of the architectural sequence as revealed in these sub-operations.

PN-46A-1

This was the only unit in sub-operation PN-46-A, and consisted of a test pit measuring 1.00 x 2.00 m aligned at an angle of 40 degrees along its long axis. The first lot consisted of the humus layer, which was 25 cm thick. The 3.02kg (6.04kg/m³) of ceramics recovered in this level were quite high for a unit of this size in the Acropolis.² Though heavily eroded, these ceramics appeared to be from the Chacalhaaz phase.³

The second lot (25cm of soft soil with abundant broken stones) yielded a great deal of ceramics that appear to represent early Yaxche phase types. Within this otherwise Late Classic ceramic assemblage, however, there were also some sherds representing Balche and Naba phase ceramic types.

Excavations in this unit were terminated in the third lot due to the danger of collapse. Lot 3 consisted of 47cm of loose rubble fill with powdery soil. The ceramics

supervision of the author and Fabiola Quiroa.

² For comparison see Table 1 of Appendix I for details of ceramic weights recovered in Operations 11, 46, 50 and 54.

³ See Table 2, Appendix I for ceramic phase assignments of all lots, estimated dates of deposition, description of context, and explanation of date assigned.

recovered from this lot were assignable to the Yaxche phase. All of the materials recovered in this unit indicate the presence of a surface midden, a conclusion confirmed by the findings in other PN-46 sub-operations.

46B-1

The PN-46B sub-operation began as a series of three 1.00 x 1.00m test pits running across the top of Str. J-33, each being separated by 1.00m. These units were initially intended to test areas of high phosphate concentration as determined in tests conducted by Jacob Parnell. The results of these initial probes, however, made it advisable to broaden the scope of the excavations in order to make a trench whose final dimensions were 1.00 x 6.00m, running at an angle of 40 degrees (Fig. 6.5).

PN-46B-1 was 1.00 x 1.00m unit, the first lot of which was the 20cm of humus. High quantities of ceramics from the Chacalhaaz phase were encountered in this first lot (11.58kg total, an average of 57.90kg/m³; see Tables 1 and 2, Appendix I for comparison with other lots in Court 4). The sheer quantity of ceramics was taken as an indicator of the presence of a midden, an interpretation confirmed in excavations conducted as PN-46F (see below).

The second lot consisted of 20cm dark soil with rocks. The lot ended at the level of a low wall in the south side of the unit. In addition to large quantities of ceramics, a significant number of faunal remains were also recovered in this lot, lending further credence to the concept that this deposit represented a midden. The ceramics from this lot represented a mix of Chacalhaaz and Yaxche phase materials.

Lot 3 was defined by 50cm of loose, brown soil with abundant rocks that represents the fill of the platform of Str. J-33. The ceramics from this fill are a mix of Chacalhaaz and Yaxche phase materials. The lot ends at the surface of a well-preserved, thick stucco floor. This is the 1st Patio Floor of Court 4, upon which J-33 was constructed.

The fourth lot consisted of 50cm of fill below the patio floor, composed of compact soil and pebbles. In comparison with the levels above it, Lot 4 did not yield a high quantity of cultural materials such as ceramics or faunal remains. Those ceramics that were recovered from this lot were from the Yaxche phase.

Lot 5 consisted of approximately 40cm of light brown soil. In the eastern portion of the unit this soil was nearly devoid of stones, but large cobbles were present in the western portion of the same layer. This lot yielded significant quantities and varieties of cultural materials including sherds, figurines, obsidian, shell, animal bone and bajareque. The ceramics recovered represent what may be best considered a Balche phase assemblage, although there are what appears to be some Naba and early Yaxche phase types present as well. Given the brevity of the Balche phase, however, the presence of Yaxche types may simply place this lot at the end of the former ceramic phase.

The sixth and final lot in this unit consisted of 40cm of yellow soil with a distinctive, sandy consistency. A very few Balche phase sherds were recovered from this lot. All of the ceramics were found in association with several large cobbles in the northern portion of the unit.

PN-46B-2

This was a 1.00 x 1.00m unit, located on the southern edge of PN-46B-1. The first lot consisted of the 20cm of humus. Numerous sherds were recovered from this lot, which, although, eroded were clearly from the Chacalhaaz phase on the basis of vessel form.

The second lot consisted of dark soil with pebbles. This lot was 35cm thick and contained abundant ceramic materials. Sherds were identifiable as a mix of Yaxche and Chacalhaaz materials.

The third lot represented the fill of the J-33 platform, and consisted of loose, brown soil with abundant broken stone. In addition to Yaxche phase ceramics, a portion of a metate was recovered from this lot. This lot ended at the top of the 1st Patio Floor of Court 4.

The fourth lot consisted of 50cm of fill below the level of the patio floor. The fill was composed of compact soil with pebbles. Lot 4 yielded moderate quantities of Yaxche phase ceramics, in addition to faunal remains and bajareque.

Lot 5 consisted of approximately 50cm of light brown, compact soil with large rocks. As with PN-46B-1-5, this lot yielded an unusual quantity and variety of cultural materials. The ceramics appear to be from either the Balche or early Yaxche phase.

A 40cm thick layer of sandy, yellow soil defines the sixth lot. Lot 6 initially appeared to be sterile of cultural materials. However, a broken Pucte Brown (Naba or Balche phase) vessel was found within this fill in association with a small quantity of charcoal. The entire base and one-half of the vessel-wall were found broken but

articulated (Fig. 6.6). This vessel was probably placed as an offering during the deposition of this fill.

The seventh lot consisted of 20cm of sandy brown soil containing charcoal and ash. Very little ceramic material was found in this lot - only three Naba phase sherds in total. The eighth lot was also sandy, but was light brown in color, 15cm thick and contained ash. Like Lot 7, the eighth lot produced only three Naba phase sherds.

The ninth lot consisted of 45cm of light colored, sandy soil. Only one Naba phase sherd was found in Lot 9. The tenth lot consisted of black soil, possibly the ancient humus layer, with no evidence of cultural material. Excavations were terminated at this level for lack of space to continue working safely.

PN-46B-3

A unit measuring 1.00 x 1.00m, PN-46B-3 was placed on the south side of PN-46B-2. The first lot consisted of a 30cm thick humus layer. Abundant Chacalhaaz phase ceramics were found in this lot. A 35cm thick layer of dark brown soil with pebbles defined the second lot. The ceramics recovered from Lot 2 represent a mix of Chacalhaaz and Yaxche phase materials.

The third lot consisted of 50cm of loose, brown soil with abundant compacted rocks. This material represents the fill of J-33. Ceramics recovered from this lot represent Yaxche phase materials. Lot 3 ends at the surface of the 1st Patio Floor.

Lot 4 consisted of 40cm of compacted soil and pebbles beneath the patio floor. The quantities of cultural materials found in this lot were lower than in the levels above. Those sherds that were recovered in Lot 4 are from the Yaxche phase.

60cm of compact gray soil defined the fifth lot. Large cobbles were present in the eastern profile of the unit at this level, but absent in the western profile. Abundant cultural materials date to the Balche or early Yaxche phases on the basis of the ceramics recovered from this lot. The sixth lot consisted of 20cm of sandy, yellow soil.

PN-46B-4

This unit measured 1.00 x 1.00m and was placed along the south side of PN-46B-3. The first lot consisted of the 10cm thick humus layer. Lot 1 yielded abundant Chacalhaaz phase ceramics. The second lot consisted of a 30cm thick layer of brown soil with widely dispersed cobbles. Ceramics recovered from Lot 2 represented a mix of Chacalhaaz and Yaxche phase materials.

55cm of compact brown soil with abundant stones defined Lot 3. In addition to Yaxche phase ceramic materials, this lot yielded a fragment of a metate. The lot ended at the surface of the 1st Patio Floor.

Lot 4 consisted of 40cm of fill below the floor, composed of compact, brown soil with pebbles. All of the ceramics recovered from this lot are from the Yaxche phase.

The fifth lot was composed of a layer approximately 45cm thick of cobbles with no soil matrix. No cultural materials were found in Lot 5. The sixth lot consisted of 80cm of brown soil with cobbles. Abundant cultural remains included charcoal, chert, obsidian, and bajareque in addition to Balche (or early Yaxche) phase materials. The lot ended at the surface of the sandy yellow soil, which was not excavated in this unit.

PN-46B-5

This unit measured 1.00 x 1.00m, and was located along the southern side of PN-46B-4. The first lot consisted of the 20cm thick humus layer. All of the identifiable ceramics recovered from this layer were from the Chacalhaaz phase. The second lot consisted of light brown soil with well-dispersed cobbles. Lot 4 was 40cm thick and contained a mixture of Chacalhaaz and Yaxche phase ceramics.

A relatively small quantity of Yaxche phase materials was recovered in the third lot, a 30cm thick layer of loose brown soil and abundant cobbles. Fragmentary human remains were encountered distributed throughout Lot 3, concentrated in slightly higher quantities in the southern half of the unit. These remains were once part of Burial 63, discussed in detail below (see PN-46B-6; Fig. 6.7).

The fourth lot consisted of 60cm of small limestone fragments and compact brown soil. The ceramics recovered from Lot 4 are Yaxche phase materials. Below this level, the fifth lot consists of a 45cm thick layer of large limestone cobbles. Though compact, this rubble fill is loose, although the uppermost part of Lot 5 is cemented together as the result of water percolating down through the limestone. A few Yaxche phase sherds were found in Lot 5.

The sixth lot consisted of 90cm of moderate size cobbles. No cultural materials were recovered from this lot. The lot ended at the level of sandy yellow soil.

PN-46B-6

PN-46B-6 was a 1.00 x 1.00m unit, placed on the south side of PN-46B-5. This unit was excavated with the intent of revealing more of the human remains initially

uncovered in PN-46B-5-3. The first lot consisted of the 20cm thick humus layer.

Ceramics recovered from this first lot were assignable to the Chacalhaaz phase. The second lot consisted of brown soil with widely dispersed stone. Lot 2 was 30cm thick and contained Chacalhaaz phase ceramics.

The third lot consisted of 35cm of dark brown soil and cobbles of moderate size. The remains of a destroyed cist were uncovered in this lot. Designated Burial 63, this disturbed interment accounts for the scattered human remains found in PN-46B-3-5 (Fig. 6.7). Fragments of the temporal bones, the diaphyses of the radii, femurs, tibiae and fibulae were present, as well as the diaphysis of the right ulna. Small fragments of the left iliac bone, as well as three phalanges of the hand, two phalanges of the foot, and one metatarsal were also recovered. The three teeth found in this burial are the only evidence for defining the age of the individual. Tooth-wear suggests a young adult. The sex of the individual could not be determined (Scherer, Yoder, and Wright, 1999: 394).

The skeleton was oriented with the head to the north. No definite evidence of grave offerings was uncovered, although a fragment of a stingray spine was found to the east of the burial. Given that the burial had been so badly disturbed in antiquity, it is possible that the stingray spine had originally been placed within the cist. Very few sherds were found in this lot, but given the stratigraphy and evidence of disturbance it seems likely that the individual was originally buried in a period contemporary with the use of Balche or early Yaxche phase ceramics.

The fourth lot consisted of 55cm of compact brown, clayey, soil with both pebbles and small cobbles. Lot 4 yielded abundant ceramics, as well as obsidian, figurines, shell and charcoal. The ceramics represent a Yaxche phase assemblage.

The fifth lot consists of approximately 1.00m of loose rubble fill. The wall and northern corner of a low platform (Str. J-33-sub-1) were exposed in this lot. This same platform was also exposed in PN-46D-1-4 (Fig. 6.8). The ceramics from this level indicate a date contemporary with the use of Balche or early Yaxche phase ceramics.

PN-46C-1

This was the only unit in the PN-46C sub-operation. PN-46C-1 was a 1.00 x 1.00m unit placed off of the northwest side of Str. J-24 in order to test the results of phosphate testing (Fig. 6.9). The first lot consisted of 20cm of humus, within which was uncovered Chacalhaaz phase ceramics. The second lot consisted of 50cm of collapse from J-24, as well as dark brown soil. Lot 2 yielded abundant ceramic materials, in addition to faunal remains, charcoal, obsidian and a bifacially flaked chert point. The ceramics were a mix of Chacalhaaz and Yaxche phase materials.

The third lot consisted of 40cm of pebbles and compact, brown soil containing abundant cultural materials. These artifacts included worked blocks of limestone, obsidian, ceramic figurines, and chert nodules, in addition to Yaxche phase ceramics. Excavation was ended in this unit at approximately 20cm into the fourth lot, which consisted of loose rubble fill containing a few Late Classic sherds.

PN-46D-1

Sub-operation PN-46D represented a series of three test pits, each measuring 1.00 x 1.00m and located in the narrow alleyway between Strs. J-33 and J-25. Each sounding was separated by one meter, and was aligned at an angle of 110 degrees. The first lot in

PN-46D-1 consisted of the 20cm thick humus layer, which contained a moderate quantity of Chacalhaaz phase ceramics. 30cm of pebbles and light brown soil defined Lot 2. This second lot contained abundant cultural materials, including a mix of Yaxche and Chacalhaaz phase ceramics in addition to fragments of chert, obsidian, shell, bajareque and animal teeth.

The third lot consisted of 50cm of brown soil with widely distributed large cobbles. A moderate amount of Yaxche phase ceramic material was recovered from this fill.

The fourth lot consisted of approximately 1.20m of loose rubble fill. A buried platform was uncovered in the eastern profile of the unit (see also PN-46B-6-5). The minimal amount of ceramic material recovered appeared to be from the Balche phase. The lot terminated at a dark brown soil upon which the platform was seated and which may represent the ancient humus level.

PN-46D-2

This unit was located 1.00m to the northwest of PN-46D-1. The first lot consisted of the 20cm thick humus layer, which contained moderate quantities of Late Classic ceramics. The second lot consisted of a layer (35cm thick) of pebbles and brown soil that contained Yaxche phase ceramic materials.

The third lot consisted of a 40cm thick layer of brown soil. A line of cut stones was exposed in the northern profile of the unit that may represent the edge of a low platform. Ceramics from Lot 3 are from the Yaxche phase.

The fourth lot, 40cm of loose rubble fill, began with the discovery of an alignment of two large limestone blocks. Below these blocks a large quantity of small stones that were apparently placed with some care were exposed in the northern profile of the unit. No artifacts were found in this lot.

PN-46D-3

This unit was located 1.00m to the northwest of PN-46D-2. The first lot consisted of the humus layer, 15cm thick, which contained a moderate amount of Chacalhaaz phase ceramic material. The second lot consisted of 35cm of pebbles and brown soil with abundant artifacts, including Yaxche phase ceramics.

A layer 50cm thick of brown soil with abundant, and well-dispersed, small cobbles defined the third lot. Ceramics from Lot 3 were assignable to the Yaxche phase. The fourth lot consisted of 40cm of large, loose, limestone cobbles. A very few sherds of Yaxche phase ceramics were recovered from this unit. In the northern profile of the unit a large limestone block was exposed, running at the same orientation as the two blocks found in PN-46D-2-4.

PN-46F-1

The test pits excavated during the 1999 field season seemed to confirm the presence of residential middens (the only definitively residential debris in the Acropolis) as originally indicated by the results of soil-phosphate tests. However, the associations of these midden materials with the architectural remains in Court 4 were still not clear. Furthermore the presence of these midden materials at, or near, the ground surface

suggested that these were the remains of the final occupation of the Acropolis.

With this in mind, it was decided during the 2000 field season to conduct horizontal excavations in Court 4 so as to define the relationships between Strs. J-24, J-25, J-33, and J-34 and evaluate the evidence for their final episodes of occupation. PN-46F represents a series of 35 units that covers the intersections of these buildings (Figs. 6.10, 6.11).

PN-46F-1 is a 2.00 x 2.00m unit near the northeastern corner of Str. J-33. The first lot consisted of the humus layer (10 – 20cm thick). Among the artifacts recovered was a reconstructable metate. This grinding stone had been used until the base had worn through. The sheer quantity of artifacts recovered, as well as the types of artifacts recovered, in this and the surrounding units indicate a residential midden (see Table 3, Appendix I for a preliminary inventory of artifacts collected in PN-46F through 46I).

The second lot consisted of 10 – 18cm of collapse from both Strs. J-24 and J-33. As exposed in this and other units, the superstructure of J-33 had been largely built of perishable materials. However, low masonry wall-bases defined the rooms of the building. To what height these masonry walls may have originally reached is not clear. In addition to large quantities of sherds (typical of all of the surface and near-surface lots in the area between J-33 and J-24 unless otherwise noted), Lot 2 yielded a fragment of jade (approximately 1 x 5 x 2.5cm) that may have been the arm of a small figurine. The fill of the interior floor of J-33, as well as the patio floor just outside of the building, was exposed at the base of Lot 2. No stucco from either floor had been preserved in this unit.

PN-46F-2

This was a 2.00 x 2.00m unit located on the southeastern side of PN-46F-1. The first lot consisted of the humus layer, which was 10 – 20cm thick. Twelve fragments of possibly three or four metates were found within Lot 1 alone (Fig. 6.12).

Lot 2 consisted of 10 – 12cm of collapse. This second lot ended at the level of the fill from J-33 and the patio outside of the building. No stucco was preserved of either floor. The third lot is defined by the soil taken from underneath an overturned and expended metate. A sample of this soil was taken for flotation.

PN-46F-3

This was a 2.00 x 2.00m unit two meters to the southeast of PN-46F-2. The gap between these two units includes the area excavated during the 1999 field season as PN-46B-1. The first lot consisted of the humus layer, in addition to backfill deposited by excavators working on Str. J-24 during the 1930s. Lot 1 was 10 – 20cm thick.

The second lot consisted of a level of collapse (10 – 20cm thick) from the wall bases of J-33. This lot ended at the level of the interior and exterior floor of J-33. This unit was largely situated on top of the structure itself, and did not yield the same quantity of artifacts found in those units that include more of the alleyway between J-33 and J-24. This would indicate that the midden is the product of trash disposal thrown into the alleyway, probably by the inhabitants of J-33. Excavations in PN-46F-19-2 and -46F-19-3 (see below) revealed that the largest bench in J-33 had, at one time, extended into PN-46F-3-2. The bench was not well preserved in this unit, as tree roots had largely destroyed it.

PN-46F-4

PN-46F-4 was a 2.00 x 2.00m unit, placed at the northeastern side of PN-46F-1. The first lot consisted of the 10cm thick layer of humus. The second lot consisted of a level of collapse and midden materials overlying the basal skirting of Str. J-24 and the patio floor. Two metates were found in Lot 2, one atop the other (Fig. 6.11). These appear to have been purposefully stacked, though the significance of this is unclear.

The third lot consisted of the 20cm of soil within the concavity of the uppermost metate. A sample of this soil was taken for flotation. The fourth lot included both the soil within the concavity of the lower metate, as well as soil from a probe into the patio floor (26cm deep). The fifth lot consisted of the 20cm of soil within the concavity of yet another overturned and expended metate, this one located along the edge of the plinth of Str. J-24.

PN-46F-5

This was a 2.00 x 2.00m unit placed at the southeastern side of PN-46F-4. The first lot consisted of the 10 – 15cm of humus. The second lot consisted of a level (15 – 20cm thick) of collapse over the patio floor and the plinth of the J-24 platform.

PN-46F-6

This was a 2.00 x 2.00m unit located at the southeastern side of PN-46F-5. The first lot consisted of the 15cm of humus. The second lot was defined by the 15 – 20cm of collapse overlying the patio floor and the plinth of the J-24 platform. The plinth in this unit appears higher than in PN-46F-4 and PN-46F-5 and this fact raises an interesting

possibility: there may have been a lateral staircase with long, low risers extending up along the side of the J-24 platform that provided access to the superstructure from Court 4. No other evidence for access to the top of the platform from Court 4 was uncovered in excavation. However, because the full length of the J-24 platform was never fully exposed in excavations this possibility has not been confirmed.

PN-46F-7

PN-46F-7 was a 2.00 x 2.00m unit placed at the southeastern edge of PN-46F-3. The first lot consisted of 10 – 15cm of humus. The second lot consisted of a layer of collapse, 15 – 20cm thick, overlying the interior floor of J-33. The smaller quantity of materials found within the interior of J-33 in PN-46F-7-2 further supports the notion that the midden was restricted to the space between Str. J-33 and J-24. The third lot was defined by the 15 – 20cm of collapse found outside of J-33, ending at the level of the exterior floor.

PN-46F-8

This was a 2.00 x 2.00m unit located on the southeastern side of PN-46F-7. The first lot consisted of a 10cm thick humus layer. A 15 – 20cm thick layer of collapse both within and without the remains of Str. J-33 defined the second lot, ending at the levels of the interior and exterior floors.

A nearly complete metate was found sitting on the floor of the southeastern room of J-33. This metate had not been used to the point of breaking, as had every other grinding stone found in these excavations. Instead, it appears that the metate was left on

the floor when the building was abandoned. In addition, a broken but nearly complete vessel was found on the floor in the southern corner of the same room, where the exterior wall had fallen over it (see Fig. 6.11). The presence of the metate, in what appears to be use-related primary context, suggests that the room was used for food preparation.

PN-46F-9

PN-46F-9 was a 2.00 x 2.00m unit located on the southeast side of PN-46F-8. The first lot consisted of 15cm of humus. The second lot consisted of a level of collapse overlying the southeastern wall of J-33 and the alleyway between Strs. J-33 and J-34. This layer was 20cm thick and included midden materials. This lot ended at layer of stones placed as a pavement overlying an earlier phase of the midden. Below this pavement was 40cm of midden materials that defined Lot 3, ending at the level of the patio floor. The stucco of the floor was relatively well preserved in this unit.

PN-46F-10

This was a 2.00 x 2.00m unit on the southwestern side of PN-46F-7. The first lot consisted of 10 – 15cm of humus. The second lot consisted of 15cm of collapse overlying the interior floor of J-33. The lot ended at the level of the interior floor and revealed the southeast side of the central bench of J-33, as well as another low bench on the northeast side of the room (Fig. 6.11). A low wall, less than 10cm high, was also found on the southwest side of the room, that apparently formed a threshold between this room and that to the southwest.

PN-46F-11

This was a 2.00 x 2.00m unit located on the southeastern side of PN-46F-10. The first lot consisted of 10 – 15cm of humus. The second lot consisted of 15cm of collapse overlying the remains of J-33. Lot 2 exposed the rest of the room initially uncovered in PN-46F-10-2. This lot also yielded a high quantity of bones and lithic materials (see Table 3, Appendix I).

PN-46F-12

This was a 2.00 x 2.00m unit, located on the southeastern edge of PN-46F-9. The first lot consisted of the humus layer, which was 10 – 15cm thick. The final phase of J-34 was exposed immediately below the humus layer. The surface of the platform was not well preserved and no stucco was present.

The second lot consisted of a mix of collapsed masonry and midden materials 20 – 30cm thick, lying off of the northwest side of J-34. The lot ended the level of the stone pavement also uncovered in PN-46F-9-2. A lump of cemented limestone, stucco, sherds and animal bones was found at the base of Lot 2 in the corner of J-34 where an extension of the platform protrudes to the northwest. This lump, measuring some 40 x 40 x 15cm defined Lot 3. I cannot, at present, explain this deposit.

A human burial was found just below the stone pavement at the bottom of PN-46F-12-2, and designated Burial 81 (Fig. 6.13; see also PN-46F-23-4 below). Burial 81

contained the badly crushed skeleton of an adult female.⁴ The grave itself was not well made, and consisted primarily of a cist for the head, with the rest of the body placed in a concavity excavated within the midden. The body was extended and supine with the head to the northeast, although the torso was somewhat twisted to fit the body into the grave. The grave was topped with crudely cut blocks. No offerings were found with the burial, which was associated with late facet Chacalhaaz phase sherds. Lot 4 consisted of the layer, approximately 20cm thick, of soil immediately surrounding the burial on all sides. The fifth lot was defined by the midden materials below Burial 81, ending after 30cm at the level of the preserved patio floor.

PN-46F-13

This unit measured 2.00 x 2.00m, and was located to the southeast of PN-46F-12. The first and only lot consisted of the 10 – 20cm of humus overlying J-34.

PN-46F-14

This was a unit measuring 2.00 x 2.00m, located on the southwest side of PN-46F-10. The first lot consisted of the 10 – 15cm of humus overlying the final phase of J-33. Although there was a significant quantity of artifacts recovered in this lot, it was not as high as that in the areas between buildings, perhaps indicating that the deposition of midden materials in this area took place during a relatively short period of time.

PN-46F-15

⁴ All metric and non-metric interpretations of human remains discussed in this chapter are the product of

This was a 2.00 x 2.00m unit, the first lot of which was the 10 – 20cm of humus. A bench was exposed below the humus layer in the southern corner of the building (Fig. 6.11).

PN-46F-16

This was a 2.00 x 2.00m unit located to the southwest of PN-46F-14. The first lot was the 10 – 20cm of humus overlying the principal entrance of J-33, including the southern corner of the plinth and staircase of that building. The staircase was not well preserved.

There was no Lot 2 in this unit due to a note keeping error. Lot 3, however, represented the excavation of the 0.70 x 2.00m area where PN-46F-16 adjoins PN-46I-1. This lot was excavated with the intent of delimiting the cists of Burials 94 and 95 (see below). PN-46F-16-3 was a layer of moderately compact, dark gray soil that was 31cm thick and included collapse from the masonry of J-33.

Lot 4 (28cm thick) consisted of fine textured soil, dark brown in color. A fragment of human bone, part of the lower extremities, was found on the north side of the unit, resulting in the continuation of excavation to south. This exposed another cist, which was subsequently designated Burial 101 (Fig. 6.14). The majority of this cist extended outside of the borders of the unit. Yet another cist was uncovered at the base of Lot 4, running parallel to J-33. This burial was never excavated for want of time at the conclusion of the 2000 field season.

Burial 101 consists of a cist running parallel to J-33, and perpendicular to two other burials (94 and 95) discussed below in PN-46I. The cist itself was poorly made, with its capstones and sides formed of roughly cut stones placed directly on an unprepared soil surface. Part of the southwestern side of the cist had been removed in order to place Burial 94. The cist measured 1.96 x 0.46 x 0.20m, and was filled with fine brown soil.

The individual buried within the cist was an adult male. The upper portion of the skeleton was well articulated, but the interment of Burial 94 had disturbed the lower portions of the skeleton. The body was extended and dorsal, with the left hand placed over the face and the right arm placed alongside the body. This positioning of the arm is unusual in the burials at Piedras Negras, but not among burials found in Court 4 (Andrew Scherer, personal communication 2000). One fragment of deer horn and two fragments of quartz were found near the burial, but it is not clear if they are offerings associated with Burial 101, Burial 94, or merely objects that were present in the fill used to cover the graves.

PN-46F-17

This was a 2.00 x 2.00m unit, placed on the northeastern side of PN-46F-9. The first lot consisted of the humus (10 – 15cm thick) overlying collapsed masonry and midden materials (Fig. 6.15). The second lot consisted of 30 – 40cm of collapsed material immediately below the humus, but over another layer of humus and the midden to the southwest of the J-24 platform. The third lot consisted of 30 – 40cm of collapsed masonry mixed with midden materials. The difference between Lot 2 and Lot 3 is more

one of texture than one of soil color change or different artifact content; PN-46F-17-3 being denser than PN-46F-17-2.

Lot 4 consisted of midden materials below the collapsed masonry. This layer was approximately 40cm thick. Lot 4 ended at the level of the patio floor, and revealed the presence of a low wall. The precise associations of this wall are not clear, but it may represent an extension of J-33.

The fifth lot consists of the ballast immediately below the 1st Patio Floor. The fill was 10cm thick and composed of pebbles and compact soil, which contained an abnormally high quantity of jute (*Pachychilus sp.*) shells, as well as animal bone and at least five pieces of human bone. These last were clearly in a secondary context and did not constitute a burial in the Piedras Negras sequence. The fill below the ballast formed the sixth lot, and consisted of 15cm of compact soil and pebbles. Lot 6 ended at the surface of another stucco floor.

The seventh lot consisted of the ballast below the 2nd Patio Floor, 10cm of compact soil and pebbles. This lot yielded a human phalanx and Balche phase ceramics (Fig. 6.16). However, the lots above and below Lot 7 are associated with Yaxche phase materials. It seems possible that the materials found in this lot originated in and around Burial 63 (see 46B-6-3 above), which was heavily disturbed and associated with Balche phase sherds, mixed with Yaxche ceramics. Between Lots 7 and 8 there was a layer of pebbles that was preserved only in discontinuous fragments across the unit. The best explanation is that the pebbles are the remains of a floor, not otherwise preserved, associated with Str. J-24-2nd.

The eighth lot consisted of compact soil containing many artifacts and a relatively high number of animal bones (see Table 3, Appendix I). Lot 8 was 26 – 40cm thick, and included a layer of sascab (ground limestone), devoid of artifacts, deposited over two parallel façades that crossed the unit from southeast to northwest (see also PN-46F-23-10). The lot ended at the level of the bedrock.

The ninth lot consisted of loose rubble fill on the northeast side of the northeastern façade uncovered in PN-46F-17-8. The lot ended at the bedrock. It is probable that these masonry features represent the façades of two low platforms built immediately on top of the bedrock. These two structures are designated Str. J-24-sub-1 and J-34-sub-1. Ceramics in the fill are either from the very early part of the Yaxche phase, or perhaps the Balche phase, though mixing may have occurred with the overlying stratum.

PN-46F-18

This was a 2.00 x 2.00m unit located on the southwest side of PN-46F-18. The first lot consisted of the 10 – 15cm of humus on top of collapsed masonry overlying the southern corner of J-33. The second lot consisted of the collapsed masonry itself. This layer was some 20cm thick, and composed of small cut blocks that had fallen from the front of the J-34 platform. The façade of that platform had bowed out and collapsed entirely.

PN-46F-18-3 covered a reduced area, measuring only 0.70 x 1.10m and adjoining PN-46F-16. This probe was intended to fully expose the cist of Burial 101 (Fig. 6.14). Lot 3 was 22cm thick and consisted of dark gray soil, mixed with collapsed masonry and

pebbles. Lot 4 was a 10cm thick layer of fine brown soil and pebbles. Lot 5 consisted of 33cm of fine grayish-brown soil and many pebbles.

PN-46F-19

This unit measured 2.00 x 2.00m and was placed on southwestern side of PN-46F-3. The first lot consisted of 10 – 20cm of humus and a great deal of collapsed masonry (Fig. 6.17). The second lot was defined by 16 – 48cm of collapsed masonry overlying the remains of the largest bench in Str. J-33. A single human tooth was uncovered in Lot 2, perhaps associated with Burial 104. The quantity of masonry overlying the bench appears to be excessive given the amount of debris found elsewhere on J-33. Given the presence of an intrusive burial (Burial 104) below the building's interior floor and alongside the bench it is possible that the rubble was deposited over the bench and burial as part of the process of abandonment of the structure.

The third lot consisted of the fill of small cobbles and loose soil within the bench. The masonry of the bench has evidence of two phases of construction (Fig. 6.11). The stucco of the interior floor of J-33 was well preserved at the base of the fill within the bench. It would appear that the construction of the initial phase of the bench postdates the placement of the interior floor of J-33, though by how much time it is impossible to say.

The fourth lot consisted of the fill within a 1.00 x 1.00m probe beneath the level of interior floor of J-33, just off of the northwest side of the bench. The fill itself was composed of 73cm of loose cobbles and soil without many artifacts. The lot ended at the surface of the 1st Patio Floor, well preserved here beneath the mass of J-33. It thus

appears that J-33 was built directly on top of the 1st Patio Floor. The edge of the cist of Burial 104 was also exposed within Lot 4, on the southwest edge of the sounding.

Lot 5 consisted of 10cm of compact fill below the patio floor. The sixth lot consisted of an extension of the sounding to the southwest, within the fill below the interior floor of J-33 made in order to expose more of Burial 104.

PN-46F-20

This unit measured 2.00 x 2.00m and was located to the southwest of PN-46F-19. The first lot consisted of 10cm of humus overlying the terminal architecture of J-33. A single human tooth was found in this lot. Because of a note keeping error, there is no second lot.

Lot 3 consisted of 35cm of loose cobbles and soil beneath the level of the interior floor of J-33 and overlying the capstone of Burial 104. The difference in color of the fill in this lot and that in PN-46F-19-4 clearly indicates that this burial is intrusive, and probably associated with the abandonment of Str. J-33.

The fourth lot represents the contents of Burial 104 (Fig. 6.18). Burial 104 was placed along the short axis of Str. J-33 and consisted of an adult male placed within a cist. The skeleton was extended supine, with the right arm crossed over the chest. The bones were well preserved although perturbed by water and rodents (the bones of the latter were also found within the cist). The sides of the cist were formed of small crudely cut stones, and the capstones were formed of large flat blocks. No grave furniture was found with the burial.

PN-46F-21

This was a 2.00 x 2.00m, located to the northeast of PN-46F-17. The first lot consisted of 10 – 15cm of humus. A 35 – 40cm thick layer of collapsed masonry and soil to the southwest of the J-24 platform defined the second lot. Lot 3 consisted of a 35 – 40cm thick mix of collapse and midden materials below Lot 2 off of the southwest side of J-24.

Lot 4 was defined 40cm of compact soil and midden materials below the collapsed masonry on top, and to the side, of the extension of J-33. The fifth lot consisted of 38cm of very dark and compact soil packed into the small space between J-33 and J-24 that did not contain the same quantity of artifacts as found in the surrounding midden.

The sixth lot was defined by a 15 – 50cm thick layer of collapsed masonry beneath the humus layer (PN-46F-21-1) and lying on top of the superstructure of J-24.

PN-46F-22

This was a unit that measured 2.00 x 2.00m located to the southwest of PN-46F-20. The first and only lot in this unit was defined by the 10 – 15cm of humus overlying the staircase at the principal entrance of Str. J-33.

PN-46F-23

This unit measured 2.00 x 2.00m and as placed on the southeastern edge of PN-46F-17. The first lot consisted of a layer of humus, 10 – 15cm thick, over Str. J-34 as well as the patio at the corner formed by J-24, J-33 and J-34. Of the artifacts found in

Lot 1, four fragments of a single *mano* (the portion of a grinding stone held in the hand) are particularly noteworthy (Fig. 6.19). Given the number of expended metates found in association with the midden in Court 4, it is surprising that almost no manos were found.

Lot 2 consisted of 20 – 30cm of collapsed masonry below the humus layer. One human tooth was found in this second lot. The third lot was defined by 20cm of compact soil and midden materials off of the north side of J-34. Lot 3 contained an unusually high quantity of figurines and animal bones (see Table 3, Appendix I).

The fourth lot consisted of the materials around Burial 81 (Fig. 6.13; see PN-46F-12-4 above). Lot 5 was defined by the 40cm of midden materials and soil between the bottom of Burial 81 and the 1st Patio Floor.

The sixth lot was composed of the soil and pebble ballast below the 1st Patio floor, and continued for 6cm. Lot 6 yielded a number of well-preserved polychrome sherds, as well as a human mandible. The significance of the mandible in this deposit is unclear. Lot 7 consisted of 15cm of pebble fill below the ballast that was virtually devoid of artifacts. This seventh lot ended at the surface of another stucco floor.

The eighth lot was defined by the 10cm of ballast below this 2nd Patio Floor. Below this ballast, the ninth lot was composed of 26 – 40cm of compact earthen fill. A 50cm thick layer of sascab, devoid of artifacts, lay below Lot 9, and constituted the tenth lot in PN-46F-23. This sascab lay atop two parallel façades that are the remains of Str. J-24-sub-1 and J-34-sub-1. Lot 11 consisted of the fill of soil and loose rubble to the northeast of the wall of J-24-sub-1, which contained early facet, Yaxche phase ceramics. Both platforms were built directly on top of the bedrock.

PN-46F-24

This was a 2.00 x 1.00m unit located on the northeastern side of PN-46F-23. The first lot consisted of a 10 – 20cm thick layer of humus over the corner that forms the intersection between J-34 and J-24. Lot 2 was composed of the 10 – 50cm of collapsed masonry that lay over the remains of the J-24 platform, outside of the superstructure. The third lot consisted of the 0.20 – 1.60m of collapsed masonry off of the southwest side of J-24, ending at the 1st Patio floor. Lot 4 was defined by a thin layer of collapsed masonry (10cm thick) below Lot 2, and above the poorly preserved surface of the J-24 platform.

The fifth lot consisted of the ballast below the 1st Patio Floor. This layer was composed of 13cm of compact soil and pebbles. Lot 6 consisted of the 10cm of fill below the ballast, ending at the surface of the 2nd Patio Floor. The platform façade of J-24 begins immediately below the level of the 2nd Patio Floor, and this would indicate that Str. J-24-1st was constructed at approximately the same time that this floor was laid in place.

PN-46F-25

This was a 2.00 x 2.00m unit to the southeast of PN-46F-23. A layer of humus that was 10 – 15cm thick defined the first lot. The second lot was composed of a thin layer of collapsed masonry, 10 – 15cm thick, overlying J-34. Lot 3 was similarly composed of 5 – 10cm of collapsed masonry immediately over the surface of J-34. Physically, there was no difference between the material that composed Lots 2 and 3. They were excavated as two lots because the surface of J-34 was so poorly preserved. It

was therefore deemed necessary to proceed more slowly to avoid penetrating the building. A line of cut stones was exposed on the northeast side of the unit that may be the plinth of a low superstructure atop J-34.

PN-46F-26

This unit measured 2.00 x 2.00m and was placed on the northeastern side of PN-46F-21. The first lot consisted of 10 – 15cm of humus over the top of the superstructure of J-24. A fragmented but complete vessel was found in the humus layer (Figs. 6.20). The second lot consisted of 10 – 15cm of loose earth and pebbles within the third construction phase of the principle bench exposed in the superstructure of J-24. Lot 2 ended at the level of the interior floor of J-24. The third lot consisted of the 15 – 20cm of loose earthen fill immediately below the bench and the level of the interior floor.

PN-46F-27

Measuring 2.00 x 2.00m, PN-46F-27 was placed on the southeast side of PN-46F-26. The first lot consisted of the 10 – 20cm of humus overlying the superstructure and interior floor of the southeastern room of J-24. The second lot consisted of the 10 – 20cm of collapsed masonry and soil over the interior floor of this same room. The stucco of the interior floor was well preserved. The floor was approximately 1cm thick. It had been polished and was a dull yellow in color. Also exposed in Lot 2 was the exterior wall of the superstructure. Along the base of this wall, on the inside of the room, a line of small cut stones was loosely placed on the floor. With stones of this same line exposed in PN-46F-28-2 and another similar line of stones on the outside of this exterior wall exposed in

PN-29-2, it appears that these stones functioned as a system for reinforcing the exterior wall and preventing its collapse.⁵

Also of interest in this lot was the discovery of two deer horns (broken into five pieces) that showed wear on their tips and were probably used for working lithics. In addition there was at least one possibly complete, though fragmented, ceramic vessel, a whole chert biface, and other artifacts directly on top of the stucco of the floor and below the collapsed masonry rather than mixed in with it. It would appear that the roof and walls of J-24 collapsed on top of the artifacts and more artifacts were subsequently deposited over the fallen superstructure as the inhabitants continued to use other buildings in Court 4.

PN-46F-28

This unit measured 2.00 x 2.00m and was placed on the southeast side of PN-46F-27. The first lot was defined by the 10 – 20cm of humus over the southern corner of the southeastern room of J-24. The second lot consisted of a layer of 10 – 20cm of collapsed masonry that lay above the interior floor of the southeastern room of J-24. A significant quantity of sherds and animal bone were found in Lot 2. In addition, seven fragments of a single Chablekal Fine Gray bowl were found here, that along with the four sherds found in PN-46F-27-2, constitute the single largest sample of this ceramic type found anywhere in Court 4 (see Table 3, Appendix I).

⁵ Houston (personal communication, 2000) has noted several cases of maintenance and preventative buttressing carried out by the Maya to prevent the slumping of platforms elsewhere in the Acropolis. The fight against gravity was a constant one in the Acropolis.

Interestingly, where the depth of deposition allows for an assessment to be made, almost all fragments of Chablekal Fine Gray pottery found in Court 4 come from strata that immediately overlay construction associated with Yaxche phase ceramics. Upper strata, such as the humus layer, not in direct contact with building or patio floors are almost entirely devoid of these ceramics (see Table 3, Appendix I). This pattern is discussed further in the conclusion section.

The interior floor of J-24 was broken in the northern corner of the unit and the fill below had been mixed with the upper strata by the action of roots. A sounding measuring 1.00 x 1.00m was placed in this same corner (Fig. 6.21). The loose pebbles, cobbles and earth that had been mixed by the roots, defined Lot 3. This perturbed layer was 30 – 40cm thick. The fourth lot consisted of the loose cobble and soil fill that formed the hearting of the J-24 platform. Lot 4 was between 0.90 and 1.20m thick and contained many faunal remains.

Lot 5 consisted of 20 – 45cm of compact soil and pebbles that lay over the top of a low wall and a stucco floor. The wall and floor are part of the superstructure and interior floor of Str. J-24-2nd. The sixth lot consisted of 45 – 50cm of compact soil and pebbles ending at a hard surface that may constitute part of J-24-3rd or of J-24-sub-1. It was not possible to continue excavations below this point because of the dangerous structural instability.

PN-46F-29

This unit measured 2.00 x 2.00m and was placed on the southwestern side PN-46F-28. The first lot consisted 10 – 20cm of humus overlying the superstructure of J-24

and the intersection J-24 and J-34. Lot 2 consisted of the 10 – 70cm of collapsed masonry overlying the surface of J-24 and J-34 (Fig. 6.22). Exposed in this lot was a line of stones loosely set against the exterior wall of J-24 that served as a structural reinforcement. Lot 2 yielded a higher than expected quantity of lithics (both obsidian and chert), animal bone and sherds (see Table 3, Appendix I).

In addition two human teeth and a fragment of cranium were found in this same layer. This very minimal grouping of human remains was designated Burial 96. It seems likely that the body was deposited at, or near, the surface of J-34 and that the rest of the remains had been eroded or destroyed by animals. Coe (1959) mentions several cases of human remains in the form of a few teeth or bone fragments found near the surface during the excavations of the 1930s. Similarly, Houston and Urquizú (1998: 244) encountered burned human remains in the humus layer over Str. J-7. It is not possible to assign a date to this burial, although it certainly post-dates the dynastic collapse.

The third lot consisted of 10cm of soil and pebble fill of the J-24 platform immediately beneath the surface of the exterior floor. The sequence of construction as exposed in Lot 3 clearly indicates that the J-34 antedates J-24, although probably not by very much time. These two structures may, in fact, represent the same building program as they are both associated with the same patio floor (the 2nd Patio Floor of Court 4).

The fourth lot consisted of the 1.40m of loose rubble fill, devoid of artifacts. 25 – 30cm of compact soil and pebbles that lay above a poorly preserved stucco surface defined Lot 5. This floor may be the exterior floor of J-24-2nd.

The sixth lot consisted of a 15cm thick layer of grayish-brown soil, with many animal bones. The platform of J-34 ended at the bottom of the lot. The seventh lot was

defined by 20 – 30cm of soil and pebbles mixed with a small amount of weathered limestone, ending at the soft, weathered bedrock.

PN-46F-30

This was a unit that measured 2.00 x 2.00m and located on the southeast side of PN-46F-11. The first lot consisted of the 10 – 15cm of humus overlying the J-34 platform. Lot 2 is defined by the 0.50 – 1.00m of collapsed masonry and midden materials found in the alley between Strs. J-33 and J-34. The variety of artifacts found in PN-46F-30-2 is notable and included animal bones, a shell earspool, two carved bone pins, and two modeled brazier posts (Fig. 6.23). The second lot ended at the level of the patio floor. The stucco of the floor, however, was not preserved in this location.

PN-46F-31

This was a 2.00 x 2.00m unit located at the southwest side of PN-46F-30 (Figs. 6.10, 6.11, 6.24). The first lot consisted of the 10 - 15cm of humus above the surface of J-34. The second lot consisted of a mixture of humus and collapsed masonry 10 – 15cm thick, lying between J-33 and J-34. Lot 3 was defined by a mixture of collapsed masonry and midden materials in the passageway between J-34 and J-33. This third lot, 0.50 – 1.00m thick, ended at the level of the patio floor and as with PN-46F-30-2 contained an unusual variety of artifacts.

PN-46F-32

This was 2.00 x 2.00m unit placed on the southwestern edge of PN-46F-31. The first lot consisted of the 10 – 15cm of humus above J-34. The second lot consisted of the 45 – 80cm of collapsed masonry of the J-34 platform in front of and on top of the plinth of J-33. The platform of J-34 had collapsed entirely at this point.

PN-46F-33

PN-46F-33 measured 2.00 x 2.00m and was located on the northeast side of PN-46F-26. The 10 – 15cm of humus over the interior floor and bench of J-24 constituted the first lot. The second lot consisted of 15 – 20cm of collapsed masonry lying atop the interior floor of J-24. This floor was not preserved, and as a result Lot 2 actually penetrated to the ballast below the floor level in some places.

The 15 – 20cm thick layer that included Burial 83 defined the third lot. Burial 83 was intruded into the floor of J-24, and is a simple burial with no obvious preparation made for the body (Fig. 6.25). The skeleton of an adult female was placed extended and supine on top of loose rubble fill. The burial was located below and in front of the bench exposed in the central room of J-24. The bench itself had been extended for a third time to cover the feet of the burial. Only one artifact was definitely associated with the burial: a flower carved from mother-of-pearl and measuring 0.01 x 2.00 x 2.00cm (Fig. 6.26).

The fourth lot consisted of the 15cm of loose soil immediately below Burial 83. The 1.35m of loose rubble fill that constitutes the hearting of J-24 defined Lot 5. This fifth lot ended at the interior floor of J-24-2nd. The floor was well preserved and was painted red in some spots. The sixth and final lot consisted of 70cm of loose rubble fill

below the floor, which was devoid of artifacts. Excavation was halted at this level because of the potential for collapse.

PN-46F-34

This was a 2.00 x 2.00m unit located on the southeastern side of PN-46F-33. The first lot consisted of the 10 – 15cm of humus overlying the northern corner of the southeastern room of J-24. The second lot consisted of the 10cm of collapsed masonry overlying the interior floor of J-24, which was not preserved in this unit. Two walls were exposed in this lot that divided the central room from the southeastern room, separating what had originally been a single room-space.

PN-46F-35

This was a 2.00 x 2.00m to the northeast of PN-46F-33. The first lot consisted of 10 – 15cm of humus overlying the entrance to the room exposed in PN-46F-26, -46F-27, -46F-33 and -46F-34. The second lot consisted of the 5 - 10cm of collapsed masonry overlying the exterior patio floor outside of the doorway of the J-24 superstructure. The floor itself was not preserved. The third lot consisted of 5 – 10cm of collapsed masonry above the interior floor immediately within the doorway of the building. One human tooth, almost certainly from Burial 83, was found in this third lot.

PN-46H-1

The PN-46H sub-operation was essentially an extension of the horizontal excavations begun in PN-46F. A change in sub-operation was deemed necessary because

the PN-46F units are most closely associated with the spatial and functional relationships between Strs. J-33, J-34, and J-24. In contrast PN-46H was focused on the relationship between Strs. J-33 and J-25. The first unit in this sub-operation measured 2.00 x 2.00m and was placed immediately to the southwest of PN-46F-22 (Figs. 6.10, 6.11). The first lot consisted of the 10 – 15cm of humus that overlay the plinth of the basal platform of J-25 as well as the exterior patio area between J-25 and J-33. The space between J-33 and J-25 was actually quite restricted and formed an alleyway allowing access to the entrances of both buildings.

The second lot was defined by the 10 – 15cm of soil beneath the humus layer, ending at the level of the patio floor. The floor was not preserved in this area, so the floor level was estimated based upon other exposures in PN-46F. It is likely that no stucco was preserved because many burials were interred in the alleyway between J-33 and J-25 (see discussion of PN-46F-16-4 and –46F-18-3 above). Though these graves were covered over, the stucco was not replaced. In addition to Chacalhaaz phase ceramics, a pendant made from a dog's tooth was uncovered in this lot (Fig. 6.27).

PN-46H-2

This was a 2.00 x 2.00m unit located to the southwest of PN-46H-1. The first lot consisted of the 10 – 15cm of humus that lay atop the basal platform as well as the remains of the superstructure of J-25. The superstructure consisted of a masonry platform that had supported pole-and-thatch walls and roof. The masonry was formed from cut stones, but was qualitatively of a poorer quality construction than Str. J-33: stones were more crudely formed, and the masonry of the superstructure was less

substantial. The ceramics in this lot include Kumche phase materials, so assigned on the basis of a few sherds of Trapiche Incised (Fig. 6.28; see Holley 1983: 519-520).⁶

The second lot consisted of the level of 10 – 15cm collapsed masonry and soil above the basal platform of J-25. The third lot consisted of the 10 – 15cm of collapsed masonry and soil covering the remains of the superstructure of J-25.

PN-46H-3

The dimensions of PN-46H-3 were smaller than the neighboring units because of a tree that could not be removed from the area. This unit measured 1.50 x 2.00m and was placed to the southwest of PN-46H-2. The first lot consisted of the 10 – 15cm thick humus layer above the remains of the Str. J-25 superstructure. The backside of a bench was exposed in the northwest side of the unit. Ceramics from this lot include Kumche phase materials.

PN-46H-4

This was a 2.00 x 2.00m unit located on the northwest side of PN-46H-3. The first lot consisted of 10 – 15cm of humus overlying the superstructure of J-25. The second lot consisted of 10 – 15cm of collapsed masonry and soil overlying a bench and the interior floor of J-25. No stucco was preserved here, and the masonry was not well

⁶ The Kumche phase assemblage (post AD 830; see Holley 1983: 519-520) is poorly defined at best. Most of the materials in the upper strata of Court 4 – including those in PN-46H-2-1 – consist of Chacalhaaz ceramic types, although new modes in some late facet Chacalhaaz forms are apparent (see Muñoz, 2000). However, the presence of Fine-Orange types, such as Trapiche Incised, does appear to be a chronological marker, and I maintain the Kumche phase designation here to distinguish those deposits where Trapiche Incised sherds have been identified. These ceramics seem largely restricted to units in the PN-46H sub-operation that exposed Str. J-25. Other contiguous or proximate lots whose ceramics are described as late facet Chacalhaaz (AD 810 – 830) are likely to be contemporary with lots containing Kumche ceramics.

preserved. A low wall, formed by a single course of stones 35cm wide, was uncovered running perpendicular to the bench. The wall clearly postdates the construction of the bench, and does not run parallel to the axis of the structure.

PN-46H-5

PN-46H-5 was a 2.00 x 2.00m unit located to the southwest of PN-46H-4. The first lot consisted of the 10 – 15cm of humus that lay over J-25. The second lot was defined by a layer of collapsed masonry and soil 10 – 20cm thick that lay over the remains of the superstructure of J-25. In addition to large quantities of ceramics this lot yielded a large fragment of a schist grinding stone (Fig. 6.29). This miniature metate was perhaps used for grinding pigments. In addition another bench was exposed on the southwest side of the unit. This bench had at least two phases of construction, but excavation was not extensive enough to entirely illuminate the construction history of this feature.

PN-46H-6

This was a unit that measured 2.00 x 2.00m and was located on the northwest side of PN-46H-4. The first lot was defined by the 10 – 15cm of humus that covered J-25. The second lot consisted of a level of collapse and soil, 15 – 20cm thick, above the interior floor of J-25 and the low wall first encountered in PN-46H-4-2.

PN-46H-7

This unit measured 1.30 x 2.00m and was located to the southwest. Its dimensions are somewhat smaller than neighboring units due to the presence of large trees. The first lot consisted of the humus layer, which was 10 – 15cm thick. Lot 2 was defined by some collapsed masonry and materials that may have constituted a midden or termination deposit between the low wall (see PN-46H-4-2 and PN-46H-6-2 above) and the bench exposed in PN-46H-5-2. This deposit was 20 – 25cm thick and was composed in large part of ceramics, with other artifact categories being almost entirely absent (see Table 3, Appendix I). At least three (and probably four) whole, though smashed, vessels were recovered from this deposit (Fig. 6.30). It is possible that the deposit is more than simply a midden, and may be the remains of an act of ritual termination of architecture of part or all of J-25, and associated with the construction of the low wall.

PN-46I-1

PN-46I represents a sub-operation that was undertaken in order to place a deep trench in the open area of the alleyway between Strs. J-25 and J-33. Four units were placed at an angle of 38 degrees adjoining the PN-46F units. The first unit was measured 2.00 x 1.00m. Lot 1 consisted of 55cm of humus, and contained Chacalhaaz phase ceramics.

The second lot consisted of a layer of dark gray soil, 16cm thick, which contained some rubble deriving, perhaps, from the surrounding platforms. The ceramic material appeared to consist primarily of Chacalhaaz phase types, but also included were fragments of Trapiche Incised: (tempered) Variety Unspecified (see Holley 1983: 519-

520). Holley lists this ceramic type among those that compose the Kumche phase assemblage.

Lot 3 consists of 17cm of fine brown soil. An alignment of cut stones was exposed 15cm below the top of the level (86cm below the ground surface) on the south side of the unit, where it adjoins PN-46I-2. These stones ran from northeast to southwest across the unit and formed the capstones of a cist. Another cist was also exposed in part on the north side of the unit. Ceramics from this lot represent a mix of Yaxche and Chacalhaaz phase materials.

A layer of fine, dark brown soil that was 15cm thick defined the fourth lot. The cists that had been initially encountered in PN-46I-1-3 were fully exposed in Lot 4. The grave on the northwest side of the unit was designated Burial 94 and the grave on the southeast side of the unit was designated Burial 95. Ceramics from this lot represent a mix of materials from many phases, the latest of which is the Chacalhaaz phase.

As mentioned above, Burial 94 was covered by capstones 1.00m below the current ground surface. Upon full excavations it became apparent that the body had not been interred within a complete cist (Fig. 6.31). The body itself had been placed directly onto the underlying soil. The grave measured 1.45 x 0.40 x 0.10m and was oriented at an angle of 42 degrees. The body was extended and supine, with the right hand placed over the pelvis and the left hand extended. The cranium and the pelvis were poorly preserved, making the determination of sex difficult, however the metrics of extant bones indicated that the individual was probably a male between 20 and 50 years of age. The remaining fragments of cranium do show signs of deformation, and the teeth were filed.

Burial 95 was a partial cist, with well-defined walls for the grave on the southeast side of the feature, but nothing defining the northwest side (Fig. 6.32). The individual was placed directly on the soil. The cist measured 1.25 x 0.22 x 0.22m. The individual was an 8 year-old child. The skeleton was extended and supine with the hands crossed over the pelvis. A ground obsidian disk constituted the only artifact clearly associated with the grave (Fig. 6.33).

PN-46I-2

This unit measured 2.00 x 1.00m and was located to the southeast of PN-46I-1. The first lot consisted of a 50cm layer composed of a mixture of humus and backfill from the present excavations. This mixing occurred because it had proven necessary to move a backfill pile that overlay a large portion of the unit. The ceramics recovered from this lot were from the Chacalhaaz phase. The lot ended at the level of the patio, the stucco of which was not preserved.

The second lot was defined by 26cm of dark gray soil. Ceramics from this lot were from the Chacalhaaz phase. What appeared to be the plinth of the J-34 platform was exposed in the southwestern edge of this unit, though the masonry was poorly preserved.

Lot 3 was composed of 20cm of medium-fine brown soil mixed with pebbles. This lot was excavated to confirm the limits of the cist of Burial 95, which did not extend into this unit. Ceramics from Lot 3 were from the Chacalhaaz phase.

The fourth lot consisted of 26cm of grayish-brown soil that contained a large proportion of pebbles. This layer lay over the top of the plinth of the J-34 platform. The few ceramics recovered from this lot were from the Chacalhaaz phase.

PN-46I-3

This unit measured only 2.00 x 0.60m and adjoined the southeastern side of PN-46I-1. The intent of this unit was to fully expose Burials 94 and 95. The first lot consisted of 60cm of dark grayish-brown soil. The ceramics recovered from this lot were from the Chacalhaaz phase.

Lot 2 was defined by 22cm of dark gray soil. The plinth of the J-25 platform was exposed 2cm below the top of this stratum. The sherds from Lot 2 represent Chacalhaaz phase types.

The third lot consisted of 18cm of medium-fine brown soil, which yielded Chacalhaaz phase ceramics. A 10cm layer of fine, grayish-brown soil defined the fourth and final lot of this unit. Neither Burial 94 nor Burial 95 extended into this unit. All of the ceramics from this lot were Chacalhaaz phase materials.

PN-46I-4

This unit measured 2.00 x 1.00m and was located on the southwestern side of PN-46I-2. The first lot consisted of 78cm of grayish-brown soil composed of a mixture of humus and collapsed masonry. Sherds recovered from Lot 1 are from the late facet of the Chacalhaaz phase.

Lot 2 was defined by 20cm of dark brown soil mixed with collapsed masonry from J-34, overlying the poorly preserved remains of the J-34 platform. The ceramics from this lot were from the Chacalhaaz phase.

The third lot consisted of 8cm of medium textured, dark grayish-brown soil and small cobbles that constitute the fill of J-34. A wall was exposed on the southeast side of the unit. This wall represents the original exterior wall of the J-34 platform, which was later extended to the northwest. There is no evidence that a staircase ever descended into Court 4 from the northwest side of J-34, though it is possible that the masonry of such a staircase was removed for the construction of either J-33 or J-25. Ceramics from Lot 3 are from the Chacalhaaz phase.

Lot 4 consisted of 28cm of fine gray soil and small cobble fill. In addition to Chacalhaaz phase ceramics, Lot 4 yielded unusually large pieces of animal bones, including a mandible with nine teeth.

26cm of fine brown soil and loose rubble defined Lot 5. The ceramics recovered in this lot are from the Yaxche phase. Lot 6 consisted of 47cm of fine textured, yellowish-brown soil. The wall of J-34 initially exposed in PN-46I-4-2 continues down past this lot, but the masonry is more poorly preserved the lower it goes. The lot ended at the level of the plinth uncovered in PN-46I-2-2. As in Lot 5, the sixth lot contained Yaxche phase ceramics.

The seventh lot consisted of 29cm of fine, light yellow-brown soil. The lot ended at the level of a floor, of which the stucco was not preserved. The wall of J-34 continued downward beyond the limits of this unit. Ceramics from this lot were from the Yaxche phase.

6.3: PN-46E and PN-46G: Excavations associated with the Staircase of Str. J-20

and Str. J-26

This series of excavations was begun during the 1999 field season as part of the soil-testing program discussed in the section above with PN-46E-1. Excavation around Strs. J-26, J-35, and J-36 were extended as PN-46G during the 2000 field season (Figs. 6.4, 6.34). The southern portion of Court 4 was excavated horizontally in order to provide a coherent picture of the terminal architecture and habitation in this part of the Acropolis, and several soundings were made into Str. J-35 and J-36. Table 7, Appendix II provides a detailed summary of the architectural phases encountered in these sub-operations.

PN-46E-1

This was the only unit excavated as part of the PN-46E sub-operation. It was a 1.00 x 1.00m unit, oriented at an angle of 30 degrees, located between Strs. J-35 and J-26 as part of the phosphate-testing program. The first lot consisted of the 25cm thick humus layer, within which was found a moderate quantity of Chacalhaaz phase ceramics. The second lot consisted of 30cm of brown soil with a small quantity of pebbles. Ceramics recovered from Lot 2 were from the Chacalhaaz phase.

The third lot was approximately 2.00m deep. This level consisted of loose rubble fill with a little bit of loose soil. Almost no sherds were found in this lot. However, several well-preserved fragments of a large figurine were found. The remains of this figurine stood 20cm high, and although it lacked its uppermost portion, it clearly depicted

a woman. Excavations in this unit were terminated at this level due to the close of the 1999 field season.

PN-46G-1

This was a 2.00 x 2.00m unit located near the center of the J-35 platform. This unit, like all of those in the PN-46G sub-operation, was oriented at an angle of 38 degrees. The first lot consisted of a layer 45cm thick that was composed of a mixture of humus and small stones. A minimal amount of Chacalhaaz phase ceramic materials were encountered in this lot.

PN-46G-2

This was a 2.00 x 2.00m unit located to the north of PN-46G-1. The first lot was defined by 69cm of humus and small stones. Ceramics from this lot correspond to the late facet of the Chacalhaaz phase.

PN-46G-3

PN-46G-3 was a 2.00 x 2.00m unit placed on the western side of PN-46G-2. Lot 1 consisted of 70cm of humus, but here mixed with fewer small stones than in the preceding units. A very few Chacalhaaz phase sherds were found in this lot. In addition two fragments of bajareque indicate the presence of a perishable superstructure of some sort, but the platform with which these were associated is not clear.

PN-46G-4

This was a 2.00 x 2.00m unit located to the south of PN-46G-3. The first lot was defined by 60cm of medium textured soil that was composed of a mix of humus and small stones. The few sherds recovered in this lot were assignable to the Chacalhaaz phase.

PN-46G-5

PN-46G-5 was a 2.00 x 2.00m unit located to the south of PN-46G-4. The first lot consisted of 20cm of humus. The ceramics yielded by Lot 1 were from the Chacalhaaz phase.

PN-46G-6

Located to the south of PN-46G-1, this was unit measured 2.00 x 2.00m. The location of this unit at the center of Str. J-35 made it ideal for a sounding into the heart of the structure in order to clarify the construction sequence in this area of Court 4. The first lot consisted of 29cm of humus with small stones dispersed throughout the stratum. The ceramics are from the Chacalhaaz phase.

Lot 2 consisted of a layer 31cm thick of moderately fine, brown soil. The lot ended at the level of a floor that was not preserved apart from a disturbed layer of pebble ballast and fragmentary stucco. Also encountered in Lot 2 was the corner of the wall that was also exposed in PN-46G-10. Ceramics indicate a date contemporary with the use of Chacalhaaz phase ceramics.

The third lot consisted of a layer of fine brownish-yellow soil, 26cm thick, below the level of the floor exposed in PN-46G-6-2. On the north side of the unit a small deposit of 54 sherds representing a mix of Chacalhaaz and Yaxche types just 4cm below the top of the lot. The remaining ceramics in the lot are similarly a mix of Chacalhaaz and Yaxche materials.

The fourth lot was defined by 23cm of light brown soil, with clay and limestone mixed into the fill. It was not possible to assign a phase to the two sherds recovered from this lot.

Lot 5 consisted of approximately 1.00m of light grayish-brown, fine textured soil and large cobbles. The fill in this layer was more massive, but less compact, than in the layers above it. A single sherd, identifiable as a Yaxche phase type (Santa Rosa Cream Polychrome) was recovered from this lot.

The sixth lot was defined by 45cm of large cobbles within a thin matrix of fine, light yellow-brown soil. Excavations were halted at this level due to the threat of collapse. The bedrock was exposed on the western side of the unit but nowhere else.

PN-46G-7

This was a 2.00 x 2.00m unit located to the east of PN-46G-6. A layer 30cm thick that consisted of a mix of humus and collapsed masonry from Str. J-36 defined the first lot. A few Chacalhaaz phase sherds were recovered from this lot.

PN-46G-8

PN-46G-8 was a 2.00 x 2.00m unit located to the east of PN-46G-1. The first lot consisted of humus, measuring approximately 70cm thick. This lot did not contain the same quantity of rocks as in other surrounding units. Furthermore, parts of the unit could not be excavated due to large tree roots that cut across the excavation. Those ceramics recovered from the lot were from the Chacalhaaz phase.

PN-46G-9

This was a 2.00 x 2.00m located on the south side of PN-46G-5. The first lot consisted of .66 – 1.20m of humus and collapsed masonry from J-36. The front of the J-36 platform was exposed in this lot, standing to a maximum height of 55cm. The platform was not well preserved, and its western side was almost entirely collapsed. A few Chacalhaaz phase sherds were recovered from Lot 1.

PN-46G-10

This was a 2.00 x 2.00m unit located to the south of PN-46G-7. The first lot consisted of a mixture of humus and collapsed masonry that measured 0.45 - 1.34m in depth. As in PN-46G-9, the front of the J-36 platform was exposed in this lot, although it was preserved to a slightly greater maximum height of 89cm. The ceramics from this lot were from the Chacalhaaz phase.

The second lot was a sounding made in front of the platform façade (Fig. 6.34). This limited the unit to a space measuring .70m on the eastern side of the unit, 1.20m on the western side and 2.00m on the north and south sides. The fill within this probe

consisted of 33cm of brown soil and rubble, within which were encountered Chacalhaaz phase ceramic materials. Also exposed at the bottom of this lot was a wall running perpendicular to J-36 and corresponds to a wall also exposed in PN-46G-6-2. The architectural associations of this wall remain unclear.

PN-46G-11

PN-46G-11 was a 2.00 x 2.00m unit placed on the south side of PN-46G-7. Lot 1 consisted of a layer of humus and collapsed masonry .27 – 1.38m thick. The front wall of J-36 as exposed in this lot had collapsed entirely. A few Chacalhaaz phase sherds were found in this lot.

PN-46G-12

This was a 2.00 x 2.00m unit located over the central axis of J-36 and to the south of PN-46G-10 (Fig. 6.34). This unit was intended as a sounding in order to clarify the construction sequence of J-36. Lot 1 consisted of 30cm of humus, and yielded Chacalhaaz phase ceramics.

Because of the proximity of the front wall of the J-36 platform, and the danger of its collapse, the dimensions of the unit were reduced to 1.50m on its east and west sides below the first lot. 20cm of loose rubble and dark brownish gray soil and loose rubble defined Lot 2. Sherds recovered from Lot 2 were from the Yaxche phase.

The third lot consisted of 40cm of fine textured, dark gray soil. Two retention walls were exposed within this fill on the east and west sides of the unit. Ceramics from this lot are assignable to the Yaxche phase. One unusual artifact encountered in Lot 3

was a hairpin made from a deer bone. The bone had been polished and then differentially burned so as to produce one black side and one light gray side, with the border between them being very well defined, perhaps indicating the application of some kind of resisting material.⁷

Lot 4 was defined by 40cm of rubble fill and fine brownish gray soil. The lot ended at the level of a poorly preserved floor. No stucco was preserved and the floor level was only identified on the basis of its pebble ballast. Ceramics from this lot represent a mixture of Yaxche and Balche or Naba types.

84cm of limestone cobbles and light brown soil define the fifth lot. Only three sherds were recovered from this lot, and they appear to be assignable to either the Balche or Naba phase.

Lot 6 was constituted by 44cm of fill consisting of small rocks and fine, grayish-brown soil. The ceramics from this lot may represent either Naba or Balche phase materials.

The seventh lot consisted of 36cm of clumpy soil with pebbles. The lot ended at the level densely packed cobbles. Excavations were ended at this level due to the danger of collapsing fill. Ceramics recovered from this lot were from the Naba phase.

6.4: PN-54A: Excavations Associated with Str. J-27⁸

Str. J-27 and J-28 together form what appears to be an unfinished temple-pyramid on the northwestern flank of the Acropolis hill, although the poor condition of the

⁷ This burning may have been accidental, however the precision of the line separating the light from dark sides suggests purposeful decoration.

⁸ All of the PN-54A excavations were conducted under the immediate supervision of Fabiola Quiroa with

masonry makes any determinations of the function of these structures difficult (Figs. 6.35, 6.36). Str. J-28 is a large ramp extending up from the Northwest Group Plaza in what appear to be roughly formed terraces. No finished facing stones are evident on this ramp, but it certainly has the appearance of an unfinished staircase. The bulk of the ramp is probably formed by the hillside itself.

Str. J-27 is a platform that lies above the top of J-28, and below Court 4. Access from Court 4 may have been possible via a staircase descending from J-24, but if so this feature has been largely destroyed leaving a ramp of rubble. Access from J-27 down to J-28 was via a feature that is almost certainly an unfinished staircase.

Almost nothing about was known about these structures prior to excavations conducted during the 2000 field season. Operation 54 consisted of a single sub-operation, PN-54A, that included twenty-one individual units organized on a grid running along an axis of 148 degrees (Fig. 6.35). This operation was planned as the horizontal excavation of Str. J-27 to determine the form and function of the building, but it also included soundings into the platform to reveal the construction sequence (Table 4, Appendix 1 provides a preliminary count of artifacts by lot in PN-54A). See Table 8, Appendix II for a detailed summary of the architectural sequence as encountered in this sub-operation.

PN-54A-1

This was a 2.00 x 2.00m unit located near the rear-center of the J-27 platform. The first lot consisted of 54cm of humus and collapsed masonry fallen from the terraces

above J-27. Two fragments of a metate were uncovered in the northern part of the unit. The few sherds recovered from this lot are from the Chacalhaaz phase.

Lot 2 consisted of 13cm of dark grayish-brown soil that was both clayey and sandy. The ceramic from this lot is a mix of Yaxche and Chacalhaaz phase materials.

The third lot consisted of a layer 10cm thick of dark gray, sandy soil with numerous stones. On the eastern side of the unit there was a layer of small stones that appears to have been the fill of a floor. Ceramic recovered from this lot is a mixture of Yaxche and Chacalhaaz phase materials.

A 13cm thick layer of fine textured, gray sandy soil defined the fourth lot. A number of large dressed stones were present in this lot. The lot ended at the level of the capstones that covered Burial 79, exposed in the northeastern corner of the unit. Only part of the grave was exposed in this unit, the rest of it being uncovered in PN-54A-2. The ceramics from this lot are a mix of Naba and Yaxche phase materials.

The fifth and final lot of this unit consisted of 29cm of large, loose cobbles within a matrix of fine, grayish-brown soil. The lot was difficult to excavate because of the potential for collapse of the fill, and excavation in the unit was ended because of this danger. The sherds from this lot are assignable to the Naba phase.

PN-54A-2

This unit measured 2.00 x 2.00m and was located on the northeast side of PN-54A-1. The first lot consisted of 36cm of humus mixed with collapsed masonry. A collapsed wall was uncovered at a distance of 84cm from the southern profile of the unit. The sherds yielded by Lot 1 are from the Chacalhaaz phase.

The fill from within the collapsed wall defines Lot 2. This was a layer 31cm thick of dark gray soil, a mixture of clay and sand that contained Chacalhaaz phase ceramics.

The third lot consisted of 10cm of fine textured gray soil, composed of a mixture of clay and sand with a compact layer of pebbles that formed the ballast of a floor (see PN-54A-1-3). The ceramics from Lot 3 are a mixture of Chacalhaaz and Yaxche phase types. Lot 4 consisted of 10cm of fine textured gray soil that constitutes the fill below the floor. The sherds from this lot represent a mixture of Yaxche and Chacalhaaz materials. The lot ended at the capstones covering Burial 79.

Burial 79 is a cist formed of rough-cut stones within the fill of J-27 (Fig. 6.37). No formal surface was prepared for the burial. The grave was oriented at an angle of 30 degrees. The skeleton itself was badly disturbed, probably by the actions of rodents whose bones were found within and without the cist. The individual in the grave was a young child. The position of the skeleton was impossible to determine due to the disarticulation of the remains, although the head seemed to be to the northeast. Within the grave were 72 sherds representing a mix of Yaxche and Naba phase types, as well as a figurine fragment, the skull of a bird, a fragment of stingray spine, a prismatic obsidian blade, and a piece of spondylus shell. All of these materials were scattered throughout the burial, and given the disturbance to the skeleton and the poor construction of the cist it is difficult to determine which of these materials constitute burial offerings and which are intrusive to the grave.

The fifth lot consisted of 34cm of fine textured, gray soil and rubble fill surrounding Burial 79. A large variety of artifacts were found surrounding the grave, and

the presence of a human tooth in Lot 5 and other human remains in surrounding lots raises the possibility that some of these artifacts were originally placed within the grave. Among these items was a polished and perforated marine snail-shell. The ceramic materials from Lot 5 appear to represent a mix of Yaxche and Chacalhaaz phase types.

PN-54A-3

This unit measured 2.00 x 2.00m and was placed on the northwestern side of PN-54A-2. The first lot consisted of 50cm of humus and some collapsed masonry. Ceramics from this lot are a mixture of Chacalhaaz and Yaxche phase types. The wall initially exposed in PN-54A-2-1 was also encountered in this lot. As uncovered in PN-54A-3-1 it is apparent that this feature intersects the remains of a poorly preserved bench from the final construction episode of Str. J-27 (Fig. 6.36).

The second lot was composed of 20cm of dark grayish-brown soil. Ceramics recovered from this lot are a mixture of Chacalhaaz and Yaxche phase materials, and include one nearly complete polychrome plate of an unidentified type. In addition, the lot yielded a worked shell plaque of unknown function, an incised bone plaque (Fig. 6.38), and an obsidian eccentric in addition to numerous pieces of chert and obsidian blades. These materials represent an atypical assemblage for fill in the Acropolis, and give the appearance of a scattered cache rather than standard fill materials. A soil sample was taken from within the cist that constitutes Burial 80 (see PN-54A-4-2 below).

A layer 7cm thick of fine, dark gray soil within and immediately surrounding the bench uncovered in PN-54A-3-2 defined Lot 3. The majority of the sherds from this fill were Chacalhaaz phase ceramics. However, one small fragment of Pabellon Model-

Carved found within the masonry of the bench indicates that the construction of that feature took place after about AD 830. Those ceramics found in the lot outside of the bench are a mixture of Chacalhaaz and Yaxche types.

The fourth lot consisted of a layer of fine gray soil 41cm thick. The ceramics recovered from this could not be definitively assigned to a particular phase. Among the other artifacts recovered from Lot 4 was a single human upper incisor that had been drilled to allow for the placement of an inlay. The inlay itself was not found.

The fifth lot consisted of 16cm of large limestone cobbles within a matrix of fine gray soil. This lot yielded Yaxche phase ceramics, in addition to some unusual materials such as a shell worked into the shape of a flower (Fig. 6.38), a spondylus shell bead, and twenty fragments of bone of which some are human (these last await further analysis).

Lot 6 consisted of a layer 41cm thick of pebbles and cobbles within a matrix of yellowish-brown soil. No artifacts were recovered from this lot. The seventh lot consisted of 65cm of fine grayish-brown similar to Lot 4, but mixed with medium to large cobbles. A very few fragments of Naba phase ceramics were recovered from this lot.

A layer of medium sized cobbles, and fine brown soil measuring 35cm thick defined the eighth and final lot of PN-54A-3. It was not possible to assign a date to the ceramics recovered from this lot. Excavation ended at the level of the bedrock.

PN-54A-4

This unit was slightly smaller than those surrounding it, measuring 1.30m on its east-west axis and 2.00m on the north-south axis; the unit was placed adjoining the

southwestern side of PN-54A-3. The first lot consisted of 45cm of humus and collapsed masonry. Exposed in this first lot was the continuation of the wall feature that was first uncovered in PN-54A-2-1 and -54A-3-1. The ceramics from this lot are Chacalhaaz phase materials. In addition to other cultural materials, this lot yielded two metate fragments and a bone needle (see Table 4, Appendix I). It is not clear whether these items constitute the remains of domestic activities or were associated with Burial 80 (see PN-54A-5 below). The lot ended at the surface of the capstone of Burial 80.

The second lot consisted of a layer 27cm thick composed of dark grayish-brown soil surrounding and within the cist of Burial 80. The ceramics from this lot are a mixture of Chacalhaaz and Yaxche phase materials. Burial 80 was a cist that crossed the boundary between PN-54A-3-2 and PN-54A-4-2. The cist itself (60 x 28 x 20cm) was poorly formed of roughly cut stones that were placed directly on loose rubble fill, and oriented at an angle of 48 degrees (Fig. 6.39). The poor construction of the grave as well as the loose fill contributed to the disturbance of the skeleton, as they allowed for rodents to enter easily. As a result the skeleton was very poorly preserved and disarticulated. The individual was a child of indeterminate sex. The grave was furnished with a bone needle (Fig. 6.40) – possibly from the cloth within which the child was buried – as well as small bowl placed just outside the cist (Type: Marqueta Cream). The vessel outside the cist was whole, but had been broken by overlying fill, and contained a sherd from another plate. It is impossible to say whether the sherd was intentionally placed within the bowl or not. Several other artifacts were uncovered in the fill surrounding the grave (see Table 4, Appendix I), but it is not clear whether there were associated with the interment.

Lot 3 consisted of 11cm of fine, dark gray soil. This lot yielded Yaxche phase ceramic materials. A wall was exposed at the base of the stratum that ran southeast across the unit from Burial 80 and extending to Burial 79. The fourth and final lot of this unit consisted of 32cm of gray soil, which contained Yaxche phase ceramics.

PN-54A-5

This unit measured 2.00 x 2.00m and was located to the northeast of PN-54A-2. Lot 1 consisted of a layer of humus and collapsed masonry 49cm thick. The sherds from this lot were from the Chacalhaaz phase. The wall detected in PN-54A-2 and 3 was exposed in this lot as well, and was so dilapidated that it lacked a definite corner giving the appearance of a semicircular feature.

The second lot consisted of 24cm of a mixture of clay and sand that was dark grayish-brown in color. Ceramics from this lot were assignable to the Chacalhaaz phase. A layer of fine, dark gray soil 19cm thick defined the third lot. Ceramics from this lot consisted of Yaxche phase materials, and included an unusually dense deposit of sherds scattered over a restricted area just northeast of Burial 79.

PN-54A-6

PN-54A-6 was a unit that measured 2.00 x 2.00m and placed to the northeast of PN-54A-3. The first lot consisted of 60cm of dark grayish-brown. Exposed in this lot was the same semicircular formation that had been uncovered in PN-54A-5-1. Ceramics from Lot 1 were assignable to the Chacalhaaz phase.

The second lot consisted of 20cm of dark grayish-brown soil, both surrounding and within the fill of the wall uncovered in Lot 1. Ceramics from this lot were Chacalhaaz phase materials. The third lot consisted of fine textured, dark gray soil immediately below Lot 2 outside of the wall and contained Yaxche phase ceramics.

PN-54A-7

This was a 2.00 x 2.00m unit located to the northeast of PN-54A-6. The first lot consisted of 57cm of humus and collapsed masonry. What appears to be a low and poorly preserved bench was exposed in this lot. Ceramics from this lot are assignable to the Chacalhaaz phase. Lot 2 consisted of a 20cm thick stratum of dark grayish-brown soil containing a mixture of Chacalhaaz and Yaxche phase ceramics.

PN-54A-8

This unit measured 2.00 x 2.00m and was located to the southeast of PN-54A-7. The first lot consisted of 65cm of humus mixed with collapsed masonry. Ceramics recovered from this lot are assignable to the Chacalhaaz phase. An "L"-shaped wall or low bench was uncovered in this lot on the north and west sides of the unit.

PN-54A-9

PN-54A-9 was a unit that measured 1.00 x 2.00m to the northeast of PN-54A-8. The first lot consisted of 1.05m of fill mixed with collapsed masonry. Lot 1 yielded sherds of Chacalhaaz phase ceramics. The southeast corner of J-27 as exposed in this lot

was in very poor condition, but it appears as though there were two stairs in the northwest corner of the unit.

PN-54A-10

This unit measured 1.00 x 2.00m and was placed on the northwestern side of PN-54A-9. A layer of humus and collapsed masonry 1.05m thick defined the first lot. The minimal quantities of ceramics found in this lot were assignable to the Chacalhaaz phase.

PN-54A-11

PN-54A-11 was a unit that measured 2.00 x 1.70m and was located to the northwest of PN-54A-10. Lot 1 consisted of an 82cm thick layer of humus and collapsed masonry that contained Chacalhaaz phase ceramics. A small staircase with at least six risers was uncovered in this lot (Fig. 6.37).

PN-54A-12

This was a unit that measured 2.00 x 2.00m and was located to the southwest edge of PN-54A-1, separated from the latter by PN-54A-17 (Fig. 6.35). The first lot consisted of 85cm of humus and collapsed masonry that contained a mixture of Naba and Chacalhaaz phase ceramics. A low, south-facing bench was uncovered in this lot. The masonry of the bench was poorly preserved because of disturbance caused by tree roots.

PN-54A-13

PN-54A-13 measured 2.00 x 2.00m and was located on the northwest side of PN-54A-12. The first lot consisted of 86cm of humus mixed with collapsed masonry and contained Yaxche phase ceramics. The wall-base of the superstructure of J-27 was uncovered close to the surface in poor condition.

PN-54A-14

This unit measured 2.00 x 2.00m and was located on the southwestern side of PN-54A-13. A layer of humus and collapsed masonry 57cm thick defined the first lot. Lot 1 yielded ceramics that are a mix of Chacalhaaz and Yaxche phase types. The northwest corner of the superstructure wall was uncovered in this lot.

PN-54A-15

PN-54A-15 measured 2.00 x 2.00m and was located on the southeast side of PN-54A-14. The first lot consisted of 52cm of humus and collapsed masonry, which contained Chacalhaaz phase ceramics. The edge of the bench initially uncovered in PN-54A-12 was exposed in this lot. In addition there was a small grouping of stones, the function of which was not clear.

PN-54A-16

This unit measured 2.00 x 2.00m and was located on the southwestern side of PN-54A-15. The first lot consisted of a 57cm thick stratum of humus mixed with collapsed masonry. Lot 1 yielded Yaxche phase ceramics. The southern limits of the J-27 platform

were exposed in this lot, which covered the area between J-27 and the massive platform that forms the mass of Court 4.

PN-54A-17

This unit measured 0.70 x 1.00m and was placed along the southwest side of PN-54A-1. The first lot consisted of 69cm of humus and collapsed masonry, which contained Chacalhaaz phase ceramics. The southern edge of Str. J-27 was uncovered in this lot in an extremely poor state of preservation.

PN-54A-18

PN-54A-18 measured 1.40 x 3.00m and was located to the northeast of PN-54A-13. The first lot consisted of 1.10m of humus mixed with collapsed masonry, and contained Chacalhaaz phase ceramics. A staircase was exposed on the northern side of the unit, but the masonry was badly deteriorated as a result of the action of tree roots. A nearly complete chert point was found lying on top of the staircase.

PN-54A-19

PN-54A-19 measured 1.20 x 2.50m and was located to the southwest of PN-54A-18. Lot 1 consisted of 1.15m of humus and collapsed masonry, which contained a mixture of Yaxche and Chacalhaaz phase ceramics. The frontal staircase of J-27 was further exposed in this unit.

PN-54A-20

This unit measured 1.30 x 2.50m and was located to the northeast of PN-54A-18. The first lot consisted of 1.00m of humus and collapsed masonry, which contained a mixture of Yaxche and Chacalhaaz phase ceramics. The frontal staircase of J-27 was further exposed in this lot. A stone pendant broken into three pieces was found in this lot. These three pieces form a “J” when fit together, but apparently constitute only one-half of the object, which would have been a “U” shaped pendant.

PN-54A-21

This unit measured 2.00 x 1.70m and was located on the southwestern side of PN-54A-11. The first lot consisted of 59cm of humus and collapsed masonry, which contained Yaxche phase ceramics. The six risers of the staircase initially exposed in PN-54A-11 were uncovered in their entirety in this lot.

6.5: A Synthesis of Excavations in Court 4 and Str. J-27

It appears as though construction on the northwest flank of the Acropolis had begun by at least the 5th Century AD (see Fig. 6.41 for an overview of the construction history in Court 4).⁹ Four levels of fill exposed in PN-46B-2-6 through PN-46B-2-9 were associated exclusively with Naba phase ceramic materials. No masonry, however, can be definitely associated with this period. Since PN-46B-2-10 is likely to represent the ancient humus layer of the hillside, it is probable that buildings were constructed upon

⁹ Tables 6-8, Appendix II provide detailed summaries of the architectural phases encountered in Court 4 and Str. J-27.

this surface and buried by the strata that define PN-46B-2-6 through PN-46B-2-9. It is not possible to say exactly where the remains of such structures might be located.

The earliest structures with definite stratigraphic and ceramic associations are those associated with Balche or very early facet Yaxche phase ceramics. Structures J-24-sub-1 and J-34-sub-1 (see PN-46F-17-8 and PN-46F-23-10) were constructed in the first quarter of the 7th Century AD. The fill behind these façades constituted the hearting of the platforms, and contained Balche and early Yaxche phase ceramics. The fill that covers the remains of J-24-sub-1 and J-34-sub-1 contained early facet, Yaxche phase ceramics. It is possible that these two platforms were initially associated only with Balche phase ceramics, the early Yaxche ceramics having been mixed in during subsequent construction. If so, J-24-sub-1 and J-34-sub-1 would represent the only two buildings in the Acropolis dating to the period from AD 550 to 630. The structure designated J-33-sub-1 (exposed in PN-46B-6-5 and PN-46D-1-4) is almost certainly contemporary with Strs. J-24-sub-1 and J-34-sub-1.

Following the demolition and burial of these three platforms, at least three distinct patio surfaces contemporary with the use of Yaxche phase ceramics were laid down in Court 4. It is probable that the 3rd Patio Floor (the oldest in the sequence) was laid down soon after the burial of Strs. J-24-sub-1, J-34-sub-1, and J-33-sub-1. The construction of J-24-2nd was likely to have been contemporary with the 3rd Patio Floor.

The patio was filled in after the demolition of Str. J-24-2nd, and Strs. J-24-1st and J-34-2nd were built contemporaneously, immediately prior to the construction of the 2nd Patio Floor. Str. J-34 was actually completed first, and the exterior wall on its northeastern side was used as a retaining wall for the fill at the southern corner of the J-

24 platform. The construction of the 2nd Patio Floor included the deposition of large quantities of animal bones (see Table 3, Appendix I) as well as less common materials such as human bones, worked bone, and ceramic earspools. The quantity and quality of these objects suggests a termination/dedication activity associated with this construction episode.

The 1st Patio Floor was built during a period contemporary with the use of late facet Yaxche phase ceramics. As with the construction of the 2nd Patio Floor, the building of the 1st Patio Floor was associated with the deposition of higher than usual quantities of ceramics, and both human and animal bone (see Tables 2 and 3, Appendix I). Although the ceramics from this lot are predominantly types from the Balche phase, these are clearly out of stratigraphic sequence here. The platforms of Strs. J-34 and J-24 were maintained during this period, and they were also modified as attested by the addition of the extension off of the front of J-34.

Apart from the extension to the front of J-34, no major modifications were made to the J-34 or J-24 platforms. At least three modifications, however, were made to the superstructure of J-24. The two - and possibly three- rooms revealed in PN-46F-26, -46F-27, -46F-28, -46F-33, -46F-34 and -46F-35 were originally only a single room space with a low bench on the southwest side of the room. During the subsequent episode of construction a low wall was built in the southeastern section of the room to divide the space, and the bench was widened at the same time. It is possible that this second episode was contemporary with the construction of the low wall that crossed PN-46F-34 to the northwest and formed a third room, but the exact sequence of events is unclear. The final phase of construction included the deposition of Burial 83, which was intrusive

to the floor and the extension of the bench over the burial. The initial construction episodes would have taken place during a period contemporary with the use of Yaxche phase ceramics, but the interment of Burial 83 was made during a period contemporary with Chacalhaaz phase ceramics.

The superstructure of J-24 collapsed during the early part of the 9th Century AD, as evidenced by the early facet Chacalhaaz phase ceramics scattered across the interior floor and buried beneath the fallen masonry. The process of collapse, however, was not a rapid one. The lines of stone that were exposed in PN-46F-27-2, -28-2, and -29-2 served to reinforce the external wall of the superstructure, a clear indication of activities aimed at the preservation of a building on the point of collapse. Given the probability that the end of Piedras Negras as a dynastic center came not long after the capture of Ruler 7 and his death in AD 808 (Stuart 1998), J-24 is likely to have fallen shortly thereafter as the buildings of the Acropolis fell into disrepair. The presence of a thin layer of sherds, debitage, and stone working implements such as deer horns on the floor of J-24 suggests that the building functioned as a work area shortly before its collapse.

It is notable that the largest scatterings of Chablekal Fine Gray sherds found in the Acropolis outside of Str. J-12 (see Holley, 1983: 155) is a small grouping of eleven sherds found on the floor of Str. J-24 (see PN-46F-27-2 and PN-46F-28-2). Elsewhere in Court 4, the strata not in direct contact with building or patio floors are almost entirely devoid of these imported ceramics (see Table 3, Appendix I). The absence of Chablekal Fine Gray in strata that post-date the dynastic collapse of Piedras Negras, despite the marked continuities in the locally produced ceramic assemblage, may indicate that this particular imported type was distributed – at least in the environs of the Acropolis – in an

exchange system that had the royal court as its nexus. It may also be that Chablekal Fine Gray simply ceased to be produced, as it also disappeared from the Petexbatun prior to AD 830 (Foias and Bishop, 1997: 283). The use of Chablekal Fine Gray as a chronological marker also suggests that the J-17 sweatbath on the Acropolis was abandoned only after the fall of the dynasty, as there were no Fine Gray sherds recovered from excavations in that structure, despite the enormous volume of ceramics with which its rooms were filled (see Child and Child, 1999).

Other trade wares, such as Fine Orange types, continued to flow into the site and were widely, if thinly, distributed. This suggests that different kinds of ceramics at Piedras Negras moved through multiple exchange systems, some that required royal patronage, others that did not. The fact that Chablekal Fine Gray seems to be absent from the assemblage in Court 4 following the dynastic collapse further suggests that its presence or absence may provide a temporal marker in defining the separation between early facet (c. AD 730 – 810) and late facet (c. AD 810 – 830) Chacalhaaz ceramic assemblages, a possibility that is currently under investigation by René Muñoz.

Contemporary with, or soon after the abandonment of J-24 as living quarters, Str. J-33 was built on top of the patio floor. The variable quality of the masonry of J-33 suggests that some of the structure's building blocks were removed from the well built Strs. J-24 and J-34 with their neatly cut stones. Other blocks used in the construction of J-33 are only roughly dressed or raw river cobbles. Str. J-25 was also built during a period contemporary with the use of late facet Chacalhaaz phase ceramics, but it is not possible to say with certainty whether this construction was contemporary with J-33, or somewhat post-dated it.

Several relatively minor modifications are apparent in the superstructure of J-33 – the central bench was enlarged once – but the basal platform shows evidence of only one significant construction episode. The midden that surrounds the back and sides of J-33 clearly grew up over several decades of use. After an unknown period had elapsed, a stone pavement was placed over the midden in the alleyway between Strs. J-24 and J-33, and near the intersection of J-34 and J-24. This pavement was contemporary with the interment of Burial 81.

The abandonment of Str. J-33 came sometime during the mid-9th Century AD, as no Kumche phase ceramics are associated with this building. Str. J-25 was maintained and used into the second half of the 9th Century, on the basis of Kumche phase ceramics uncovered in PN-46H. Str. J-25 was finally abandoned at some time following the deposition of the ceramics exposed in PN-46H-7-2.

Structures J-35 and J-36 were always somewhat disconnected spatially and functionally from the rest of the patio. All evidence suggests that the construction of these platforms was approximately contemporary with the construction sequence as revealed around Strs. J-24 and J-34, inasmuch as most of the construction there took place over the course of the mid-7th to mid-8th centuries. Str. J-36 functioned as a landing for the staircase descending from J-20 and Court 3. It is reasonable to assume that J-35 also played a role in this function, perhaps providing an area for a restricted audience to gather for activities associated with the staircase and buildings above. The construction history and function of Str. J-26 remain unknown.

It is difficult to interpret the function of Court 4 or to identify its inhabitants. After the fall of the Piedras Negras dynasty in the 9th Century the area clearly functioned

as a residential group, with Strs. J-33 and J-25 forming the focus of habitation. The remains recovered from the large midden behind J-33 as well as the refuse scattered across all of the buildings in Court 4 provide evidence of a wide range of domestic activities, including lithic manufacture and food preparation. The burials encountered in Court 4 do not give any indication of elevated social status during the 9th Century. The presence of objects such as jade, shell earspools, and other fine materials do indicate that, for at least a short time following the dynastic collapse, the residents had access to fine objects.¹⁰

Prior to the collapse of the dynasty and the superstructure of J-24, however, the picture is less clear. There is not the same evidence of middens associated with Yaxche phase ceramics to point to a domestic use of the court. The plan of the superstructure of J-24, with its benches and room spaces, certainly appears to be that of a residential structure. Whether the residents were mere servants to the court, or were themselves elite members of the royal court is impossible to say. Whatever the status of the residents of J-24, it is obvious that Court 4 offered a route of access between the Northwest Group Plaza and Courts 2 and 3.

The history of Str. J-27 is more obscure than that of Court 4. Strs. J-27 and J-28 obviously formed a route of access between the Northwest Group Plaza below and Court 4 above, but it is unclear that this was the original intent of the structures. Construction on J-27 began during a period contemporary with the use of Yaxche phase ceramics, and the mass of the building's platform appears to have been built in one phase. The superstructure is more of a puzzle. The extremely poor state of preservation of the

¹⁰ Excavations conducted by Sarah Jackson (2000) in the C-Group of Piedras Negras revealed what are

masonry is unusual in the Acropolis. More effort was invested in the construction of even extremely late structures such as J-33 and J-25 than appears to have been invested in J-27. Yet, materials such as an obsidian eccentric, carved shell plaques, and other fine objects belie the notion that J-27 was a poorly built residential structure.

Str. J-27 gives the appearance of an unfinished temple-pyramid begun in the 7th Century.¹¹ This platform was subsequently used as a residential platform in the period following the collapse of the Piedras Negras dynasty. If Str. J-28 was originally intended as a staircase, the façade of that staircase was never completed and the terraced fill was left exposed. Furthermore, no stucco floor was found associated with the platform of J-27, and almost nothing was found of floor ballast that would suggest the preparation of the fill to receive a floor.

Finally, the presence of a Pabellon Modeled-carved sherd in the masonry of the bench indicates that the masonry of the superstructure dates to no earlier than the introduction of that pottery type to Piedras Negras – after about AD 830. It is not clear whether the child burials (79 and 80) are contemporary with the initial phase of the platform's construction during the 7th Century, with the latest occupancy during the 9th

interpreted as post-dynastic occupation associated with a wealth of finely made ceramics.

¹¹ Houston (personal communication, 2001) speculates that Str. J-27 may originally have been intended as a mortuary pyramid for Ruler 3. Str. J-27 is on axis with Str. J-3 (possibly the resting-place of Ruler 3's wife) and Str. J-4 (probably the mortuary temple of Ruler 2). Ruler 3 acceded to the throne in AD 687 and died shortly before AD 729, dates that are roughly coeval with the construction episodes in Str. J-27. Why work on Str. J-27 was abandoned while the rulers of Piedras Negras were at the height of their powers, and why Ruler 3 was buried within Burial 5 in the J-5 platform remain mysteries.

Century, or with some period in-between. The final occupation of J-27 was probably contemporary with the final occupation of J-25, both structures being abandoned by the close of the 9th Century AD.



Fig. 6.1: Court 4 as mapped in the 1930s.

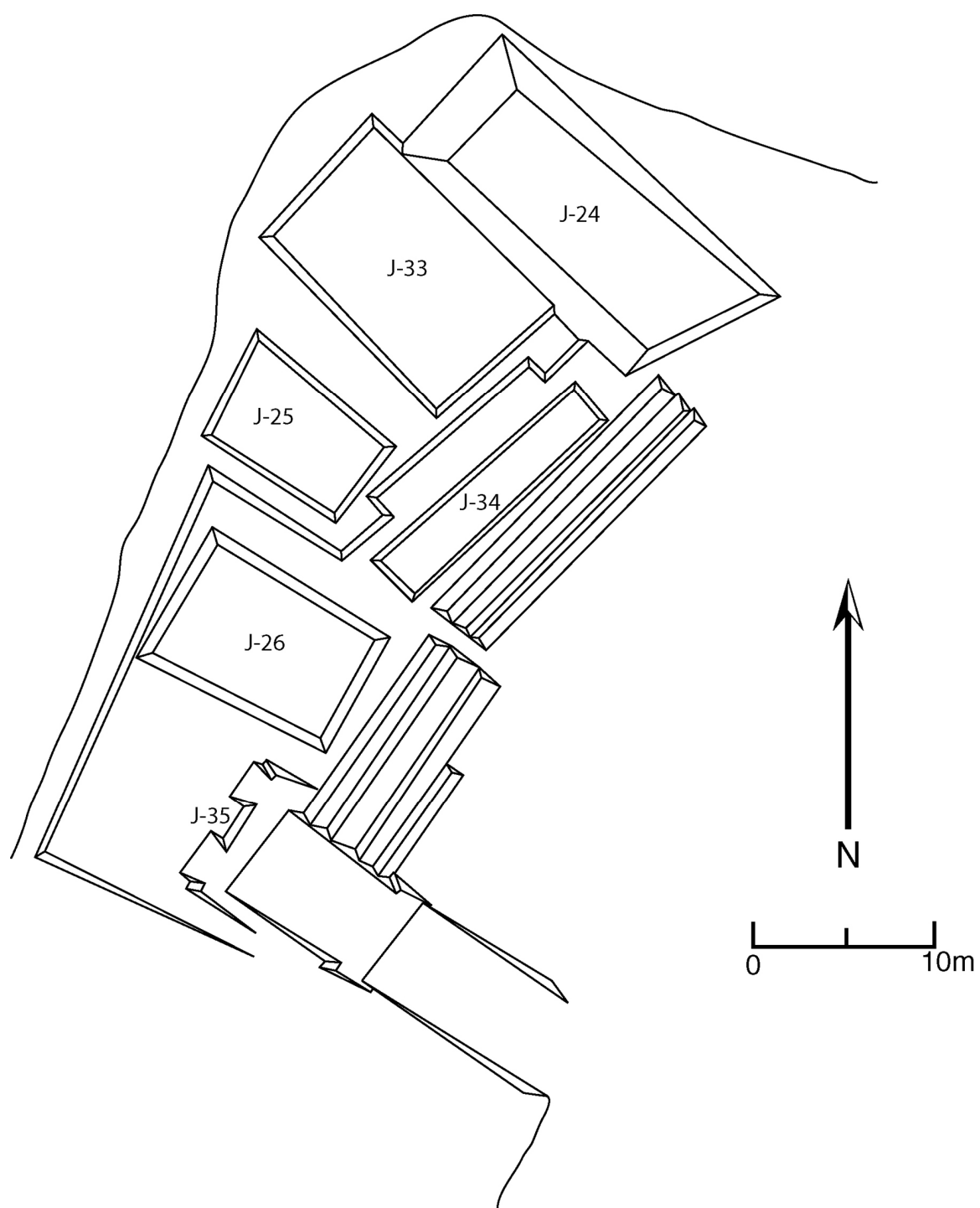


Fig. 6.2: Revised map of Court 4.

L. S., Jr., May, 1952

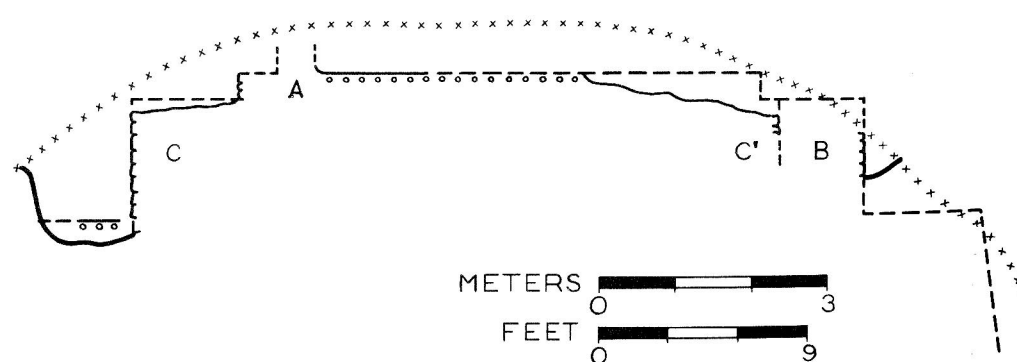


Fig. 47: Cross-section of Str. J-24

Fig. 6.3: Profile of Str. J-24 (from Satterthwaite, 1954: 88).

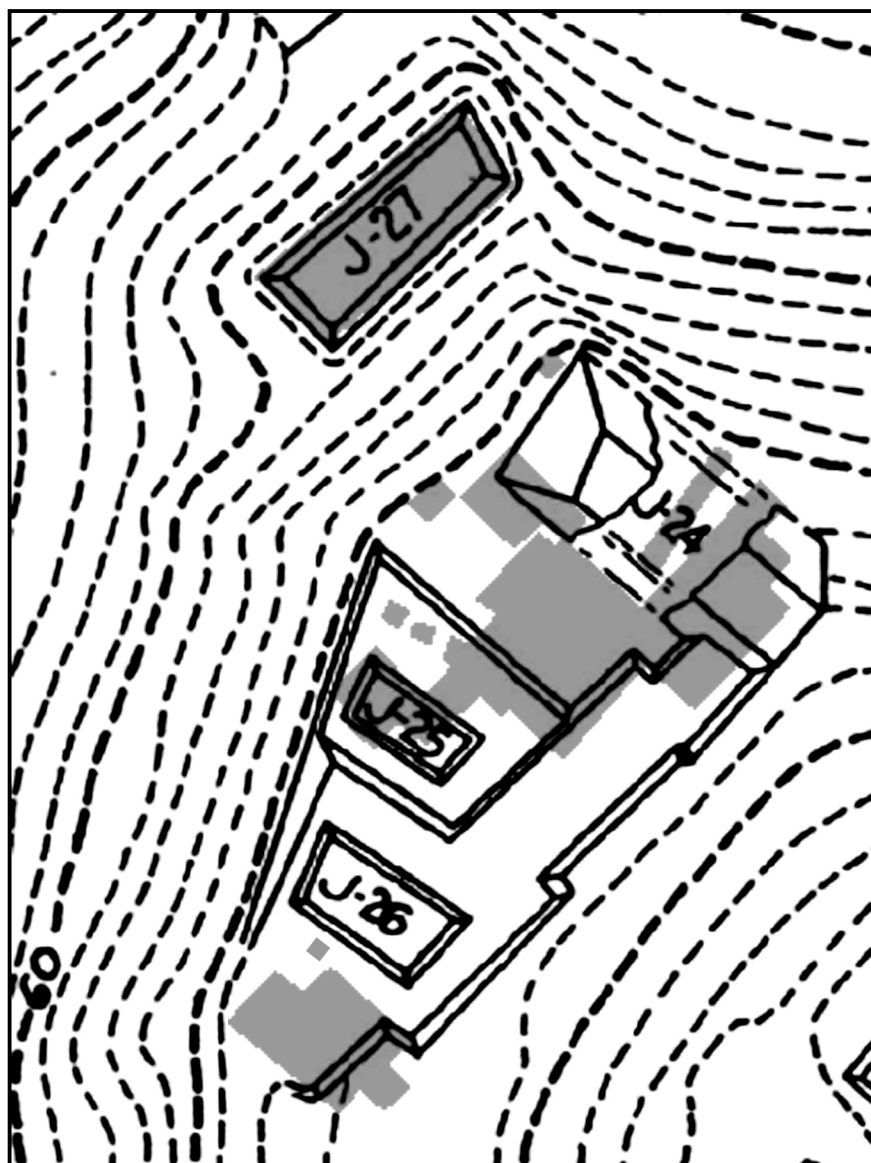


Fig. 6.4: Overview of excavations in Court 4 and Str. J-27.

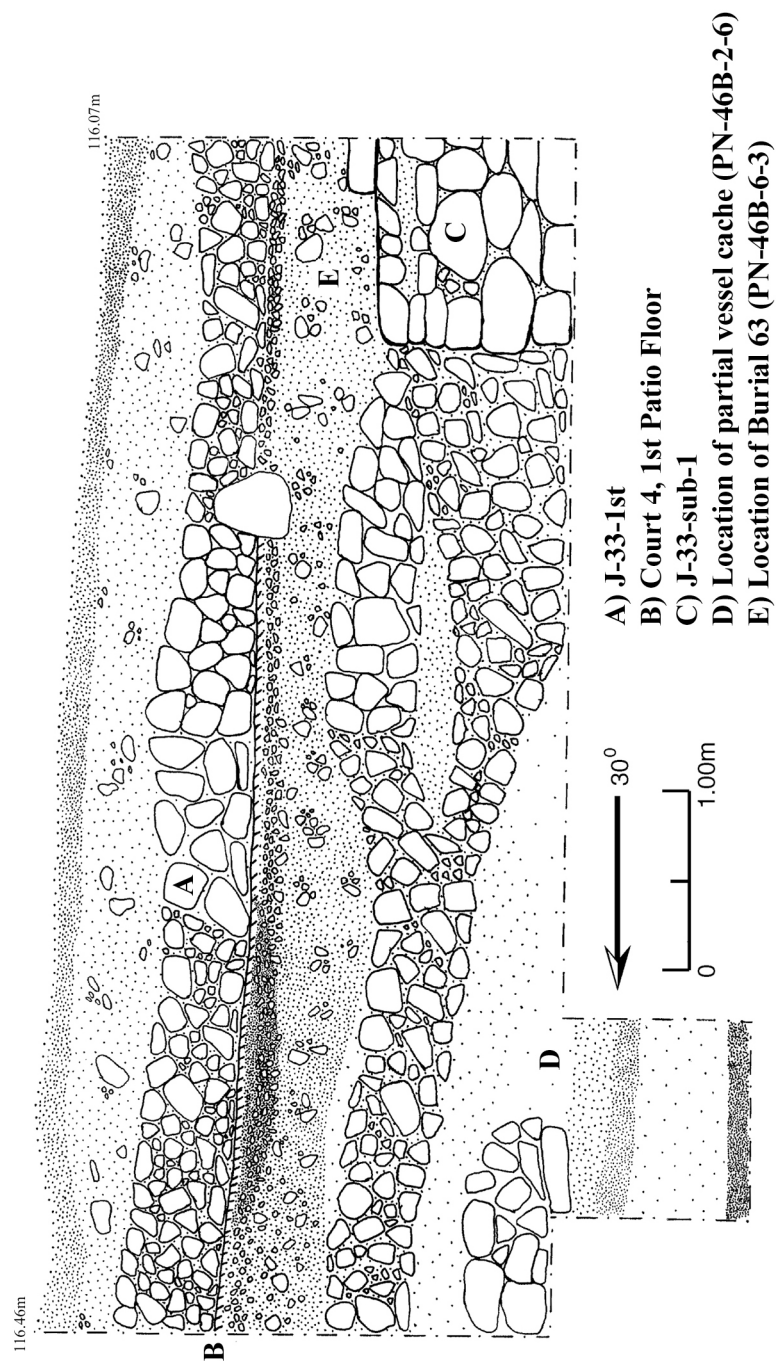


Fig. 6.5: Section of PN-46B-1 through PN-46-B-6 (drawing by Mónica Pellecer).

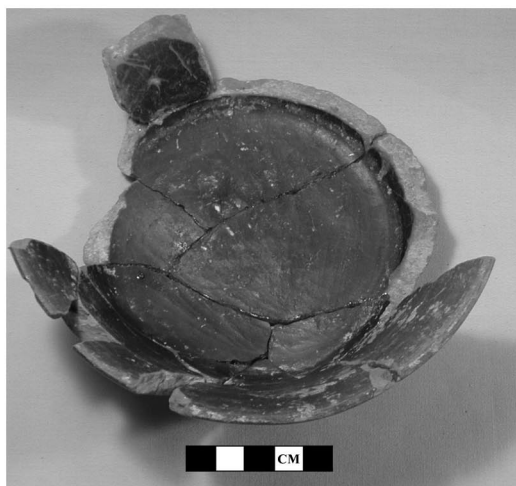


Fig. 6.6: Partial vessel (Pucte Brown) from PN-46B-2-6.

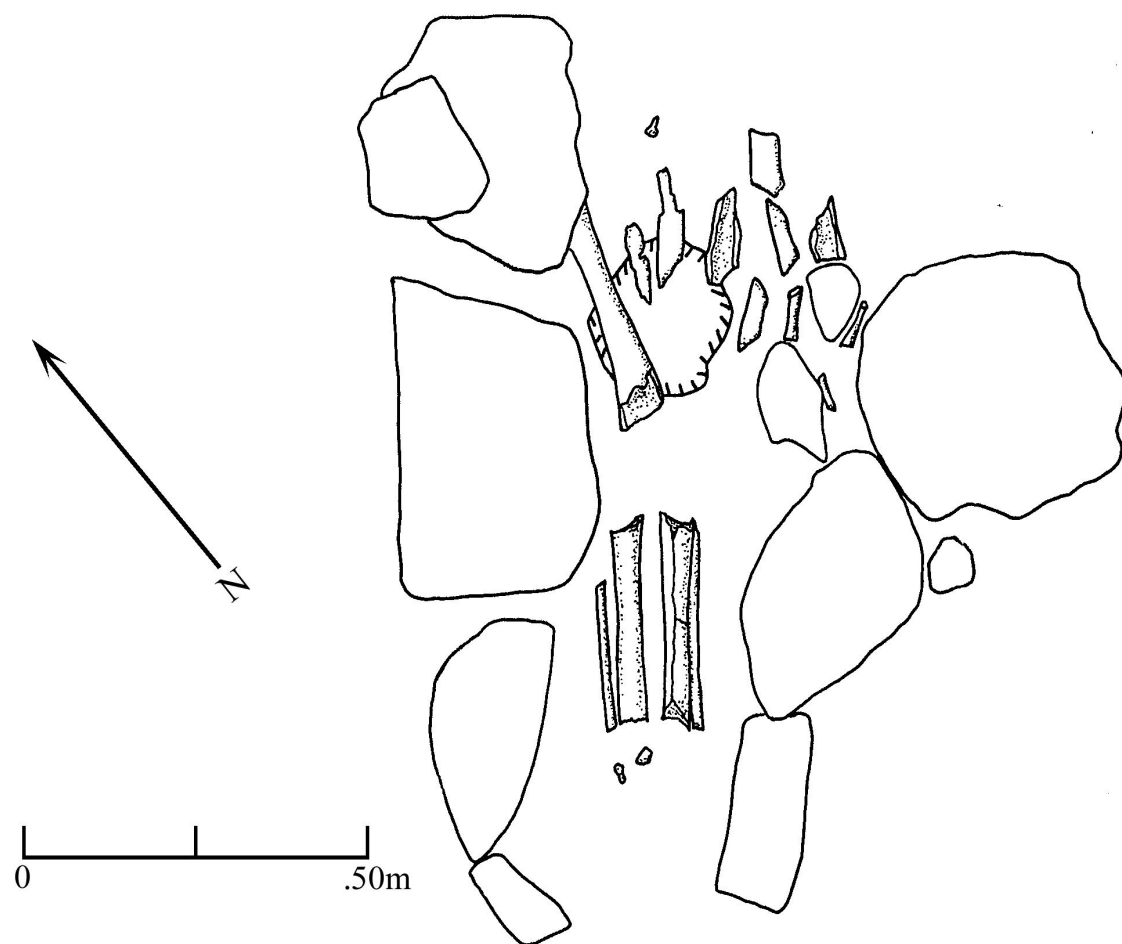


Fig. 6.7: Burial 63 (drawing by the author).

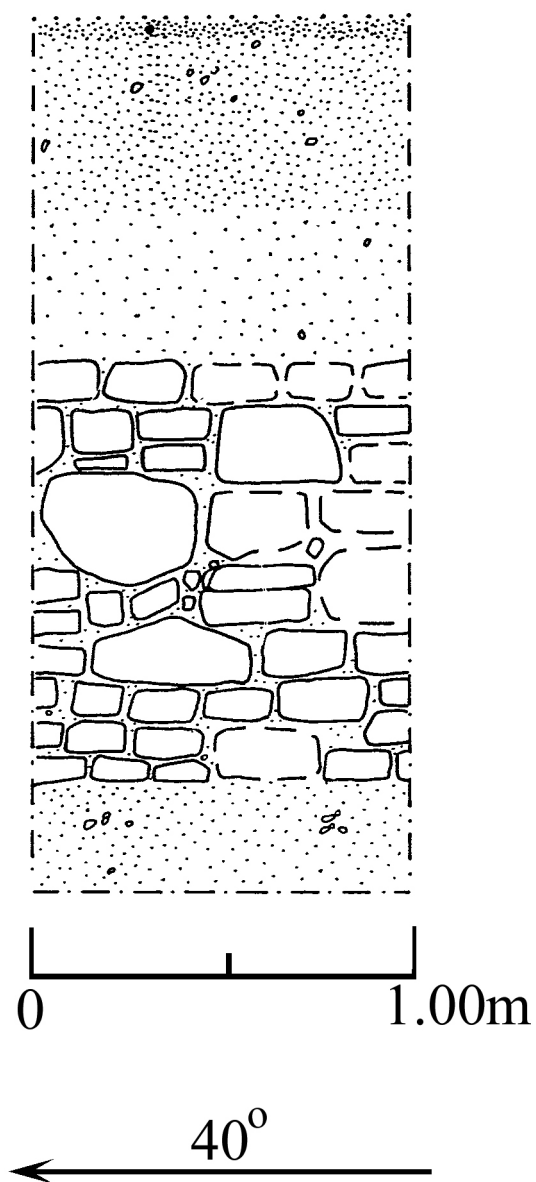


Fig. 6.8: Profile of PN-46D-1.

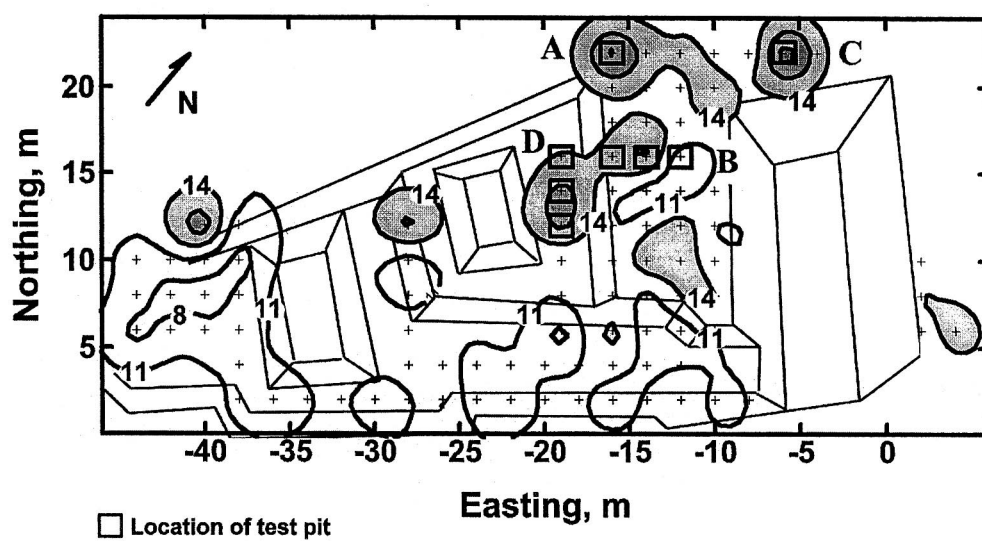


Fig. 6.9: Map of soil phosphate levels in Court 4 (from Parnell et al., 2001: 864).

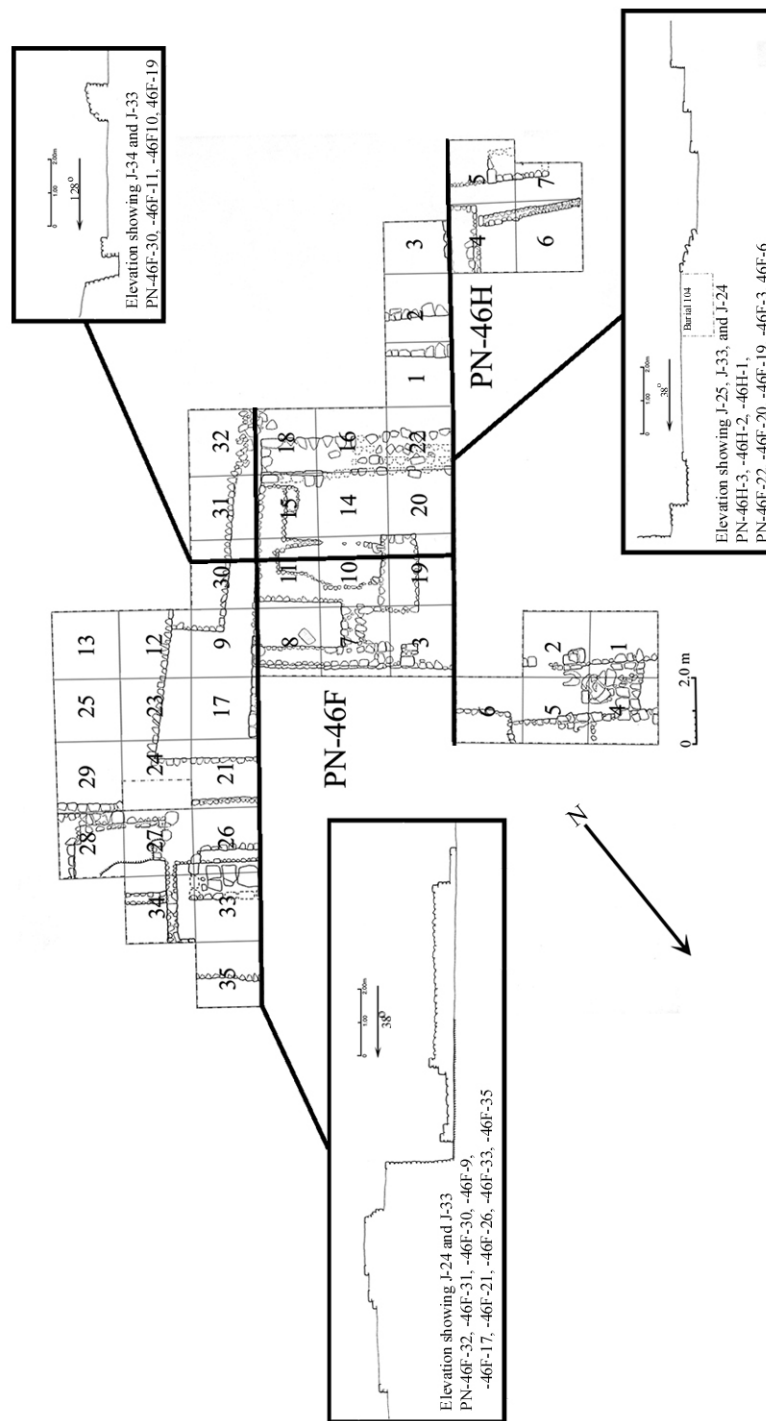


Fig. 6.10: Schematic of excavation units in PN-46F and PN-46H with elevations of Court 4.

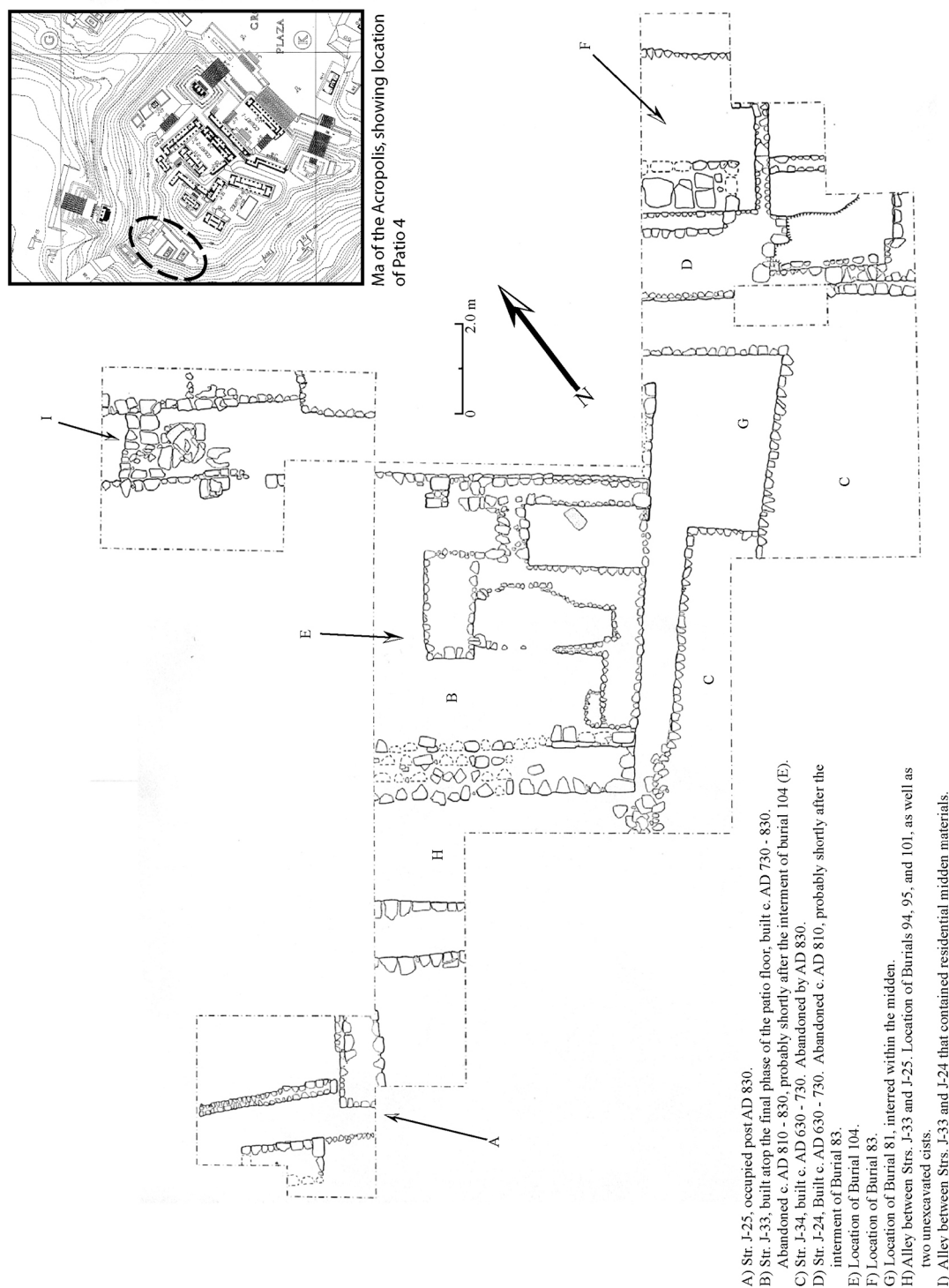


Fig. 6.11: Plan view of Strs. J-24, J-33, and J-34 as revealed in PN-46F and PN-46H.

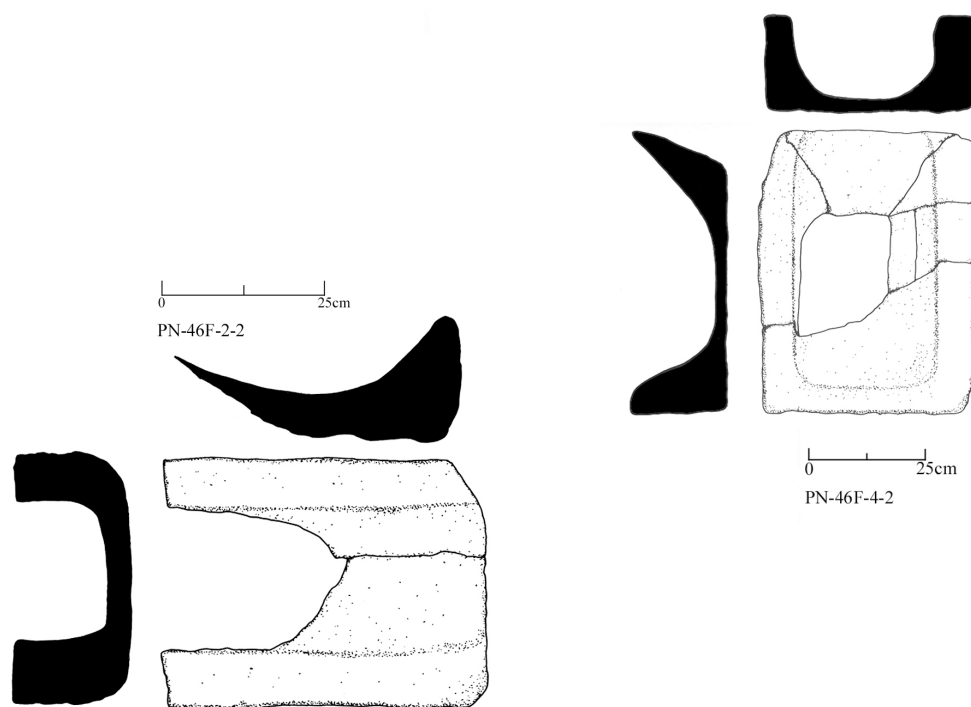


Fig. 6.12: Metates in PN-46F-4-2 and PN-46F-2-2. Central metate is the uppermost of three such stones in a pile (above, contrast enhanced to show metates are shown as light colored blocks). Drawings are of the two metates in the foreground (below).

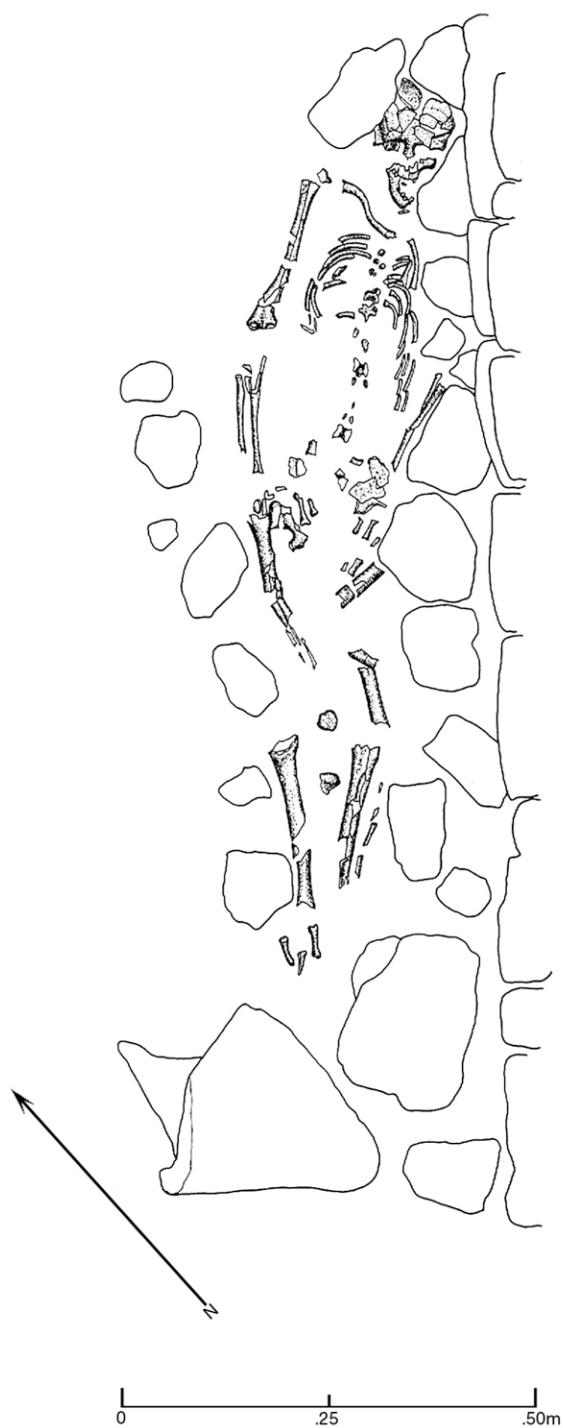


Fig. 6.13: Burial 81 (drawing by Zachary Hruby).



Fig. 6.14: Burial 101. Ghosted image at bottom right shows intrusive Burial 94 (see Fig.6.31; drawing by the author).

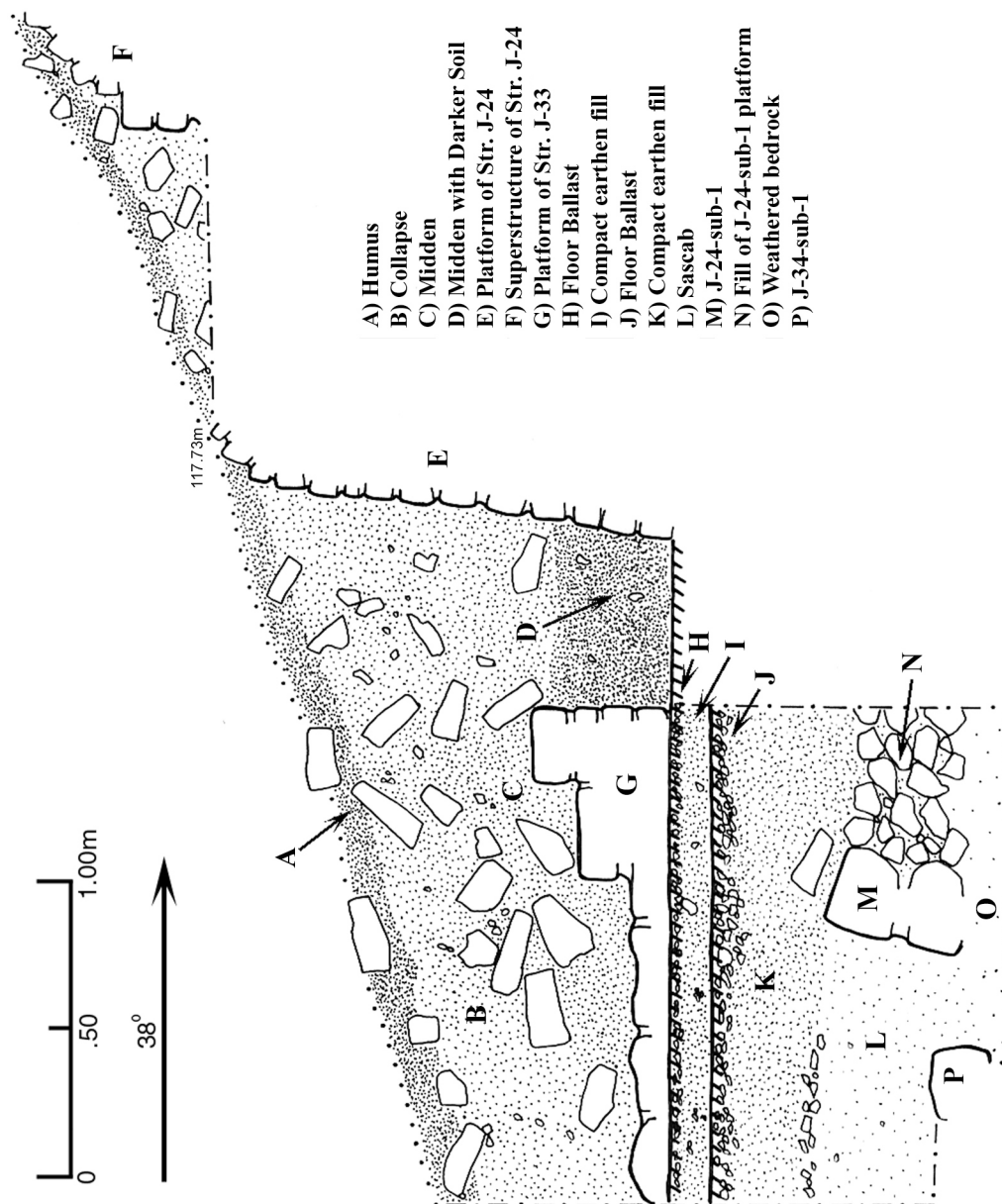


Fig. 6.15: Section of PN-46F-17 and PN-46F-21.

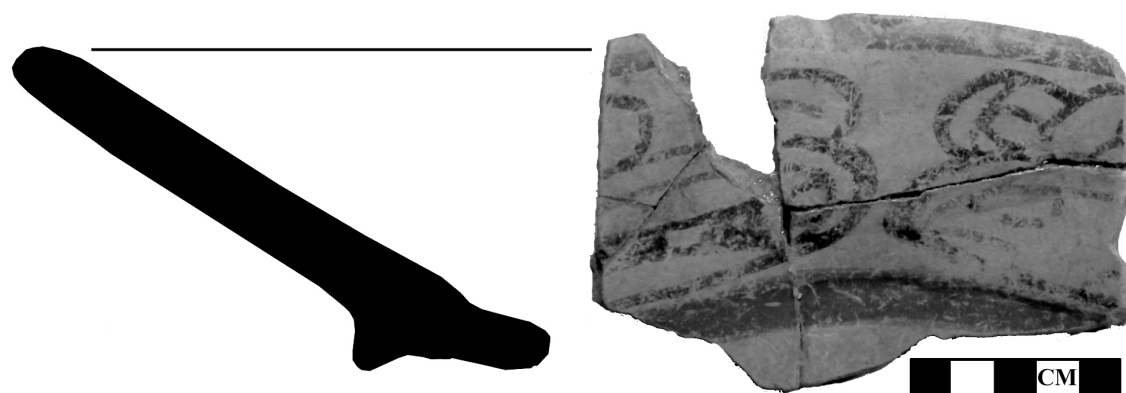
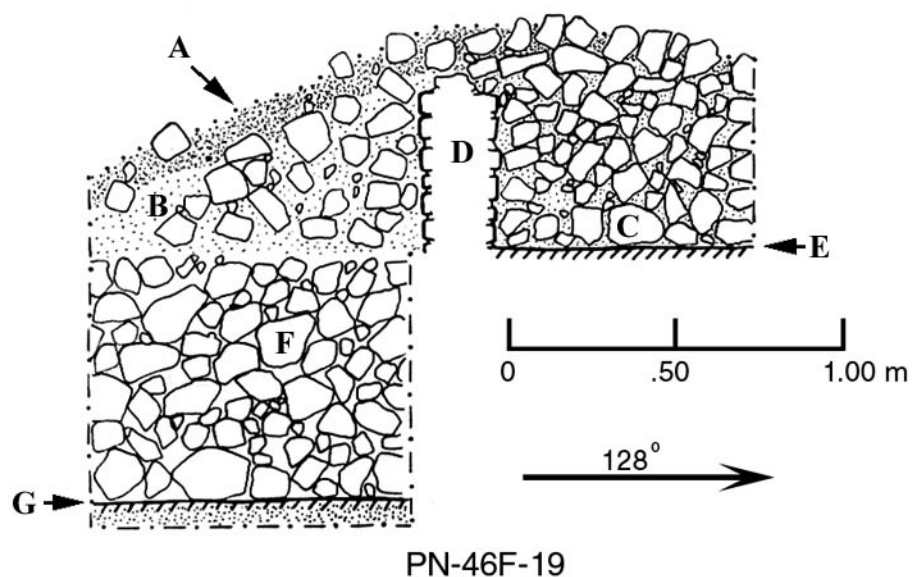


Fig. 6.16: Tsak polychrome plate fragment, Balche phase, from PN-46F-17-7.



- A) Humus
- B) Collapsed Masonry
- C) Fill of Bench
- D) Bench
- E) Interior floor of Str. J-33
- F) Fill within platform of Str. J-33
- G) 1st Patio Floor beneath Str. J-33

Fig. 6.17: Section of PN-46F-19.

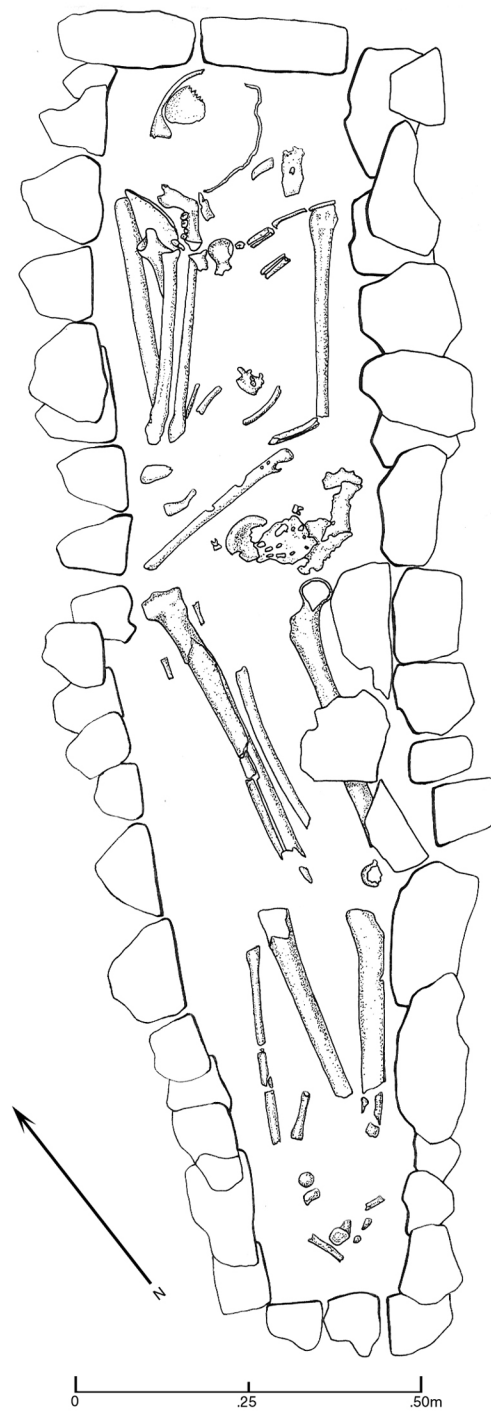


Fig. 6.18: Burial 104 (drawing by the author).



Fig. 6.19: Manos excavated from PN-46F.



Fig. 6.20: Whole vessel, excavated from PN-46F-26-1.

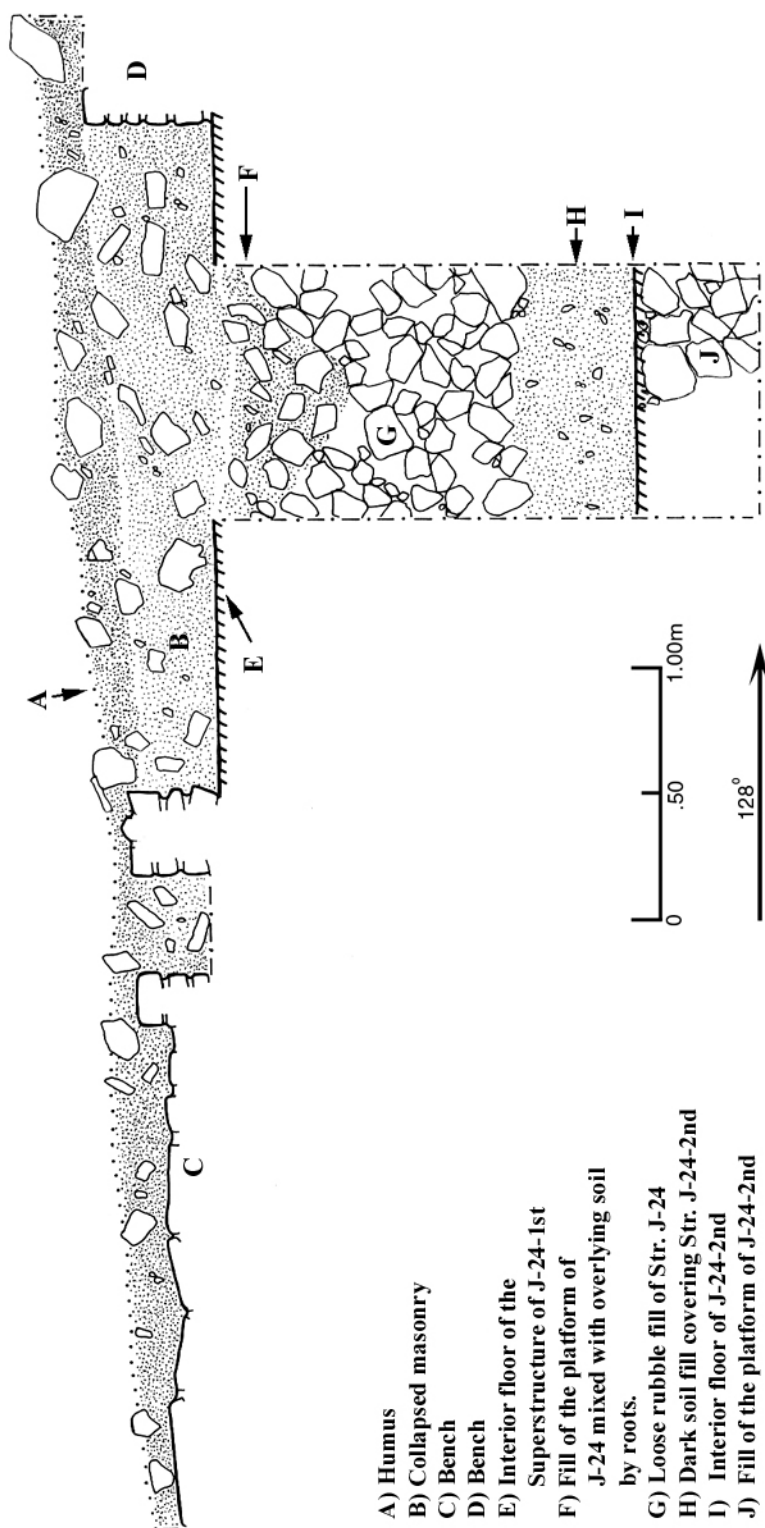


Fig. 6.21: Section of PN-46F-26, PN-46F-27, and PN-46F-28.

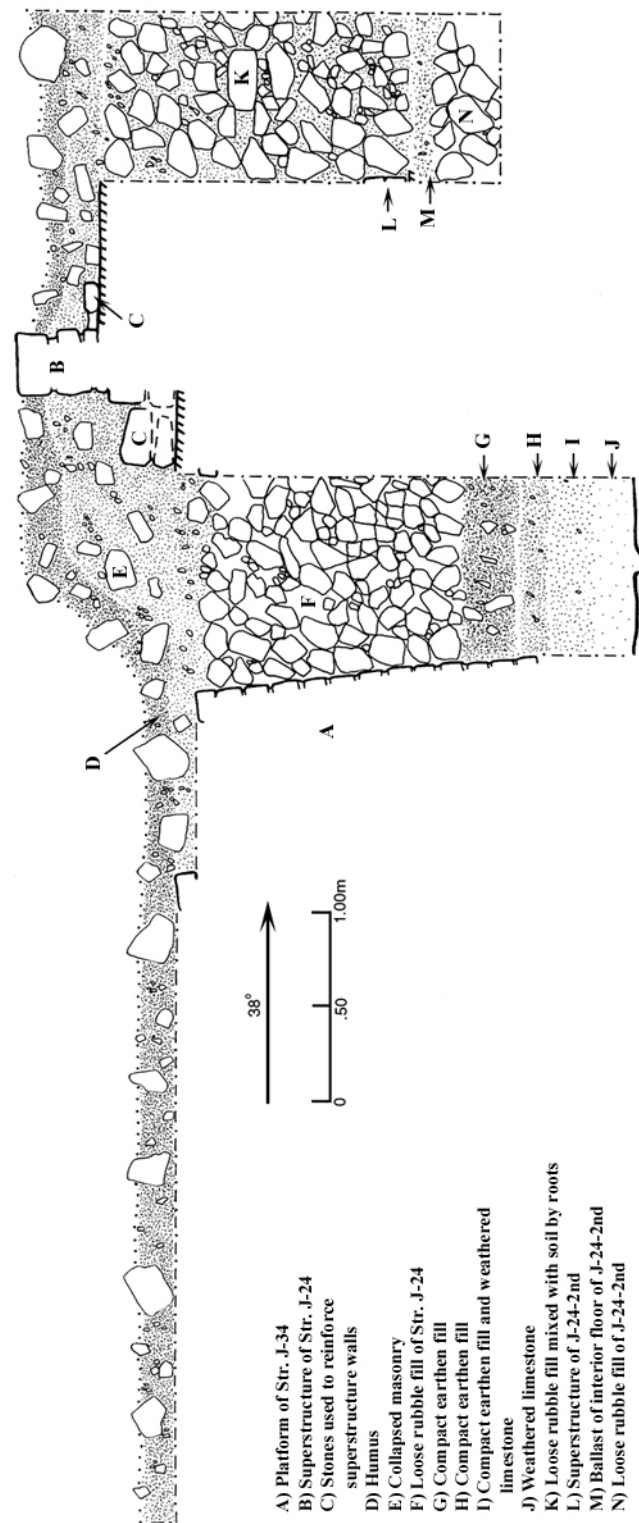


Fig. 6.22: Section of PN-46F-13, PN-46F-25, PN-46F-29, and PN-46F-28.

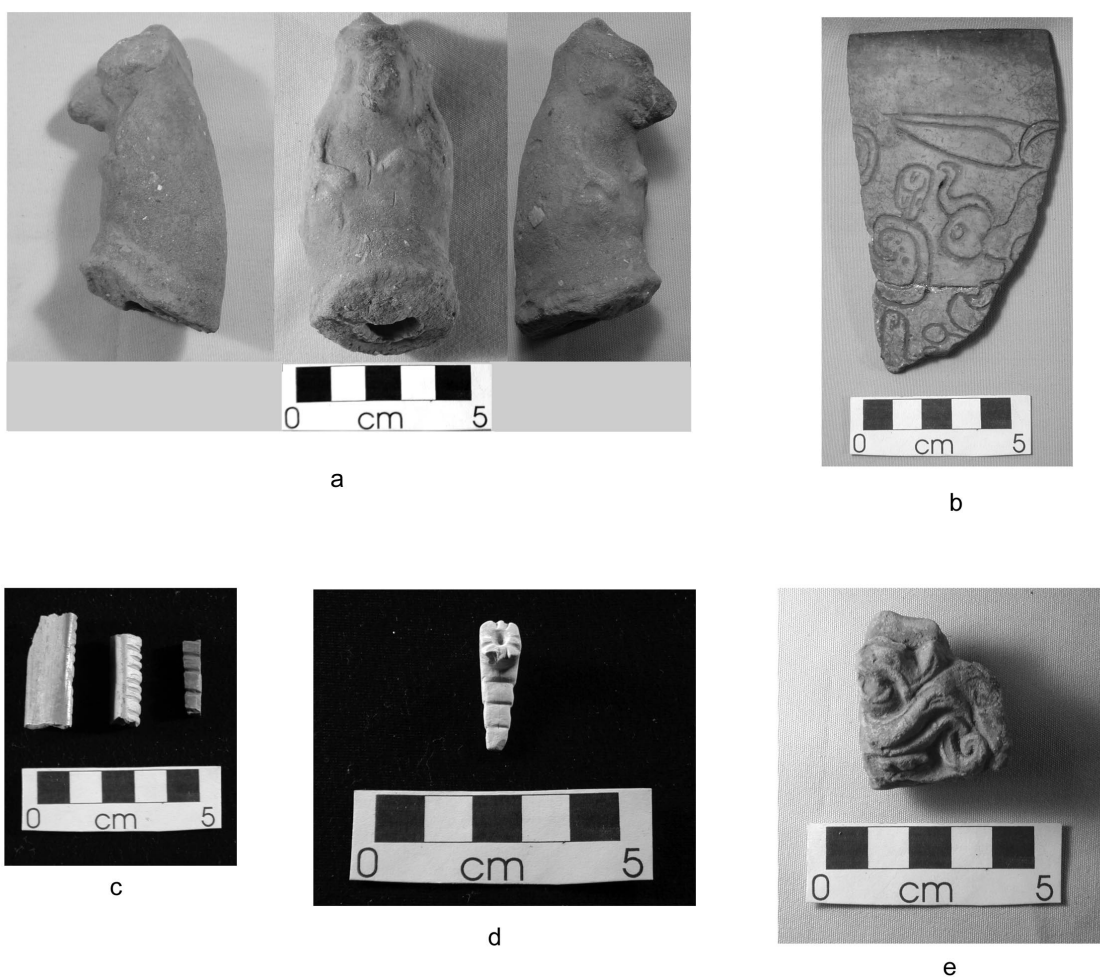
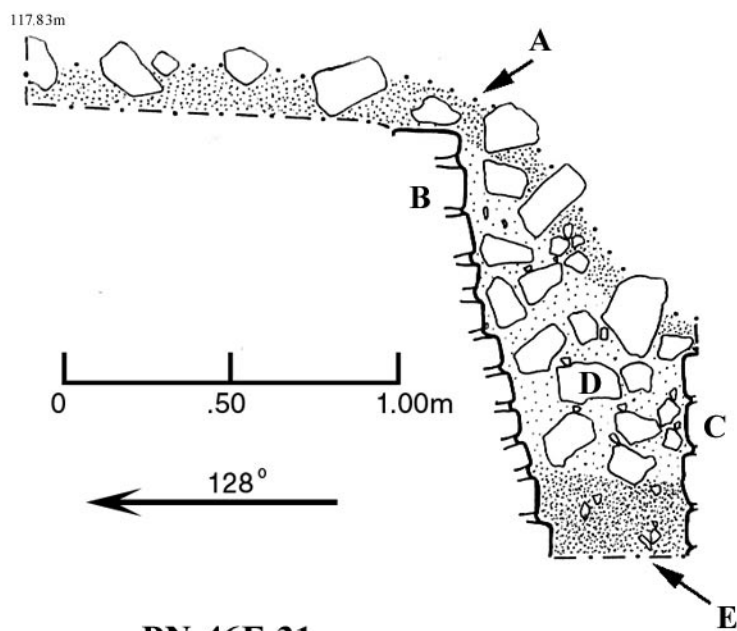


Fig. 6.23: (a) Post from tripod brazier in the form of a bat, (b) Cylindrical vessel fragment with incised death god figure, interior and lip are burned, (c) Bone rasps, (d) earspool made from conch shell, (e) Ceramic ocarina in the form of a bird.



PN-46F-31

A) Humus

B) Str. J-34

C) Str. J-33

D) Collapsed masonry and midden

E) Midden

Fig. 6.24: Section of PN-46F-31.

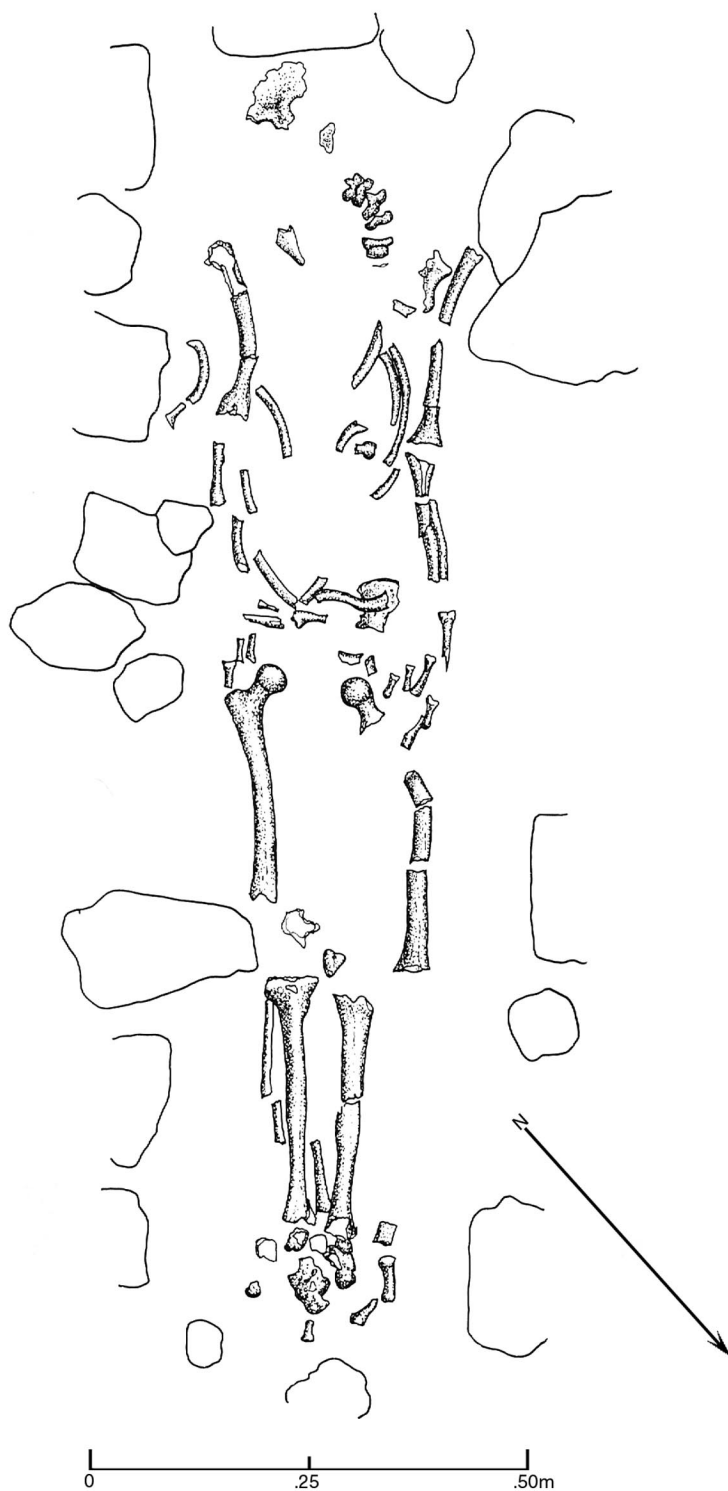


Fig. 6.25: Burial 83 (drawing by Zachary Hruby).

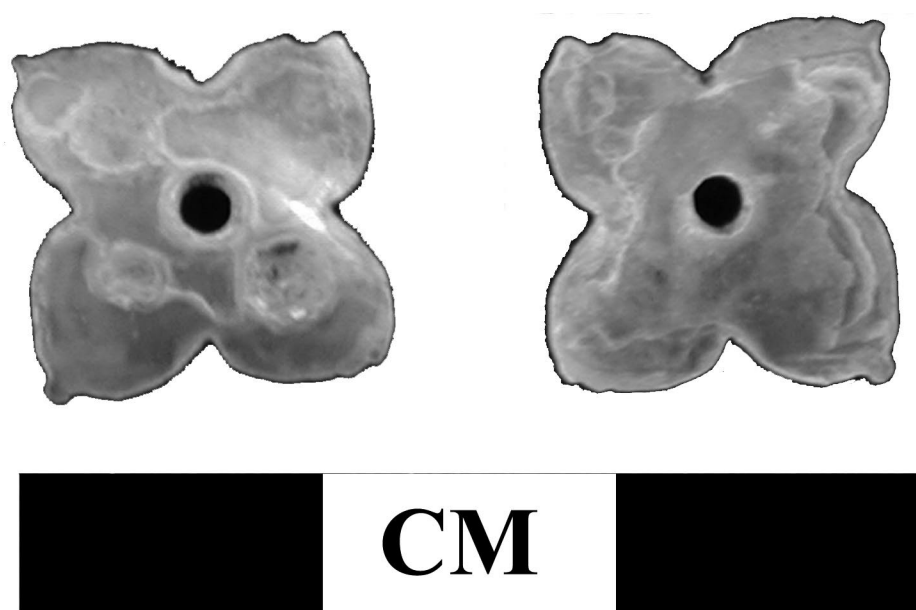


Fig. 6.26: Mother-of-pearl flower from Burial 83, front (left) and back (right).



Fig. 6.27: Pendant made from the tooth of a canine, from PN-46H-1-2.

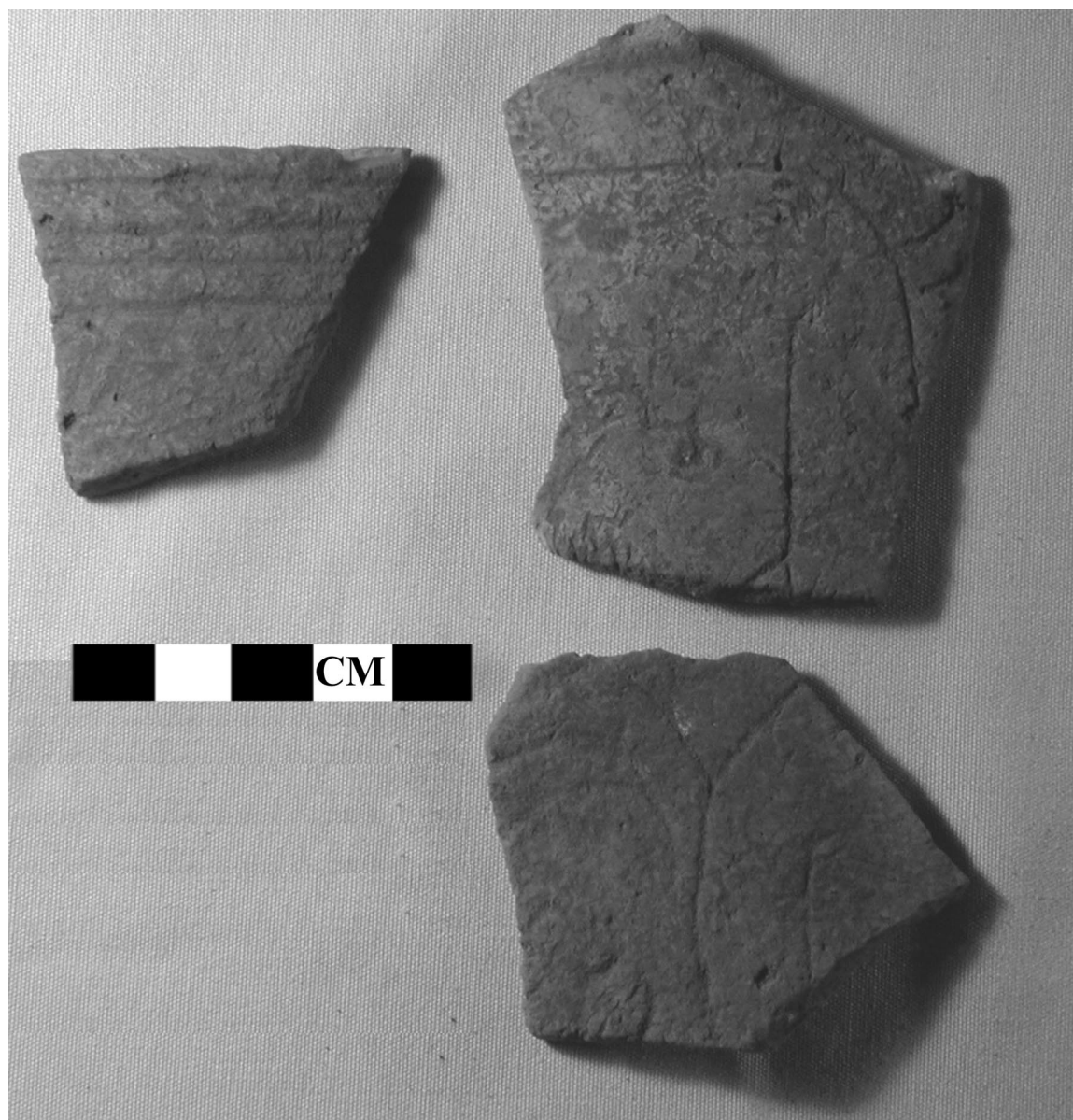


Fig. 6.28: Kumche phase ceramics (Trapiche incised: Tempered variety) from PN-46H-3-2.

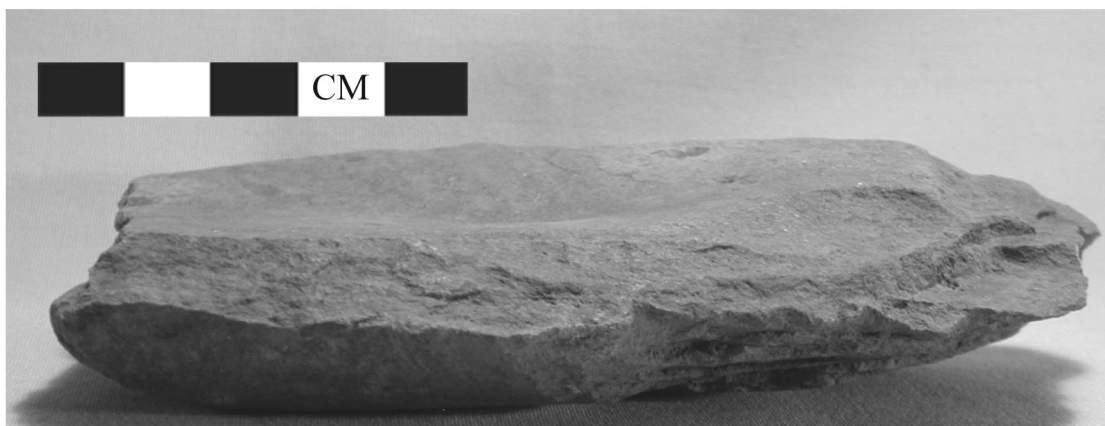
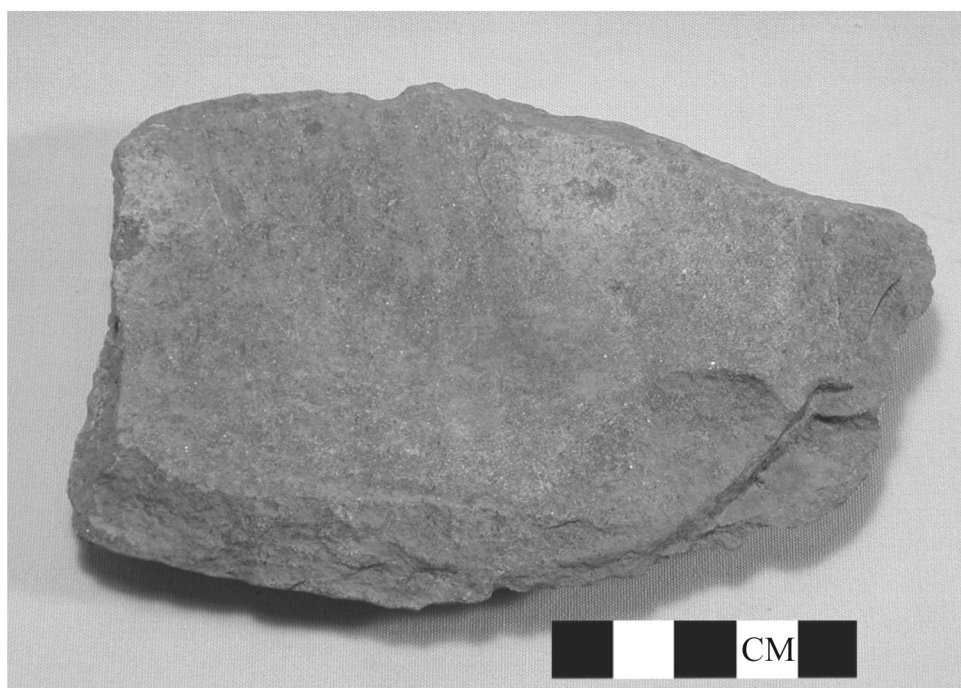


Fig. 6.29: Schist metate, possibly used for grinding pigments, from PN-46F-5-2.

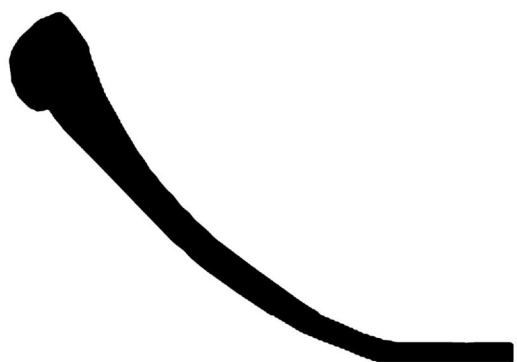
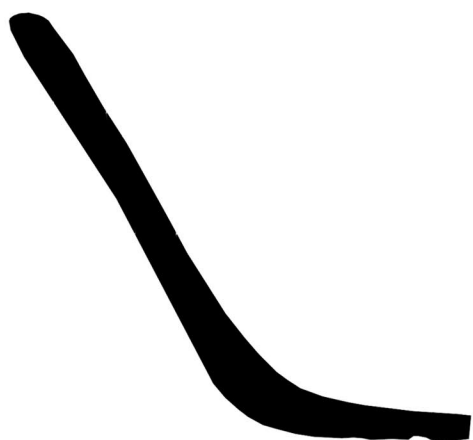


Fig. 6.30: Two partially restored whole vessels from PN-46H-7-2, a Bolonchac orange polychrome bowl (above) and a Tinaja red basin (below).

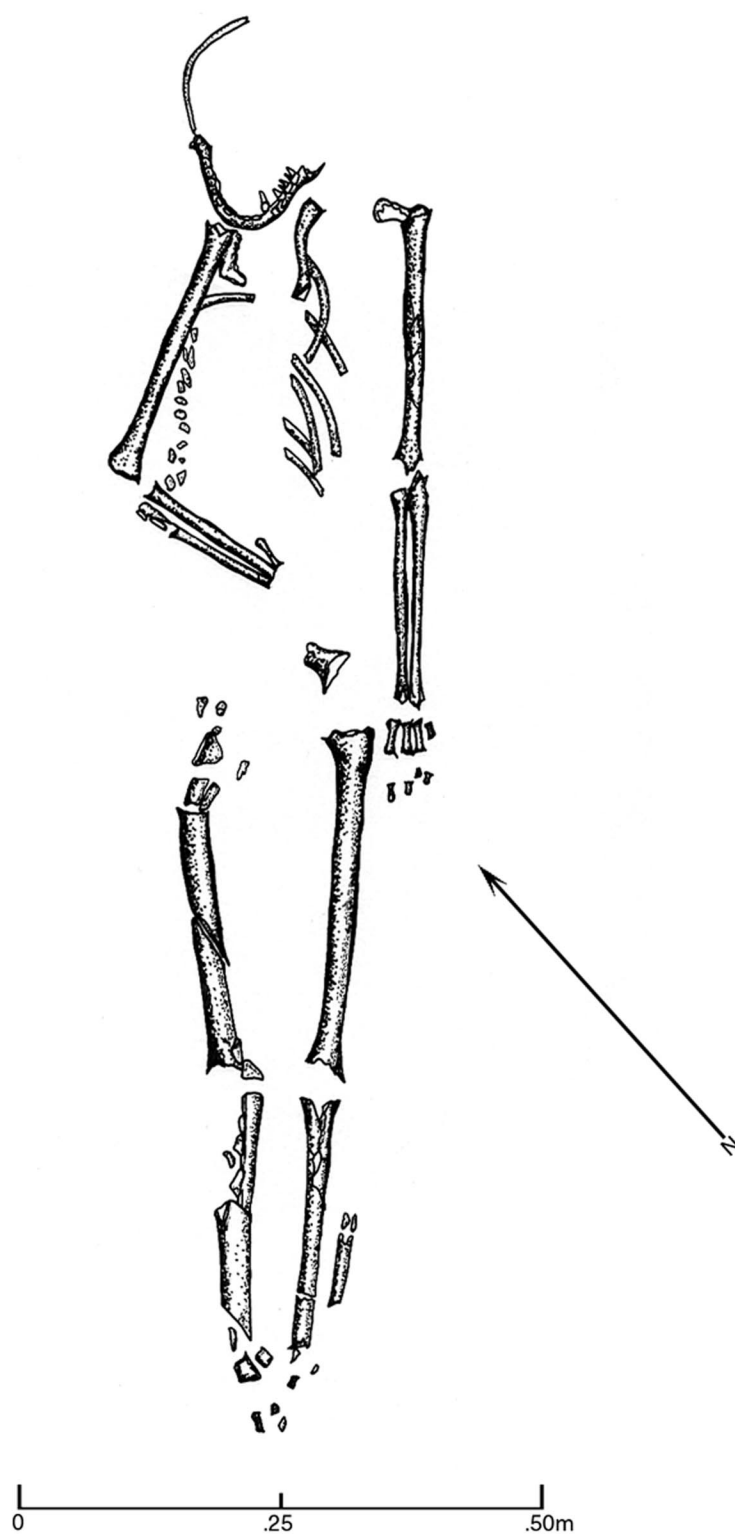


Fig. 6.31: Burial 94 (drawing by the author, inked by Zachary Hruby).

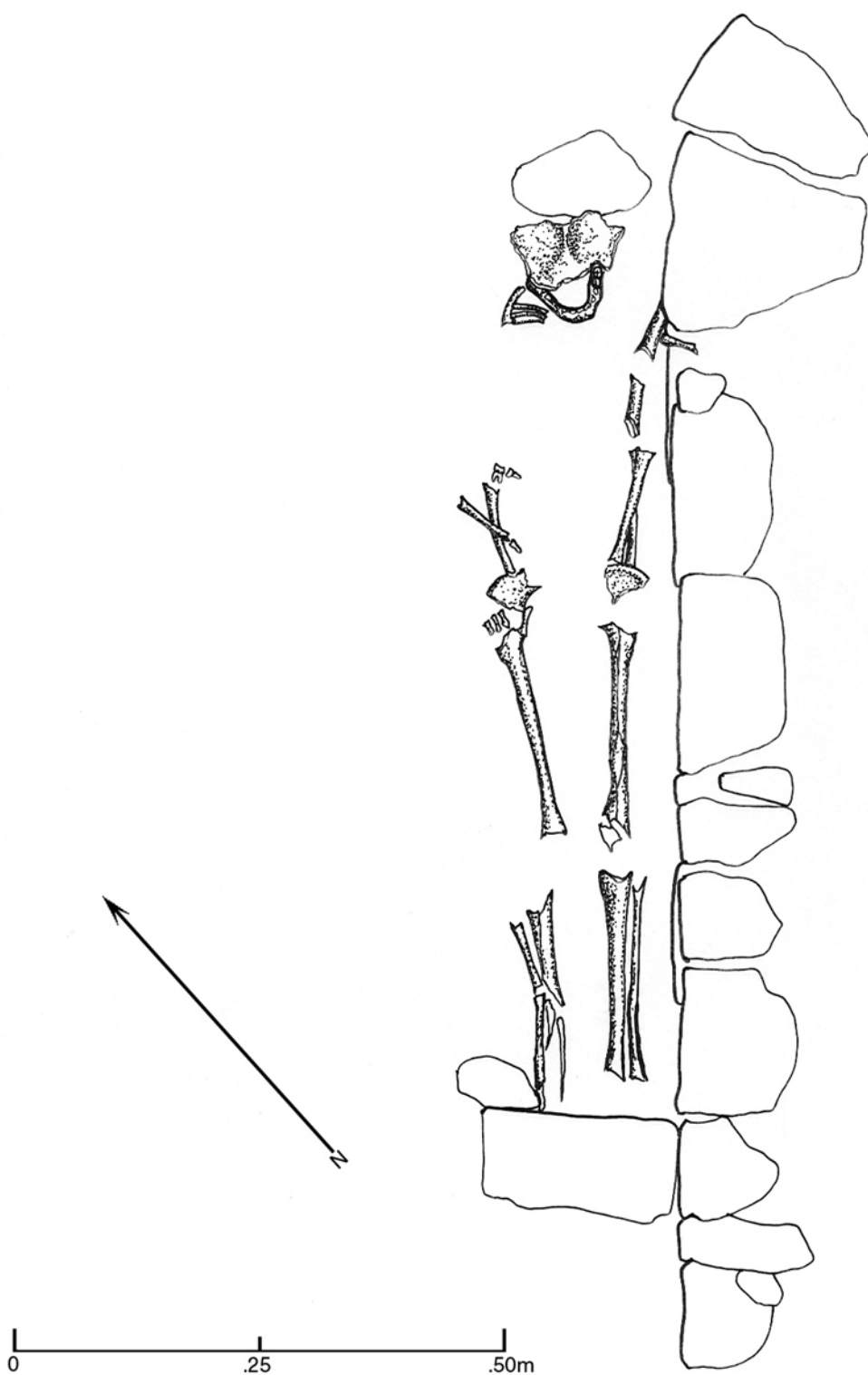


Fig. 6.32: Burial 95 (drawing by the author).

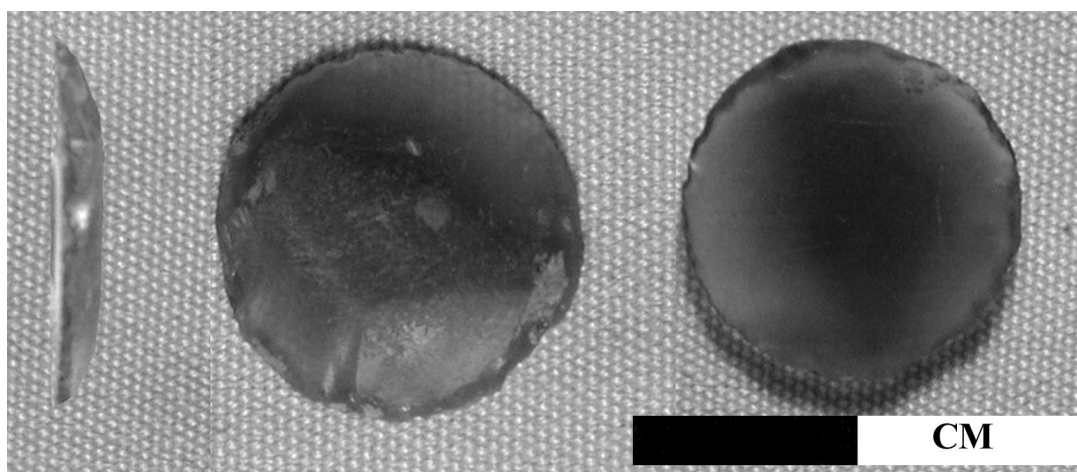


Fig. 6.33: Obsidian disk excavated from Burial 95. Lateral (left), reverse (center), and obverse (right) perspectives.

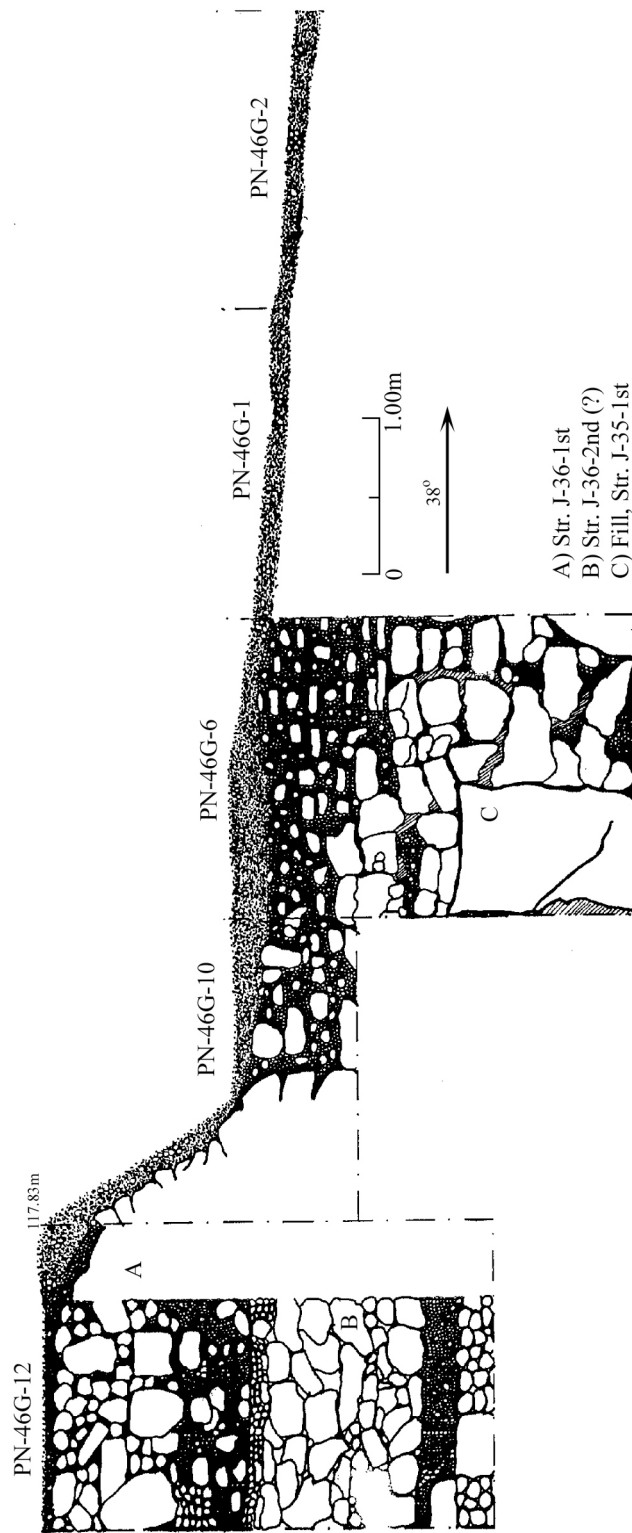


Fig. 6.34: Section of PN-46G-12, PN-46G-10, PN-46G-6, PN-46G-1, PN-46G-2 (drawing by Fabiola Quiroa).

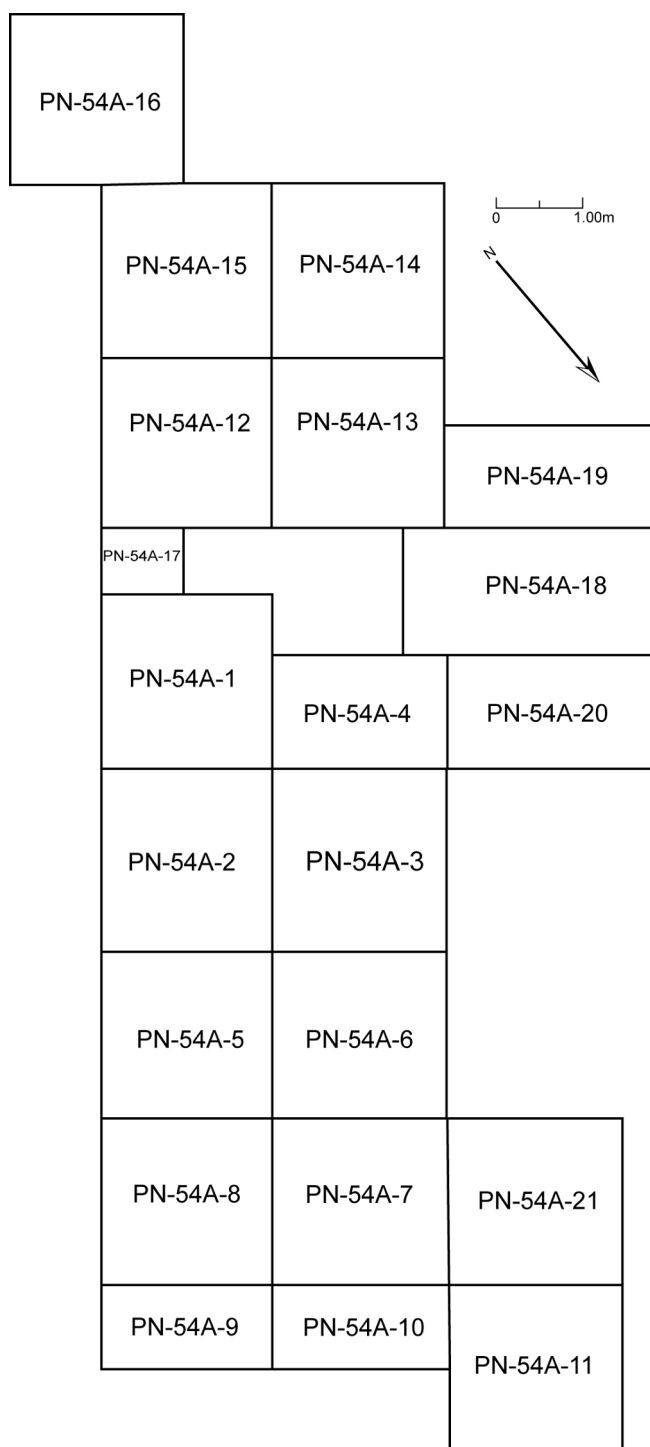
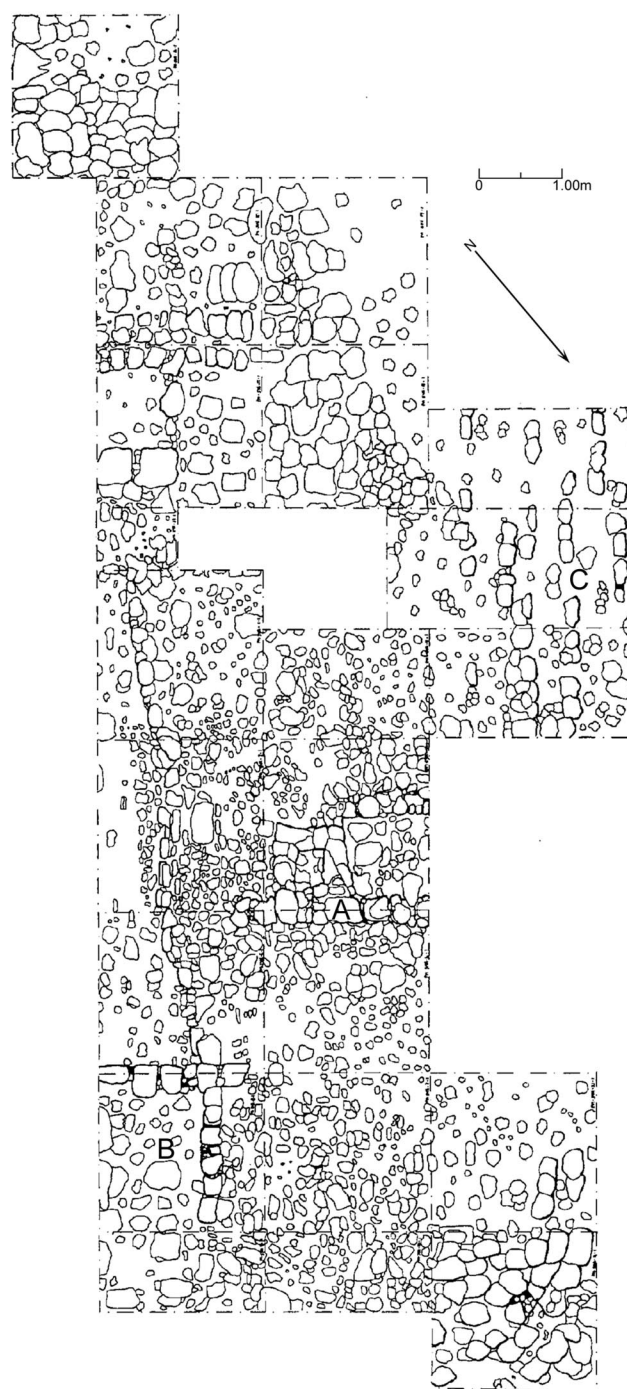


Fig. 6.35: Schematic plan view of units in PN-54A.



- A) Possible bench, associated with Kumche phase ceramics (Pabellon Modeled-carved).
- B) Bench
- C) Staircase descending to Str. J-28

Fig. 6.36: Plan view of PN-54A, showing poorly preserved masonry of Str. J-27 (drawing by Fabiola Quiroa).

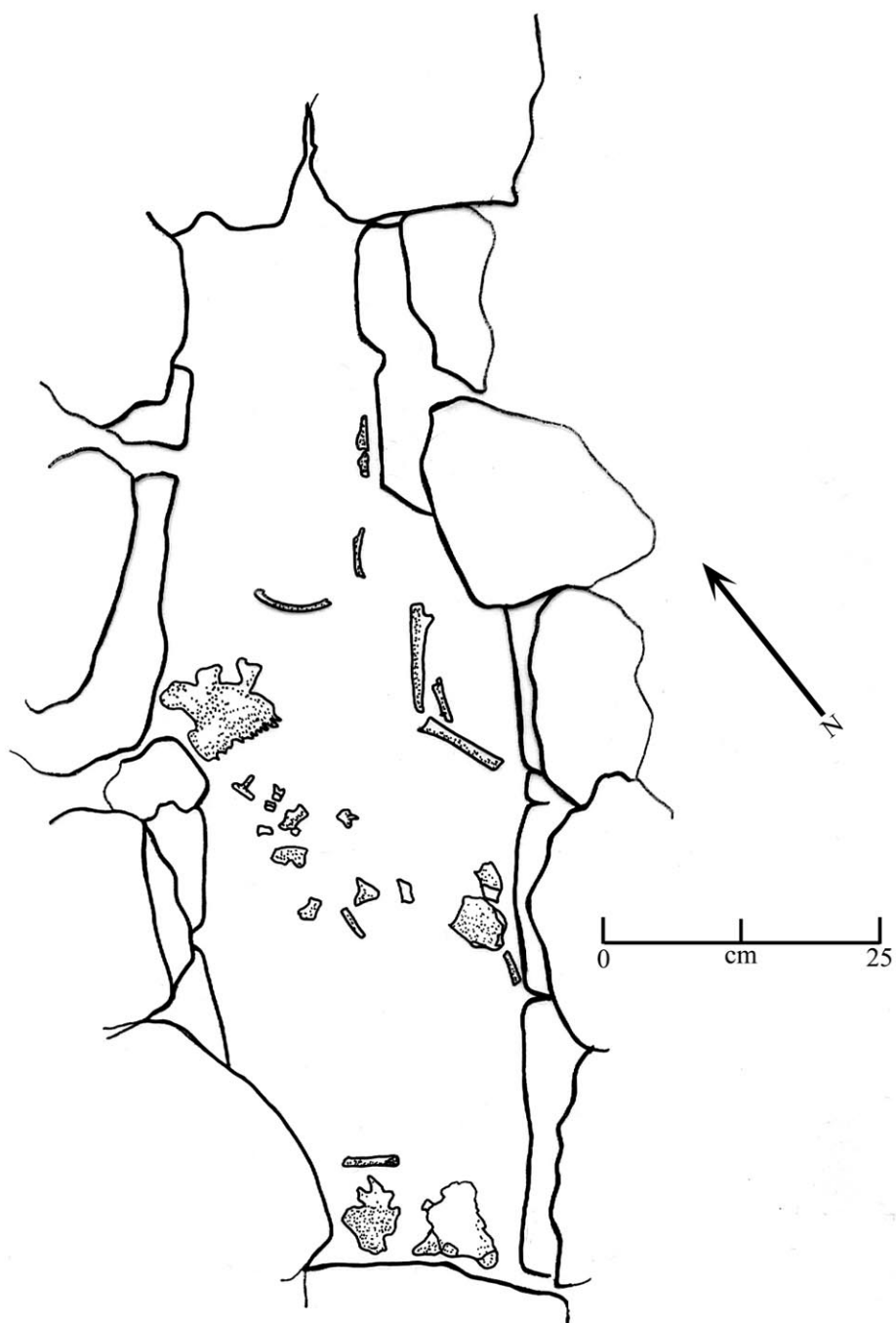


Fig. 6.37: Burial 79 (drawing by Zachary Hruby).

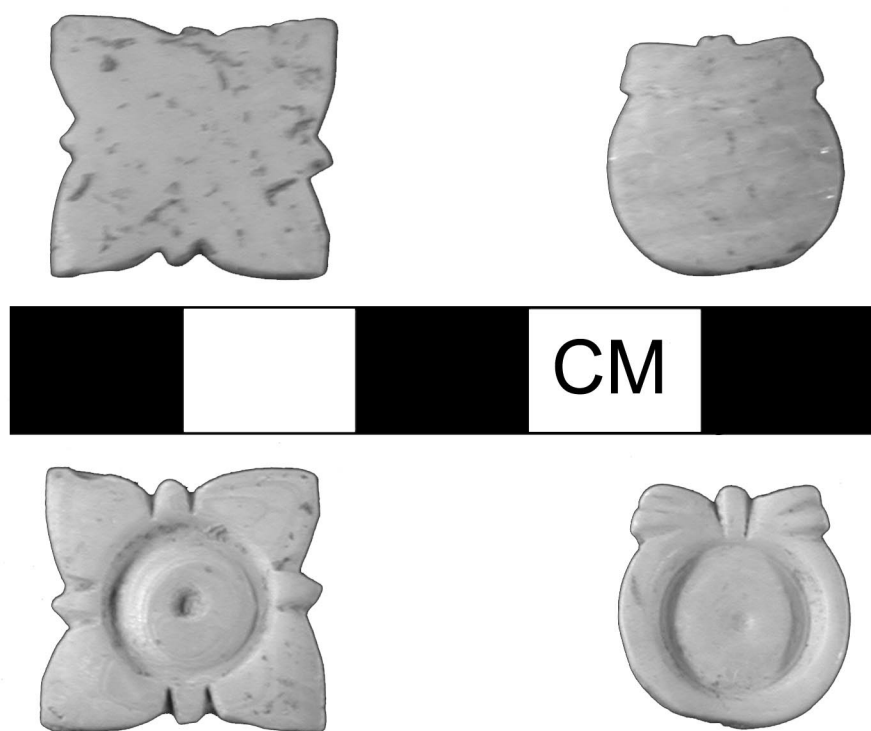


Fig. 6.38: Carved shell or bone plaques from PN-54A-3-2 (right), and PN-54A-3-5 (left).

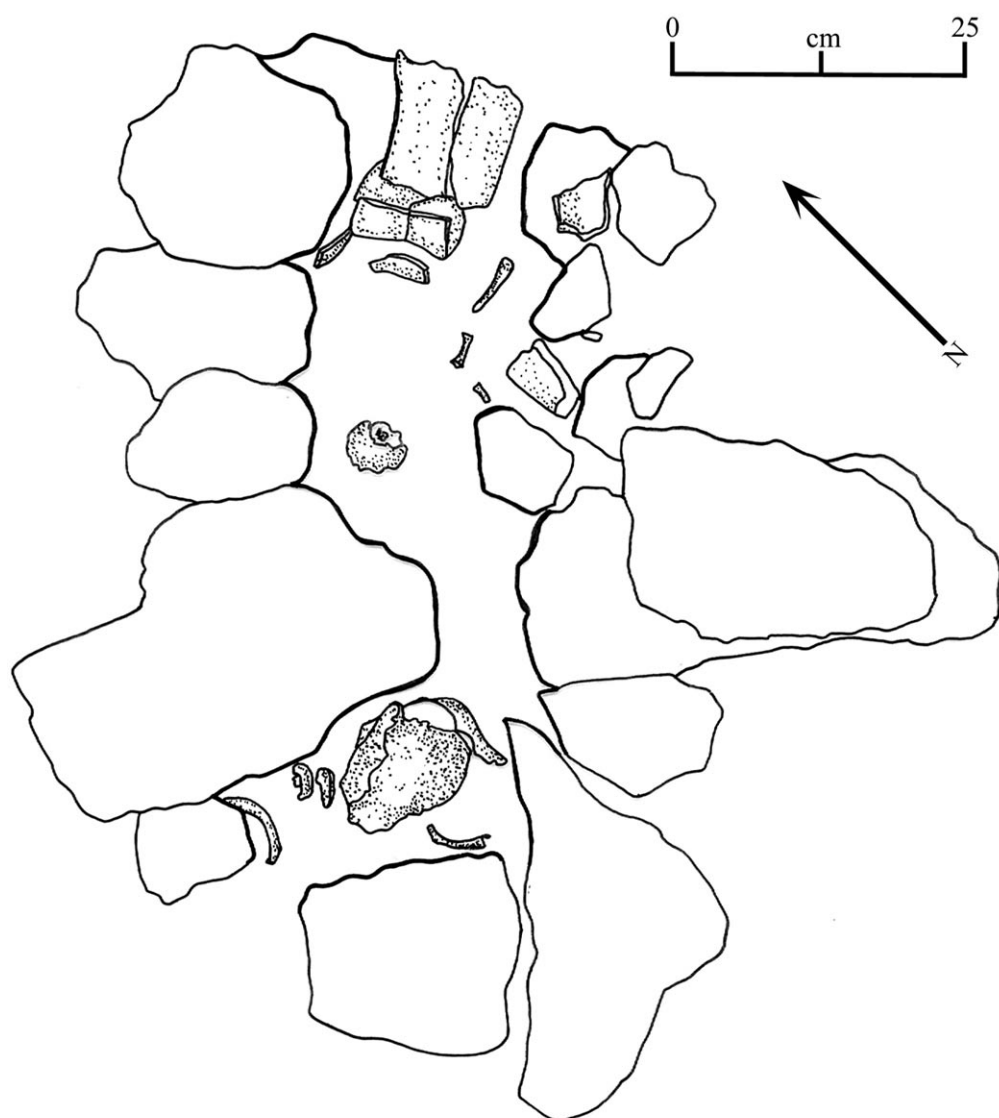


Fig. 5.39: Burial 80 (drawing by Zachary Hruby).



Fig. 6.40: Bone needle from Burial 80.

Regional Chronology	Ceramic Phases	YEARS, AD	J-24	J-25	J-26	J-27	J-33	J-34	J-35	J-36
POST CLASSIC CLASSIC TERMINAL LATE EARLY	---?---	1000 900								
	KUMCHE									
	CHACALHAAZ	800		J-25-1st	J-26-1st		J-33-1st	J-34-1st J-34-2nd	J-35-1st	J-36-1st J-36-2nd (?)
	YAXCHE LATE EARLY	700	J-24-1st J-24-2nd J-24-sub-1			J-27-1st	J-33-sub-1			
	BALCHE	600								
	NABA LATE EARLY	500 400				J-27-2nd (?)				
		300								

Fig. 6.41: Overview of known construction sequence in Court 4 and Str. J-27 (see Appendix 2 for a detailed summary of Court 4 excavations).

Chapter 7: Construction and Termination in the Acropolis as Chronological Practice

“Cheerfulness, good conscience, joyous deed, faith in what is to come - all of this depends . . . on whether one knows how to forget things at the proper time just as well as one knows how to remember at the proper time . . . This is the proposition the reader is invited to consider: *the ahistorical and the historical are equally necessary for the health of an individual, a people, and a culture.*”

Friederich Nietzsche (1995: 90)

7.1: Introduction: Piedras Negras and the Early Classic / Late Classic Divide

The previous two chapters provided descriptions of the raw excavation data from Courts 3 and 4, and a minimal interpretation of those data as they pertain to the architectural development of the Acropolis as a whole. What, though, is the social significance of these architectural changes? Because the subject of this work is the notion that indigenous chronological concepts have as one component a material expression in architecture, this chapter focuses primarily on an understanding of that aspect of the architecture of the Acropolis.

Because chronological practice is most clearly marked by moments of disjunction and the boundaries around any particular expression of the person/place/time relationship, it is around obvious breaks in the architectural patterns that chronological concepts are most likely to become apparent to the archaeologist. There are two obvious breaks – fundamental discontinuities rather than mere disruptions or changes in the pace of construction – in the general pattern of architectural growth and development of the Acropolis. One of these occurred at the end of the 8th Century AD, a time when the polity was crumbling into disarray, and forces from Yaxchilan had captured Ruler 7, the last known Piedras Negras dynast (Stuart, 1998b). It is no surprise in such circumstances that

the palace, too, should crumble or be brought down in the wake of the systemic failure of the Piedras Negras polity.

The architectural break that occurred in the second half of the 6th Century, however, cannot be explained by abandonment or systemic collapse of the polity, and it is on this earlier episode that I wish to focus. Although the royal palace of Piedras Negras was largely demolished, and the location was apparently free of any monumental building program for a period of at least several decades, the 7th Century was a period of unprecedented growth elsewhere at the site, in terms of sheer architectural mass and settlement throughout the area (see Houston et al., 1999: 11; Houston et al., 2000, 2001).

Piedras Negras was not the only city to witness such a dramatic break in the architectural sequence of its royal palace. To different extents, sites in the Southern Maya Lowlands including Altar de Sacrificios (Willey, 1973), Tikal (Coe, 1990; Harrison, 1970; Laporte, 1993; Laporte and Fialko, 1990, 1994, 1995; Jones, 1991), and Copan (Fash and Stuart 1991; Sharer, n.d.; Sharer et al. 1999a, 1999b) all experienced significant changes in their patterns of royal architecture. These changes are evident in the destruction of buildings, a change in the location of the royal palace, and breaks in construction sequences between the mid-6th and 7th Centuries AD.¹

Drawing on the epigraphic data, Tatiana Proskouriakoff (1950) was the first to note a "hiatus" in monument erection around AD 534 (9.5.0.0.0) and ending at approximately AD 593 (9.8.0.0.0.0). She also noted that the latter date coincided with an important division (between the Tzakol and Tepeu phases)² in the ceramic chronology

¹ The architectural, political and chronological changes at these sites will be discussed in greater detail in Chapter 8.

² This phase change, established at the site of Uaxactun, is approximately co-eval with the divide between

proposed by Smith (1950; Sharer, 1994: 685-687) for Uaxactun. Though a true hiatus in monument dedication is now known not to have occurred (Culbert, 1991: 316-317), and some sites even flourished during this period (Chase and Chase, n.d.; Jones, 1991), many sites do exhibit a disruption of their dynastic record during the 6th century (see Martin and Grube, 2000). It is likely that many 6th Century monuments did exist, but were destroyed during this period by either internal or external forces. John Graham (1973: 67-68; Willey, 1973: 68) has convincingly argued for such a pattern of destruction at Altar de Sacrificios, while Christopher Jones (1991) and Robert Sharer (n.d.) have offered similar arguments for Tikal and Copan respectively.

The late 6th and early 7th Centuries was a period of dramatic, and often violent, change resulting from shifting alliances and changing political organization across the Maya area. Within this general pattern Piedras Negras experienced its own historically particular socio-political upheaval. These changes are almost certainly related in part to the increasingly evident hostilities and political machinations of the rulers of Calakmul and Tikal as they sought to develop regional hegemonies (see Chapter 8; Martin and Grube, 1995; Martin and Grube, 2000). In addition, such regional patterns must be considered in light of the changing nature of the relationship between the central Mexican polity of Teotihuacan and the polities of the Maya Lowlands, a situation that is still poorly understood (see Chapter 8; Willey, 1974; Pazstory, 1978; Stuart, 2000).³ We must also understand these changes to be, in part, local phenomena directly resulting

the Naba (c. 450 - 590) and Balche (c. AD 590 - 640) ceramic phases at Piedras Negras (Holley, 1983).

³ The influence of these regional antagonisms on the political development of Piedras Negras remains unclear (though see Chapter 8.5; Martin and Grube, 2000: 104). There is, in fact, archaeological evidence at Piedras Negras of some sort of interaction with Teotihuacan in the form of green obsidian and 'candeleros' found in association with Str. R-5 (Escobedo and Zamorra 1999), as well as figurines typical

from the peculiarities of rulership in the Piedras Negras polity.

This much has long been known and identified by archaeologists, interpreted and indicated chronologically as the divide between the Early and Late Classic Periods. Yet, despite the fact that archaeological chronologies are modern creations, it does appear that in marking the divide between Early and Late Classic periods archaeologists are identifying an era recognized by the Maya themselves to be a time of dramatic social change and potential chronological rupture.

I do not identify this as a period of reaction to change, or of passive transformation, during which as Willey (1973) states, "significant and notable changes in several aspects of culture came about more or less concurrently." Rather, I see this as a period during which many aspects of material culture were actively manipulated by the rulers of Maya polities, as well as members of their subordinate nobility, in ways that were intended to ensure the perception of social stability, as well as to stabilize and reorient political relationships within and between polities, during a time of socio-political upheaval. This was done in part through the manipulation of chronologies intended to locate the ruler in space and time.

7.2: Synopsis of the Acropolis from its Beginnings until the 7th Century AD

Before addressing the issues relevant to the chronological significance of continuities and disruptions in the architectural sequence of the Acropolis, it is appropriate to offer here a brief synopsis of the construction history of the Acropolis at the Early to Late Classic divide, and the relationship of the developments in the palace to

of Teotihuacan (see Fig. 5.17). These regional issues are discussed in Chapter 8.

architectural patterns observed elsewhere at the site. Evidence of occupation in the Acropolis before the end of the 5th Century AD is extremely limited. Excavations have produced only a single fragment of ceramic from the Late Preclassic, pressed against bedrock and with no secure architectural associations (see Chapter 5, *PN-III-6-3*). Given the extent of excavations conducted at Piedras Negras, it is safe to conclude that there were no masonry structures in the area of Acropolis during the Preclassic or Protoclassic.

Masonry architecture during the Middle and Late Preclassic was centered on the South Group Plaza, where excavations have revealed walls and platforms beneath Structures R-3, R-5 and R-32 (Child and Child, 2000; Escobedo and Zamorra, 1999: 225, 2000; Houston et al., 2000: 99). After about AD 450, however, there seems to have been a significant expansion in settlement throughout Piedras Negras. Our current understanding of the data indicates that this rapid growth took place at the end of the Early Classic period, based on associations with Naba Phase ceramics (AD 450 – 550).

Excavations have revealed the extensive remains of masonry platforms arranged into spacious courtyards below the West Group Plaza (Garrido 1998: 64, 1999, 2000). The location and arrangement of these platforms leads us to believe that this was the Early Classic palace of Piedras Negras. The superstructures of these buildings were entirely removed, as was much of the masonry of basal platforms. The buildings were covered in a dark clay layer similar to that found covering Early Classic structures in Court 3. The buildings themselves are securely associated with Naba phase ceramics. The boundary between the buildings and the construction sequence of the West Group Plaza floors, formed by the dark clay layer, appears to have a mixture of Yaxche and Naba phase ceramics.

Project ceramicist René Muñoz (personal communication, 2001) notes that Balche phase ceramics are conspicuously absent in the West Group Plaza sequence. He interprets the mixture of Yaxche and Naba ceramics as indicating the exposure of the clay layer, from the point of deposit over the demolished Early Classic structures until such time as Yaxche phase ceramics came into use and stucco floors began to be constructed in the West Group Plaza.

On the sides of the hill that later forms the bulk of the Acropolis, this same period witnesses the construction of buildings that, instead of being arranged into formal patios, were arrayed along the natural contours of the land. At present we have evidence of contemporary structures beneath Courts 1, 2, 3, and 4, and under the J-17 sweatbath (Houston and Arredondo Leiva, 1999a, 1999b, 2000a, 2000b, 2000c; Houston and Urquizú, 1998; Child and Child, 1999).

In Court 1, excavations have revealed a platform underneath the megalithic staircase of J-1 that underwent modification and expansion at least three times (Houston and Arredondo Leiva, 1999b). Excavations have also revealed the extensive remains of a series of large platforms below structure J-7 (Platforms 9, 11, and 3), each consisting of only one construction episode. Though some of the structures under J-7 seem to be arranged in relation to other contemporary structures, there is no indication for the Early Classic structures of the kind of limited access patio architecture that so characterizes subsequent construction in the Acropolis (Houston and Urquizú, 1998: 251; Satterthwaite, 1954: 63-72). No Balche phase ceramics have been identified in relation to any of the buildings in the J-7 construction sequence.

An Early Classic structure uncovered beneath Str. J-1 was modified in at least three construction episodes before it was finally buried after the complete removal of its superstructure. The stratum associated with the burial of this structure consists of dark clay with abundant bajareque, and closely resembles that covering the remains of Early Classic structures in the West Group Plaza and Court 3. Although there was not the quantity of unusual artifacts associated with the remains of this building as with Str. J-20-sub-1, there was at least one partial vessel and a human mandible (Houston and Arredondo Leiva, 1999b: 255-256).

Naba phase ceramics have also been encountered below J-6, but without secure architectural associations (Houston and Arredondo Leiva, 2000b). Re-excavation of the Burial 5 tomb in Str. J-5 indicates possible construction there during the Early Classic (Houston and Arredondo Leiva, 2000b). A construction sequence for that platform has not been fully developed for lack of data.

Deep soundings made into Str. J-11 in Court 2 revealed what are possibly two phases of an Early Classic building built atop the bedrock. These structures have the same orientation as Str. J-11-1st, apparently defined by the natural rise in the hill. The first of these buildings was covered in a layer of dark clay and ash similar to that which covered Early Classic buildings elsewhere in the Acropolis. The second structure was also associated with burned clay, and a deposit that Houston and Arredondo Leiva (2000a) describes as a midden. The material excavated from these contexts is still under investigation, making comparisons with the deposits capping Early Classic structures elsewhere in the Acropolis difficult. What is clear is that stratified deposits containing Naba Phase ceramics give way directly to strata containing Yaxche ceramics (Houston

and Arredondo Leiva, 2000a). Naba phase ceramics are also associated with stratified deposits in the construction sequence of Str. J-17, but we do not have detailed data concerning the transition from the Early to Late Classic periods for this building (Child and Child, 2000).

In Court 3 excavations have revealed two substructures associated with Naba phase ceramics. Both structures are associated with a chasm that runs from northwest to southeast across the hilltop. The first, and smaller, building, J-20-sub-1, lies in front of and beneath Str. J-20 and is associated with a staircase that climbs the bedrock to the lip of the chasm. The second and larger structure, J-18-sub-2, lies on the opposite side of Court 3 to the northwest of Str. J-18, and is built directly against the bedrock leading up to the chasm edge.

In Court 4, evidence for Early Classic architecture is entirely absent, although stratified deposits containing Naba phase ceramics hint that buried buildings from this period still remain to be uncovered. Court 4 is unique in the Acropolis in having what may be architecture associated with Balche phase ceramics, Strs. J-24-sub-1 and J-34-sub-1. These low platforms are associated with a mix of Balche and Yaxche phase ceramics. However, the strata are not sealed and, given the quantities of Balche ceramics present in association with these two structures as well as J-33-sub-1, I feel that the most likely explanation is that the later materials are the result of mixing and the earlier materials provide a date for the structures.

At some point in the middle of the 6th Century (c. AD 550 – 630), every one of the structures of the Early Classic Acropolis was destroyed and buried. Building superstructures were torn down and much of the masonry of the platforms was ripped

out. At least one of these structures, J-20-sub-1, was burned in an act of ritual destruction in which ceramic vessels, figurines, earspools, and jade were piled onto the smoldering remains and then capped with clay. Other buildings may have been similarly treated, as with the platform beneath Str. J-1, but later construction has obscured much of the evidence (although see Houston and Arredondo Leiva, 1999b, 2000a). During this same episode, the chasm that formed the focus of Court 3 was filled with rubble and capped. The architectural pattern of the Early Classic was not simply abandoned by the rulers of Piedras Negras, it was ritually terminated.

However, with the beginning of the period contemporary with the use of Yaxche Phase ceramics⁴ the Acropolis, along with Piedras Negras as a whole, entered an epoch of unparalleled growth. In Court 3, after several episodes of ephemeral construction the buildings and platforms that make up the final patio layout appeared, as did Str. J-23. A sweatbath, Str. J-17, was constructed to the north of Court 2 (Child and Child, 1999). The megalithic staircase and the J-3 and J-4 pyramids were erected, while the flanks of the hillside were covered in terraces and platforms. An area that had previously been occupied by a grouping of a few small, distinct masonry buildings was converted in a relatively brief period into a singular, and monumental, complex that covered almost every meter of the hillside. Late Classic construction does not reference the patterns of the Early Classic – it obscures them.

⁴ Between approximately AD 630 and 730.

7.3: Historicizing the Events: Building and Termination as Chronological

Processes

In addressing the significance of these architectural changes as indicators of indigenous chronological manipulations, it must be understood that the meaning of architecture is underdetermined, as with any material sign. For architecture to acquire and maintain the significance intended by its builders it requires performance such as those described and depicted in monumental art (Keane, 2001: 70). That architecture as a material sign *can* be dissociated from its builders is an equally important corollary to this issue (Keane, 2001: 73). It is only through performance that the architecture acquires chronological significance, or any other social salience. Performances recorded on, and performed in association with, the placement of monuments included dance (e.g., Grube, 1992), enthronement (e.g., Martin and Grube, 2000: 142; Taube, 1988), the presentation of captives or other tribute (e.g., Houston, 2001: 209-210), burials, and burial re-entry (e.g., Fitzsimmons, 1998; Houston et al. 1999: 13; Stuart, 1998), and possibly recitation of the texts themselves (Houston, 1997: 300).

To begin with the last point, it may at first seem impossible that monumental architecture such as the Acropolis of Piedras Negras can be dissociated from its builders and occupiers. A system of finely wrought masonry buildings - pyramids, palaces, sweatbaths and support structures - that is so obviously elite, so clearly connected with the royal court, does not seem amenable to alienation from those associations. Indeed, if temporality were removed from the equation such inalienability would be almost certain.

The question is, though, whose royal palace is the Acropolis? To which king was it attributed, and to which royal court did its buildings pertain? Because of its durability

the Acropolis would have acquired a multiplicity of meanings and was associated with multiple rulers throughout its use-life. Dramatic performances, such as the display of captives or the delivery of tribute, all act to continually redefine the meaning of the built environment and the significance of those spaces as signs of historical import (Lawrence and Low 1990; Pearson and Richards 1994). The performances of rulers in the spaces built by their predecessors may unwittingly act to redefine the significance of those spaces.⁵

Rulers are dependent upon their ability to make connections and disconnections with *particular* historical/political moments; they are dependent upon their abilities to properly manipulate the available chronological possibilities in order to select for themselves, and to have attributed to themselves, the appropriate relationship to notions of rulership. These notions of rulership must be constructed as “natural” if they are to help in the construction of a perception that one’s right to rule is part of the natural order of things and not simply a historical coincidence. They must, in some sense, appear to “maintain . . . the invariance of structure,” and yet nonetheless they inherently rely upon “the value of temporal depth”(Parmentier, 1985: 136).⁶

The most immediate access we have into performances related to establishing the appropriate chronological significance of the architectural patterns observed in the

⁵ Unfortunately, however, while the dynasty of Piedras Negras flourished the palace was kept relatively free of the detritus of daily life. Thus, we have no access to most of the quotidian activities through which these architectural spaces may have acquired meaning. We must assume that, though not recorded, and certainly not as ostentatious as those activities that were recorded, the day-to-day use life of a Maya palace had a significant impact on the meaning of these spaces.

⁶ In this sense such acts are reminiscent of what Hobsbawm (1983: 1) calls ‘Invented Tradition’, “a set of practices, normally governed by overtly or tacitly accepted rules and of a ritual or symbolic nature, which seek to inculcate certain values and norms of behavior by repetition, which automatically implies continuity with the past. In fact, where possible, they normally attempt to establish continuity with a suitable historical past.”

Acropolis come from the text-bearing monuments at Piedras Negras. These monuments offer insight not only for the history they record in the form of writing, but for their function as signifiers of performances that took place in association with particular loci; performances of which they are the most visible remaining material signs. That the majority of monumental texts are concerned with “activities surrounding the placement, creation, and activation of ritual things and spaces” (Stuart 1998: 375, 1996) is central to this argument.

Narrowing the focus to more local events and to the time period in question here, a Late Classic text at Piedras Negras seems to indicate that the ruler of the site suffered a significant defeat approximately concurrent with the acts of architectural termination in the Acropolis. Piedras Negras Stela 12 bears a retrospective reference to a time no later than AD 554 (9.6.0.0.0), when the ruler of Piedras Negras paid tribute to an individual who appears to have been the ruler of Pomona, Mexico (Houston et al. 2000: 101). Stela 12 is otherwise concerned with the 8th Century victory of the allies of the Piedras Negras lord over foes from Pomona. This suggests that the retrospective reference is intended to refer to a defeat in the 6th Century by the forces of Pomona over those of Piedras Negras.⁷

Although defeat at the hands of forces from Pomona provides the most likely causal event for the destruction of buildings in the Acropolis, it remains entirely unclear whether or not invaders: (1) actually carried out the destruction, (2) buildings were demolished by locals following the defeat, or (3) a combination of the two. The fact is

⁷ Texts recording a defeat followed by the vanquishing of the same foe are not uncommon and are known from sites such as Tikal, Copan, Palenque and Caracol among others (Chase and Chase 1991; Culbert 1991; Fash and Stuart 1991; Martin and Grube 2000).

that the evidence of destruction activities varies from place to place in the Acropolis, so that what emerges is a mosaic of evidence.

Excavations in Court 3 revealed what I interpret as the reverential termination of at least one structure. The structures that are visible on the surface of Court 3 at present are the product of the building programs of the 8th and early 9th Centuries AD (Fig. 5.3). Below this veneer lies a very different arrangement of natural landscape and ancient architecture that does not form a well-defined plaza.

The natural form of the hillside upon which the Acropolis was constructed rises to a broken point beneath Court 3 and is crossed from Northwest to Southeast by a deep chasm. To the southwest side of this chasm the remains of a large masonry structure, J-18-sub-2, lie beneath the Late Classic patio in front of Str. J-18 (Fig. 7.1). On the northeast side of the chasm, lying beneath the patio and the bulk of Str. J-20, is Str. J-20-sub-1 (Fig. 7.1). It is the termination of J-20-sub-1 that provides the most accessible evidence of the processes of the demolition of the Early Classic Acropolis.

The perishable superstructure of J-20-sub-1 was burned, while pieces of ceramic vessels, figurines, jade, earspools and organic materials were thrown over the remains of the building. It appears as though some of the objects were placed carefully, while others were violently smashed spreading their pieces over several square meters. A cap of dark clay was laid over this deposit. A thin layer of ash, and a color change in the clay caused by exposure to high temperatures where the layer is in contact with the building indicate that the building was still smoldering during this depositional process.

The process of deposition and the content of the deposit clearly differentiate it from a residential midden. Although some of the ceramic fragments present evidence of

use-wear, the majority of these objects show little or no signs of use prior to their disposal. In addition, the ceramic assemblage is not consistent with a domestic midden. Excavations conducted in 1999 and 2000, in Court 4 did uncover a stratified domestic midden in the Acropolis, offering a point of comparison (see Chapter 6; Golden et al., 1999; Golden and Quiroa, 2000). In contrast with the residential midden, the termination deposit was formed rapidly (possibly in as little as a few hours or days), yielded a higher proportion of polychrome and other slipped vessels, presented larger pieces overall of the ceramic vessels, the sherds are less eroded, and there were more complete or reconstructable figurines.

I identify this deposit, therefore, as the reverential termination of a building because: (1) it occurred as part of activities associated with raising the level of the patio and is therefore as much an act of construction as destruction, and (2) there is no evidence of foreign ceramics or other materials that might have been left by invading forces as is, for instance, the case at Yaxuna, Mexico (Ardren, 1999)⁸. What is evident is a local ceramic inventory that is consistent in broad terms with a late Naba Phase ceramic assemblage (c. AD 550). However, this deposit contains ceramic types that appear vanishingly rare or even unique in the overall site assemblage at Piedras Negras, yet appear to foreshadow technological and stylistic innovations of the subsequent Balche and Yaxche ceramic phases (Muñoz and Golden, 2001).

⁸ There is no reason to believe that local people at a site are not capable of the profanation of a building. In fact intense burning such as that in evidence in this case has been cited by both Stanton and Pagliaro (1997), and Brown and Garber (In Press) as evidence of the desecratory destruction of buildings. However, intense burning also functioned as a reverential act among the Maya, as well attested iconographically and epigraphically (Fitzsimmons 1998; Stuart 1998; Taube 1998).

Two lines of evidence attest to the fact that this termination event was a rather public affair, although that public may have been limited to only the most elite levels of society.⁹ In the first place there is the sheer level of effort that would have been required to bury the smoldering remains of the building. One can imagine that any one person with a torch could have accomplished the destruction of the perishable structure with its pole-and-thatch frame. However, to bury the burning building - and in fact much of the courtyard - with a layer of heavy clay would have involved considerable effort from a group of people.

In the second place, and perhaps more intriguing, many of the ceramics were incised with graffiti. Such graffiti are extremely rare in the site assemblage at Piedras Negras, but well over a dozen different vessels in the assemblage collected from this termination deposit had them. It is reasonable to assume that the graffiti were produced as part of the termination ritual, though its significance is unclear.

Although it is not possible at present to estimate the number of individual hands represented by the graffiti, several people at least were responsible for the incisions. Many of the graffiti show crude stick figures, some more rounded, some more block-like (Fig. 7.2). Other graffiti, however, appear to show the work of an artist, with well-rendered and fluid depictions of an individual (Fig. 7.3). What we are left with in the case of Str. J-20-sub-1 is the impression of a dramatic termination event, with multiple

⁹ The burning of a building on one of the highest points in the region certainly would have been visible to some extent for long distances, thus including a wider public in the event. We have no real way of estimating how visible the participants themselves would have been, much less how visible their activities. Voices in the Acropolis today can be heard for hundreds of meters across the Northwest Group and the West Group Plazas. In all probability most people in and around the Acropolis saw flame and smoke atop the hill, and heard the voices, shouts, collapsing buildings, and other noises associated with this event.

witnesses and participants who were almost certainly drawn from the elite levels of society.

Participation in such an event created a dramatic sign of disconnection, destruction, and elimination of the old palace and its associated regime. But for the Maya, notions of death and termination were not necessarily connected with an end point, but often simply indicated a potential moment of rebirth and renewal. To build directly upon the ruins of the structures so recently and ostentatiously eliminated would have suggested the possibility of continuity at a time when discontinuity with the immediate past was politically exigent. For a period of at least several decades no significant construction took place in Court 3. I interpret this as a deliberate act, a sign of disconnection and a breaking of the cycle of demolition and construction.

The evidence associated with the destruction of other buildings in the early Acropolis is not so clear. Stratigraphic association indicates that J-18-sub-2 was buried at the same time, but no artifact rich deposits were found in association with this building. In contrast, this structure was marked by the complete removal of its masonry staircase. In excavations below Courts 1, 2 and the West Group Plaza, the remains of structures were encountered capped by a layer of dark clay virtually identical to that found in Court 3. However, there is little evidence of the same kind of complex ritual deposit found in Court 3. A building buried below Str. J-1 was associated with half of a unique polychrome vessel with a large glyph band (Fig. 7.4), as well as a human mandible, but it lacked other materials that might shed more light on the process of destruction (Houston and Arredondo Leiva, 1999b).¹⁰ In all cases, however, the masonry structures of the

¹⁰ Pagliaro et al. (1997) do cite human remains in secondary contexts as one indicator of desecratory

Acropolis were brought down within a relatively short period. Subsequent construction was apparently minimal - limited perhaps to a few low platforms below Court 4 - for decades to come.

Thus, in explaining the architectural destruction as the outcome of defeat at the hands of forces from Pomona we are forced to confront two likely scenarios. On the one hand, forces from Pomona may have actually reached Piedras Negras and so leveled at least some of the buildings of the palace as they rampaged across the city. The inhabitants of Piedras Negras subsequently leveled the remaining structures as an act intended to eliminate the detritus of battle. Yet another interpretation is that, although relatively contemporary with the loss in battle to warriors from Pomona, the architectural destruction evident in the Acropolis was entirely the work of forces native to Piedras Negras, and intended to eliminate the material vestiges of a regime that had brought a devastating loss of authority to the polity.

Following the episode of destruction in the Acropolis, the focus of royal architecture at Piedras Negras seems to have shifted for a number of decades to the south. Ruler 1's (reigned AD 603 – 639) monuments are all located in the South Group Court. The dedication of his accession monument, Stela 25, in AD 608 ended a gap in the historical record of Piedras Negras that had begun in AD 539. Given, as stated above, that there exists plausible arguments for the destruction of monuments from the hiatus

architectural termination, and mandibles are associated in Mesoamerica with war captives (Stephen Houston, personal communication 2001). However, the deposition of human mandibles at Piedras Negras provides another interesting question still under investigation (Andrew Scherer, personal communication 2000). Mandibles have been encountered below floors and within sealed rooms (see Chapter 6; Houston and Arredondo Leiva, 1999b). The contexts in which mandibles have been found at Piedras Negras suggests a possible relationship with construction activities, but any other associations are unknown at present. In addition, human remains were simply disturbed from time to time by the Maya during construction episodes and the collection of construction fill (e.g., Golden et al., 1999). These remains were

period at other lowland sites, and that several monuments at Piedras Negras were found broken and reused in construction fill, it is reasonable to assume that monuments spanning this AD 539 to 608 gap did at one time exist and were subsequently destroyed.

Stela 25 fronts the pyramid Str. R-9, alongside Stela 26 (Figs. 7.5, 7.6). The latter monument records the victory of Ruler 1 over nobles from the centers of Palenque and Sak Tz'i', and emphasizes Ruler 1's emergence as a dominant political figure in the Usumacinta Basin. Moreover, it was in the excavation of Str. R-9 during the 1930s that stratified deposits containing Balche phase ceramics (c. AD 550 – 630) associated with dated monuments were found (Holley, 1983: 85-86), indicating that Ruler 1 had modifications of Str. R-9 carried out. Yet another monument associated with warfare events, Stela 31, sits between Structures R-3 and R-4. Panel 4, commemorating the death of Ruler 1 in AD 639, was placed inside the temple of Str. R-5, suggesting the possibility that that pyramid is, in fact, his resting place – although excavations to date have failed to reveal his grave (Escobedo and Zamora, 1999; Escobedo and Zamora, 2000b; Houston et al., 2000: 100; Martin and Grube, 2000: 142 - 143; Morley, 1938).¹¹

Significantly, excavations in the South Group Court have revealed the oldest architecture found to date at Piedras Negras (Child and Child, 2000; Escobedo and Zamora, 1999; Escobedo and Zamora, 2000a, 200b, 2000c) with construction dating back into the Middle Preclassic (c. 500 BC).¹² In fact, Preclassic ceramics at Piedras Negras are found almost exclusively within the South Group Court and South Group Plaza

then deposited in other locations causing more confusion.

¹¹ Most construction fill at Piedras Negras consists of loose rubble, making intensive excavation both daunting and dangerous. If, as it would appear, the grave of Ruler 1 was not placed on the central axis of Str. R-5, it would prove extremely difficult to locate.

¹² Stratified deposits, lots PN 47D-1-6E and PN 47D-1-7, excavated in front of Str. R-5 yielded radiocarbon

(Forsyth and Hruby, 1997; Holley, 1983: 70-71; Muñoz, 1999). Furthermore, the only two Early Classic stelae remaining at Piedras Negras, Stelae 29 and 30 (dated to AD 539 and 534 respectively) are associated with pyramids R-3 and R-4 in the South Group Court. Thus, Ruler 1 had shifted the focus of politically significant monuments and architecture, as well as the performances that went with such materials, away from the defunct Acropolis to the most ancient portion of Piedras Negras.

The significance of such a move would not have been lost on the populace of Piedras Negras, whether they were elite or commoner. This was a move by Ruler 1 intended to dissociate himself from the tangible signs of a discredited regime that must still have had a place in the memory of individuals then living. At the same time, he acted to reaffirm his associations with a more ancient and still valid dynastic history. To do so was not safe, for it involve the potential for breaking chronological cycles that tied Ruler 1 into the “natural” patterns of rulership at Piedras Negras, those that would inevitably create linkages with all of his predecessors. Ruler 1 was selecting for himself a history from available historical potentials that excluded his immediate antecedents, but somehow managed to reestablish a connection with other rulers over greater temporal distance.

At the beginning of his reign, Ruler 2 (reigned AD 639 – 686) clearly sought to emphasize his connection with his father, Ruler 1. The focus of Ruler 2’s monumental program was the R-5 pyramid, where at least six of his stelae, including his accession monument, were erected at the foot of a structure associated with Ruler 1 (Escobedo and Zamora, 1999, 2000a, 2000b, 2000c; Martin and Grube, 2000:143; Morley 1938).

dates of 2,378±47 BP (475 - 381 BC) and 2,439±43 BP (532 - 446 BC) respectively (Escobedo and

Construction associated with early facet Yaxche Phase ceramics contemporary with the reign of Ruler 2 is also evident in both pyramids R-5 and R-9 (Holley 1983: 116).

Not all of Ruler 2's monuments were concerned entirely with his father, however. Panel 2, which commemorates the K'atun anniversary of Ruler 1's death in AD 658, incorporates into its narrative a reference to the Early Classic ruler known as "Turtle Tooth" (c. AD 510) (Martin and Grube, 2000: 143; Schele and Mathews, 1991: 231). The imagery on the monument is indexical of Panel 12, and both panels share the same essential composition emphasizing the dominance of the rulers of Piedras Negras over other rulers in the Usumacinta basin.

The text does not make clear, though, whether the image of ruler, royal heir and lordly youths on the panel is contemporary with Ruler 2 or with Turtle Tooth (Martin and Grube 2000: 144). Furthermore, the past and present actions that are the focus of the text are the same – the receiving by the ruler of Piedras Negras of the *ko'haw* headdress from a foreign overseer or overlord (Martin and Grube 2000: 143).¹³ The significance of Panel 2 as a political monument is rather clear, even if the relationship between temporality, text and imagery is not: Ruler 2 is intimately tied to Ruler 1, both of whom are inseparably linked into the glorious past/present of Piedras Negras. Such connections belie the disconnections – the missing past – that remain unsaid and invisible. In this sense, the confusion that modern readers of this monument encounter in separating the

Zamora, 2000; René Muñoz, personal communication 2001).

¹³ The *ko'haw* headdress is often considered a symbol of Teotihuacan influence in the Maya area (see Martin and Grube, 2000: 143). Both Panel 2 and a recently discovered wooden box from Panhale, Tabasco include the name of an Early Classic individual named U-k'ab-tuun, who is attributed the title "Lord of the West", often connected with Teotihuacan. These regional patterns of interaction with Teotihuacan are more thoroughly explored in Chapter 8.5.

image from the text, and the past from the present, was intentional and renders rhetorically (and therefore politically) intact the broken cycle of rulership.

But even as the focus of his monuments remained in the southern part of the city, Ruler 2 made significant moves towards the revitalization of the Acropolis and other northern portions of Piedras Negras. Panel 7, dating to the late seventh century, was located in Str. K-5, as were stelae 38 and 39. The date of the panel, along with ceramics and stratigraphic associations with his monuments indicates that this pyramid was renovated at least three times during the reign of Ruler 2 (Holley, 1983: 117; Satterthwaite, 1939, 1940).

It was in the Acropolis, however, that Ruler 2 invested much of his building energy. The connection with Ruler 2 is explicit in the recently discovered Panel 15 (Houston et al., 2000: 103-105). Found fallen from Str. J-4, the text details the parentage of Ruler 2, as well as his victory in warfare. The latter is the source of imagery on the monument, with five captives arrayed in despair before the king and two of his nobles (Houston 2001: 210-211). The parentage and warfare episodes, however, merely set the stage for the focus of the monument, which appears to be a tomb re-entry episode, possibly on the twentieth anniversary of the death of Ruler 2 on August 10, 706,¹⁴ an event also recorded on Stela 1 (Fitzsimmons, 1998; Houston et al., 2000: 105). This event - whatever its exact nature - was supervised by Ruler 2's son Ruler 3.

The association of the panel is entirely consistent with the evident construction sequence of the Acropolis. Following the destruction of the 6th Century, building began anew after what appears to be a relatively fallow period of at least several decades. Some

¹⁴ The Long Count date is 9.13.14.11.1.

minor construction in the late 6th or early 7th centuries may be evident in Court 4 (see Chapter 6), but is entirely absent in Courts 1, 2, and 3 where there is no *secure* stratigraphic association of construction with the Balche Phase ceramics that were contemporary with the reign of Ruler 1 and his immediate predecessors. The growth rate of the Acropolis increased dramatically with construction episodes securely associated with Yaxche Phase ceramics (c. AD 630 – 730).

Ruler 2 had reestablished through his building program the royal significance of the Acropolis, in a way that made no obvious reference to the ruins that lay beneath. Given the probable content of Panel 15's text, it seems that somewhere within Str. J-4 is the grave of Ruler 2 (Houston et al., 2000: 104-105). Thus, whether he chose to have himself buried within the Acropolis, or whether those who survived him selected his resting place for him, there is no doubt that the interment of a long-reigning and powerful monarch within the palace was an unmistakable sign of the importance of that location to the dynasty and the Piedras Negras Polity.

The re-entry of his tomb twenty years after his death would have served as a powerful reminder of the presence of the dead king. For those who could not observe whatever rituals were associated with the re-entry, Panel 15 stood in as a material symbol of the ephemeral performance; it was a "Pre-Columbian billboard of ambitious scale" (Houston et al., 2000: 105) continually advertising the contents of the tomb and the connection with the living ruler.

There is no doubt that building in the Acropolis proceeded apace, and indeed likely accelerated, during the reign of Ruler 3 (AD 687 – 729). Excavations reveal that multiple construction episodes in all four courts in the Acropolis are associated with

ceramics contemporary with the reign of Ruler 3. Indeed, one unusual deposit associated with a construction phase of Str. J-11 included a sherd with Ruler 3's name painted on it, and the stratigraphy is entirely consistent with a date falling within his reign (Fig. 7.7; Houston and Arredondo Leiva, 2000a).¹⁵

All eight of the stelae connected with Ruler 3 (Stelae 1 - 8) were set before the J-4 pyramid. Much as the stelae of Ruler 2 stood before his father's pyramid/shrine, Str. R-5, Ruler 3 emphasized his own associations with a structure connected to a genealogical linkage. This, in turn, provided an effective chronological connection to rulership tied into the immediate past (Houston et al., 2000: 105). The stelae of Ruler 3 were erected once every five years. In addition to recording important events in the life history of the ruler, and marking five-year *hotun* intervals (Martin and Grube, 2000: 146; Proskouriakoff, 1950), these monuments served to periodically reinforce the chronological/political relationship between Ruler 3 and the royal palace through the impact of their presence and the ceremonies that accompanied their placement.

Each subsequent ruler in the Piedras Negras dynasty was forced to negotiate his own place in the political chronology of the kingdom. To do so they had to choose among the myriad potential material and immaterial signs of history available to them. At the same time, these rulers had to avoid the pitfalls of association with those signs of, and in, history that might represent a chronological disjuncture, thereby diminishing their claim to power.

¹⁵ In another connection between rulers and chronologies, Ruler 3's building efforts may have been encouraged, in part, by the arrival of the K'atun 8 Ajaw on 9.13.0.0.0 (AD 692). One of the most calendrically complex monuments at Piedras Negras, Altar 1 was dedicated by Ruler 3 and commemorates the 9.13.0.0.0 Period Ending. This K'atun was apparently commemorated with a burst of construction at other sites including Palenque, where all three temples in the Cross Group were dedicated on this date

7.4: Conclusion: The Politics of Chronology

In conclusion, then, what is the chronological significance of all of these material signatures of political change? I would argue that although the destruction of buildings in the Acropolis and the break in the dynastic sequence of Piedras Negras were approximately coeval with the defeat of an unknown sovereign at the hands of the ruler of Pomona, those acts of destruction for which we have archaeological evidence are not necessarily, or exclusively, the result of foreign invasion. Invading forces may, indeed, have razed some structures. Other structures, however, were likely razed by members of the Piedras Negras royal court and such demolition along with the architecturally fallow period that followed, were the results of actions intended as a positive and creative act.¹⁶

The Acropolis as the royal palace - the house of the royal court - was the most tangible sign of a discredited regime. The interment of the Early Classic buildings on the Acropolis, and the elimination of inscribed monuments that pertained to the defeated ruler, represented the conscious efforts of Ruler 1 of Piedras Negras, and/or those who paved his way to the throne, to make a clear conceptual separation between himself and his immediate predecessors following a period of political humiliation. The wreckage of the Acropolis was allowed to remain architecturally fallow for several decades, reducing the possibility that renewed construction would be viewed as the rebirth of the old and defeated order.

(Martin and Grube, 2000: 169)

¹⁶ We know nothing of what happened to the defeated ruler, nor do we know who may have governed the site in the period immediately preceding the accession of Ruler 1 in AD 603. Interregnums are not unknown in the Maya area. At Yaxchilan, for instance, ten years separates the reigns of Shield Jaguar I and Bird Jaguar IV, from 742 to 752 AD (Mathews, 1988; Schele, 1991: 78; Schele and Freidel, 1990: 271).

But at the same time, ties with the past are imperative in legitimating the authority of a dynastic ruler. Thus, Ruler 1 had to struggle with the potentially difficult issue of maintaining legitimacy in the aftermath of such a break. To reiterate: this is the real trick of chronology as social and political practice. If a ruler chooses, or is required, to eliminate signs of history that are politically compromising they must at the same time ensure that other signs act as indicators of stability.

Clear linkages were therefore maintained with earlier regimes whose monuments were not destroyed in order to maintain the appearance of continuity with a past that was selectively chosen. Ruler 1 preserved monuments belonging to rulers from the period immediately preceding defeat at the hands of Pomona, while his son Ruler 2 erected new monuments that emphasized his own connections, through his father, to these same earlier rulers. Ruler 2 was able to begin the renovation of the Acropolis, somewhat more secure that the use of that space would not create a chronological link with the discredited regime of the late 6th Century. Ruler 3 continued and accelerated construction in the Acropolis, and dedicated monuments that emphasized his own connections with his father.

The efforts of Rulers 1, 2 and 3 ensured that the Acropolis had once again become a reasonably safe sign of rulership, eliminating signs of termination and chronological disjunction until they were revealed once again by archaeologists. The continued use of Long-Count dates that encompassed millennia and were inscribed upon monuments, as well as the celebration of five-year and twenty-year periods, emphasized the continuity of worldly order and stability through the regime's ties with a more distant past. But this

was a past that for K'inich Yo'nal Ahk and his immediate successors eliminated the period between AD 539 and 603.

However, defeat at the hands of Pomona in the 6th Century and the humiliation of the ruler of Piedras Negras were not forgotten. They remained as chronological possibilities that the rulers of Piedras Negras might use to integrate the many historical possibilities available to them with social and political actions. We can see this in the case of Ruler 7, the final Piedras Negras dynast, who came to the throne in AD 781. When forces loyal to Ruler 7 managed to overcome the warriors of Pomona in AD 795, it was politically viable for this 8th Century king to invoke the defeat of his 6th century predecessor after nearly 250 years of historical exile, and so Stela 12 phrases the conquest of Pomona as an act of vengeance. It is perhaps fitting, or ironic, that this is the last historical record from Piedras Negras (Houston et al., 1999; Martin and Grube, 2000: 152-153; Stuart, 1998b).

This interpretation of the archaeological and epigraphic data has addressed only the possibility of indigenous notions of chronology as they relate to the most elite levels of society. We can see the efforts of the rulers of Piedras Negras in their palace to create the connections and disconnections necessary to support their regimes, but these efforts are not necessarily reflected in the architecture of Piedras Negras as a whole. The chronological maneuvers and manipulations that took place in non-royal houses¹⁷ almost certainly left very different material patterns, although the vocabulary of construction, destruction, dedication, termination, burials and caching may have been very much the same.

¹⁷ I use the term house in reference to the House Society model discussed in Chapter 4.

This does not mean that the chronological manipulations of the rulers of Piedras Negras did not fundamentally alter the chronological constructions of all levels of society. As material referents of the fundamental corporate body within Maya society the architecture of the royal court must have provided a spatial and temporal touchstone for society as a whole. Furthermore, the economy of the royal court and the nature of production and distribution associated with such objects as finely painted ceramics has a profound effect on the styles of these objects (Ball, 1993; Muñoz and Golden, 2001).

As archaeologists we identify these changes, in ceramics for instance, typologically and subsequently apply a chronological importance to them. As objects that participated in ancient and indigenous processes of chronology, however, they were important signs of the relationship between person, temporality and place. The need of the members of a house to reorient themselves chronologically – to reintegrate themselves socially, politically, economically and spatially – in new ways might entail the selection or creation of alternative histories with material correlates. This issue and the relationship of the indigenous practice of chronology to archaeological chronologies, especially as they pertain to the Early Classic to Late Classic Divide, will be more thoroughly explored in the two subsequent chapters.

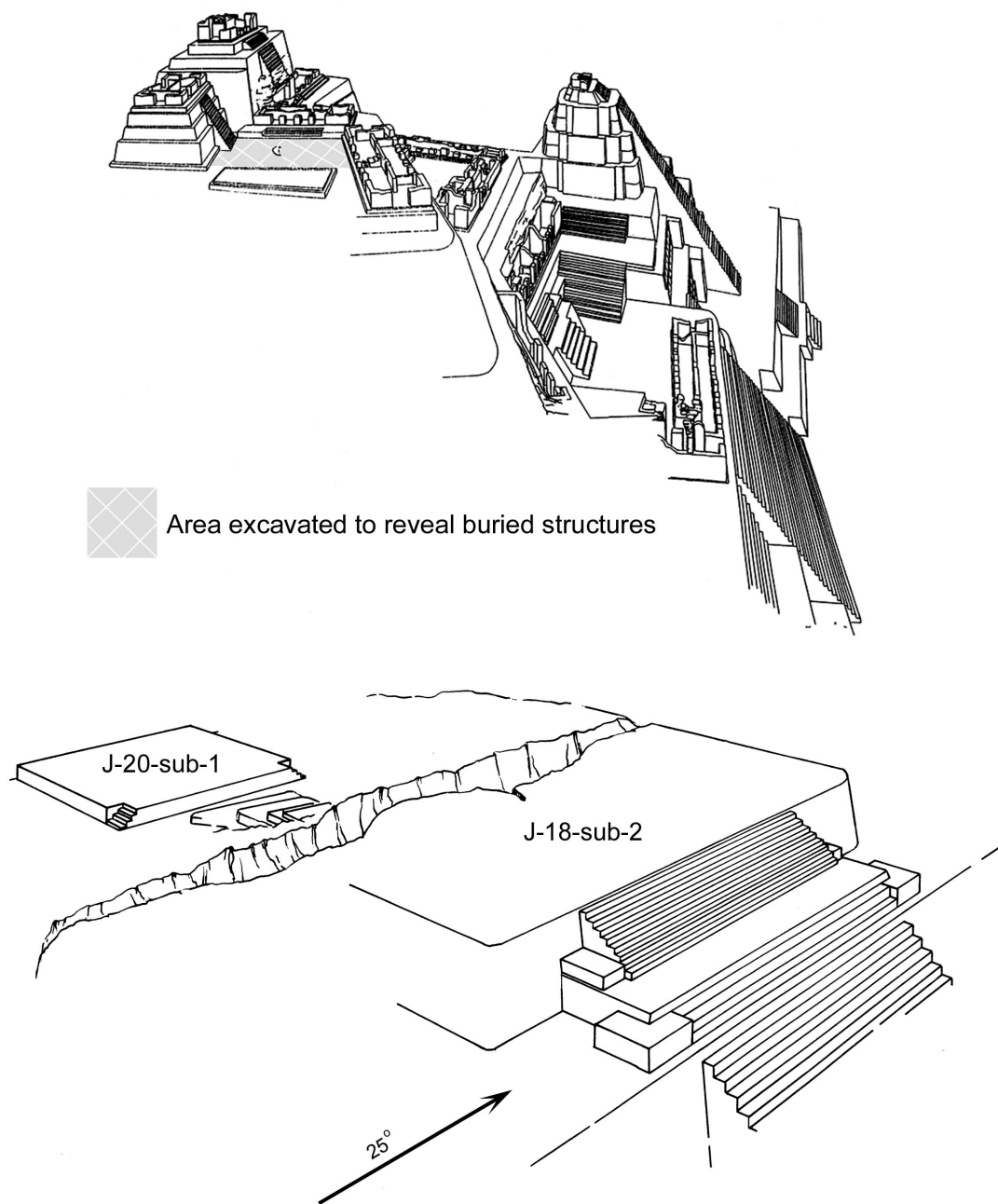


Fig. 7.1: Early Classic buildings below Court 3.

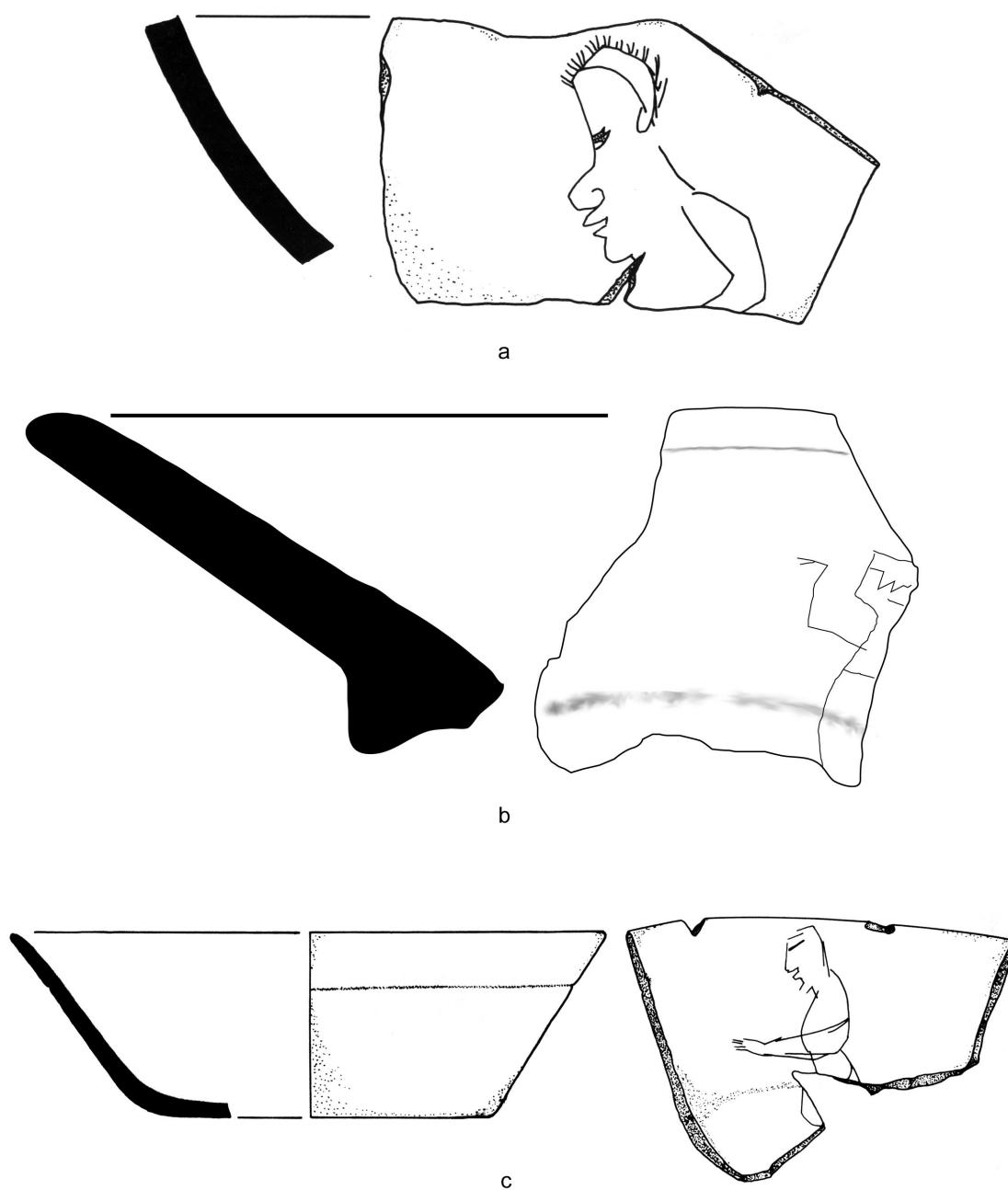


Fig. 7.2: Aguila Orange sherds with graffiti excavated from, a) PN-11A-3-4, b) PN-11A-1-3, and c) PN-11A-3-4 (drawings by the author, not to scale).

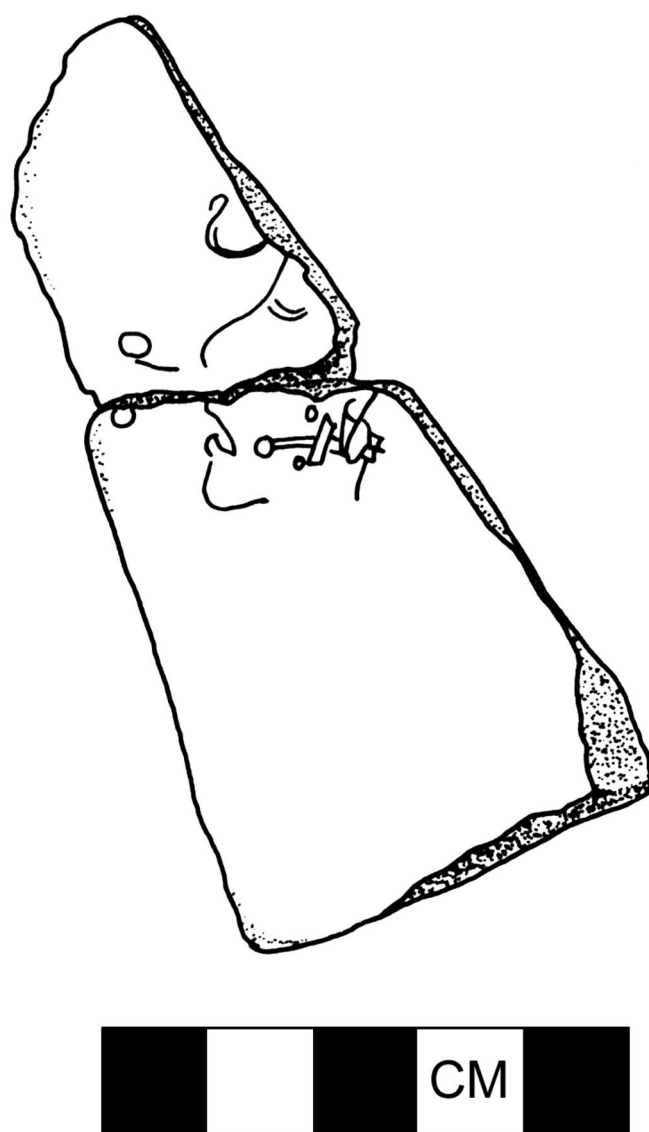


Fig. 7.3: Sherd with graffito from PN-11A-3-4 (Drawing by the author)

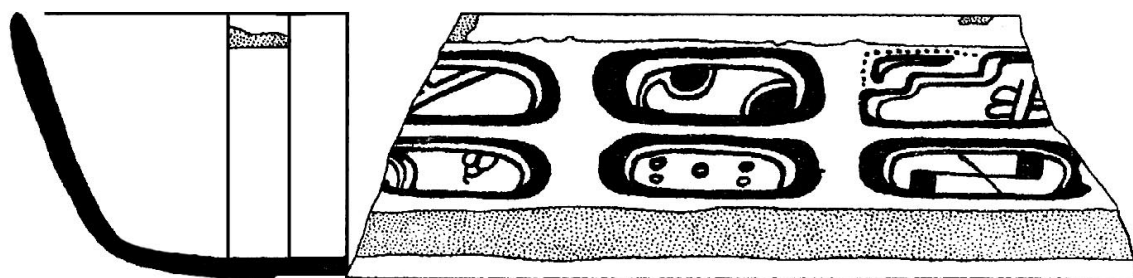


Fig. 7.4: Partial polychrome vessel with glyph band and painted stucco on rim, found in association with Early Classic platform below Str. J-1 (see Houston and Arredondo Leiva, 1999: 250; not to scale, drawing by Stephen Houston).

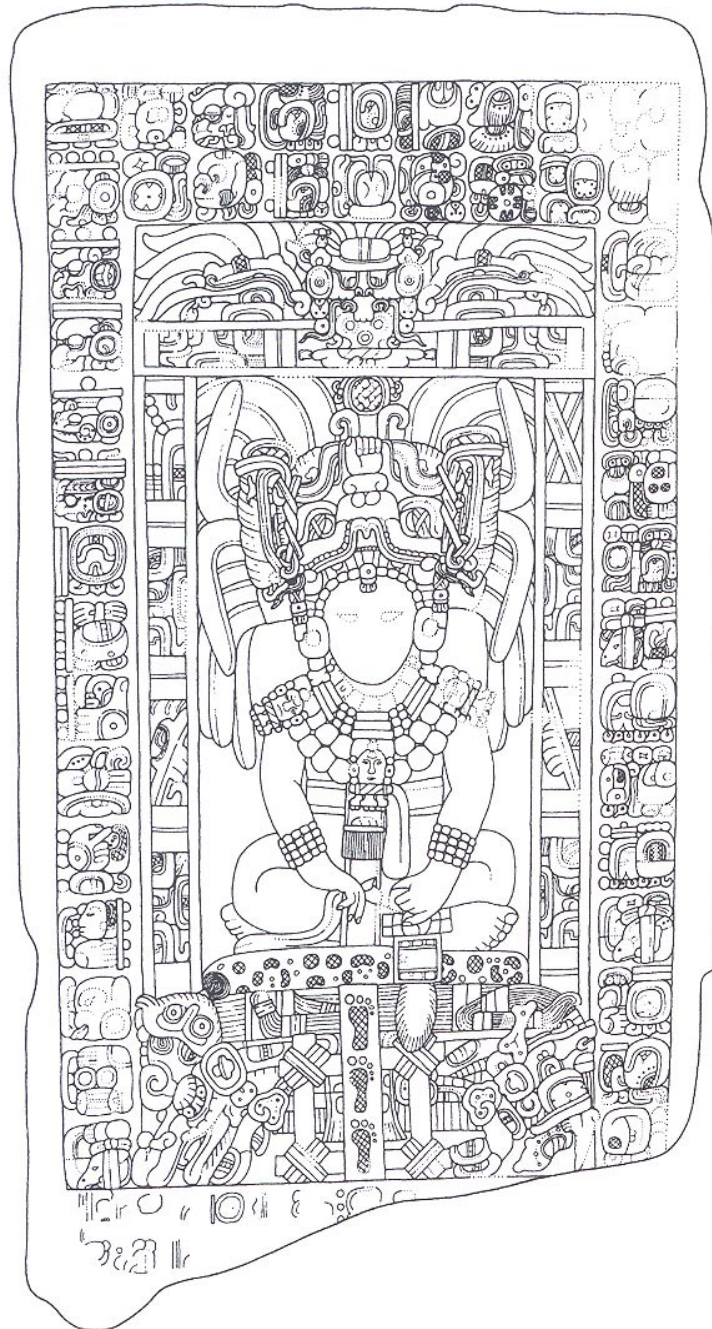


Fig. 7.5: Stela 25, dated to AD 608, the accession monument of Ruler 1 (drawing by John Montgomery, in Martin and Grube 2000: 143).



Fig. 7.6: Stela 26, depicting Ruler 1 with prisoners from Sak Tz'i' and Palenque in AD 628 (drawing by John Montgomery, in Martin and Grube 2000: 142).

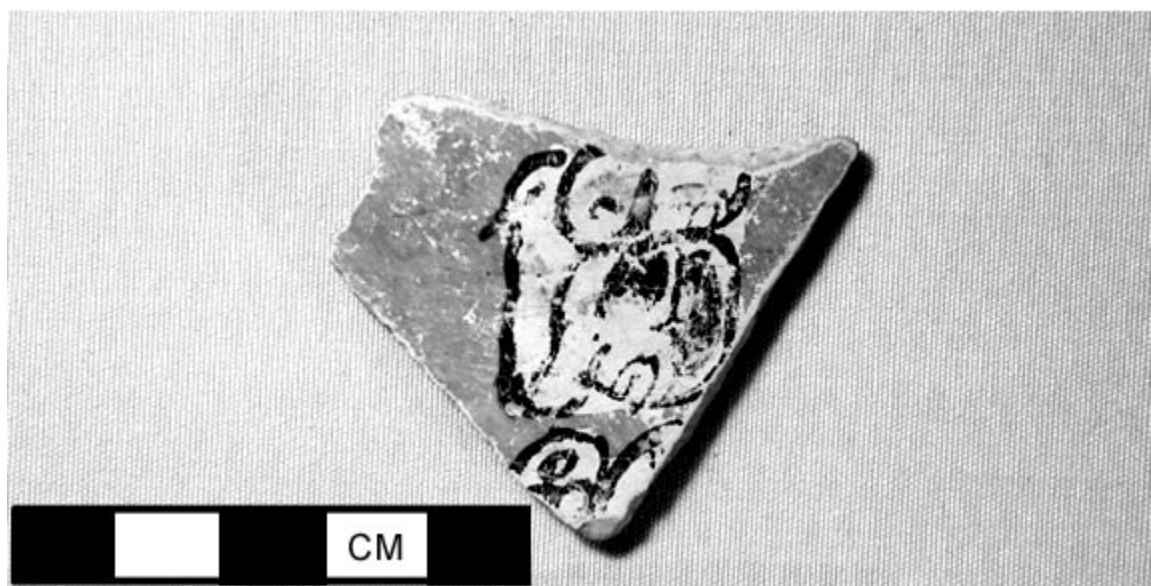


Fig. 7.7: Yaxche Phase sherd from Court 2 of the Acropolis bearing the name of Ruler 3.

Chapter 8: Reevaluating the Early Classic/Late Classic Divide at Tikal, Copan and Altar de Sacrificios

8.1: Introduction: The Regional Perspective on the Early Classic/Late Classic Divide

As I discussed in Chapter 7, the rulers of Piedras Negras enacted site-specific chronological practice intended to overcome problems of legitimation and dynastic maintenance in the late 6th and early 7th Centuries, almost certainly in large part as a response to a significant military defeat at the hands of forces from Pomona. Upheaval at Piedras Negras, however, cannot be considered merely a local event, and the reaction of its rulers must be considered in light of larger regional patterns. It is these regional patterns – particularly the changing relationship of Lowland Maya dynasties with the Central Mexican polity of Teotihuacan, changes in the content and distribution of hieroglyphic texts, architectural changes, and changes in ceramic styles, among other factors – that led archaeologists to draw a dividing line between the Early and Late Classic Periods (see Chapter 3).

This chapter, therefore, seeks to explore some of the evident regional patterns through a brief examination of the architectural and monumental changes of the 6th and 7th Centuries at three other Maya sites: Tikal, Guatemala, Copan, Honduras and Altar de Sacrificios, Guatemala (Fig. 8.1). I have chosen these sites as brief case studies to complement the data from Piedras Negras because: 1) both epigraphic and archaeological data has been published for them that encompass the period under consideration, and 2) this allows for an assessment of the observed patterns of change contemporary with events as described at Piedras Negras.

8.2: Tikal: Defeat, the “Hiatus”, Renaissance

Turning first to Tikal, Guatemala, I consider the changes visible in the architecture and monuments of the North and Central Acropolis, as by all appearances these represent the house of the royal court during the period glossed as the Early Classic/Late Classic divide (Fig. 8.2). The period of the Early to Late Classic shift is bridged in archaeological terms by the end of Time Span 6 (AD 475 – 600), and the beginning of Time Span 5 (AD 600 – 700) in the North Acropolis (Coe 1990: 840 – 841). Coe (1990: 840-841) defines T.S. 5 as offering “a seventh-century bridge, or transit from what regionally passes as ‘Early Classic’ to years manifestly ‘Late Classic’.”

There seem to be several significant architectural changes that occurred in the North Acropolis at around AD 600. An intrusive grave, Burial 200, was placed in structure 5D-22-1, and “followed by severe fires above the successive features,” apparently at the very end of T.S. 6 (Coe 1990: 840).¹ Shortly after the interment of Burial 200, the North Acropolis underwent a century marked not only by architectural innovation, but also “in appreciable changes among monuments and offerings as well as ceramics, even mortuary practices.” (Coe, 1990: 840). Jones (1991: 117-118) attributes some of these changes, in particular those relating to burial patterns, to the influence and new leadership stemming from Caracol following the military defeat of Tikal’s king “Double Bird” by an alliance led by the ruler Calakmul (see below).

¹ Burial 200 (also designated Problematic Deposit 134) was originally deposited as an intrusive grave into Str. 5D-22-1. It was later re-entered, the remains were scattered, and Burial 201 was placed into the grave. The contents of the original burial could not be definitively identified. Ceramics associated with Burial 200 were apparently broken and differentially burned (Coe, 1990: 399), recalling Burial 13 at Piedras Negras (see Houston et al., 1999).

Another major architectural renovation was apparently sparked by the interment of Burial 195. Stratigraphic connections between Burial 195 indicate that Structure 5D-32 was rebuilt to cover the burial, and the surface of the North Acropolis was renovated at approximately the same time. New versions of Structures 5D-25 and 5D-27, and the first versions of 5D-20 and 5D-21, are also contemporary with these events (Fig. 8.3). Moreover, the North Terrace was repaved and the front stairway rebuilt, while the Great Plaza was paved, its eastern terraces rebuilt, and the floor of the East Plaza renovated (Coe, 1990: 841; Jones, 1991: 116).

Burial 195 has been identified as the Tikal ruler Animal Skull on the basis of a painted stucco text in one vessel (Culbert, 1993, Figs. 50 – 51; Jones, 1991: 117; Martin, and Grube, 2000: 41). Wooden boards in the burial bear a date of 9.8.0.0.0 (AD 593), suggesting a late 6th Century interment, although the appearance of his name at Altar de Sacrificios in AD 628 may indicate that he lived to that point and that the grave is better attributed to the early 7th Century (Coe, 1990: 841; Martin and Grube, 2000: 41; Nelson, 1998: 28, 52; Stephen Houston, personal communication, 2002).

Despite Coe's (1990: 841) contention that "whoever designed [5D] 32-1st made no attempt to copy extant 5D-34-1st its local match to the W[est]," Jones (1991: 119) concludes in general terms that at the end of T.S. 6, the "tone is one of continuity, building upon patterns begun at the time of Burial 195." Integrating the archaeological chronology of the Central Acropolis with that established for the North Acropolis is somewhat problematic, but the maintenance of a structure (5D-46, associated with the 4th Century ruler Chak T'ok 'Ich'ak I) for over 400 is some indication of continuities from the Early through Late Classic periods in the Central Acropolis. This structure was

modified and built upon but never leveled (Harrison, 1970, 1999: 78). As already mentioned, however, Coe (1990: 840) sees the 7th century at Tikal as a period of change in architectural, monument, caching, ceramic and mortuary styles despite numerous continuities in the spatial arrangement of structures.²

Dramatic changes in the monumental record at Tikal are roughly contemporary with the architectural shifts seen in T.S. 5. Jones (1991: 117) describes this era, long discussed passively as a hiatus in monument dedication, as involving “a massive destruction campaign . . . between AD 557 and 682,” with the stelae clearly pecked to crack them, and their texts pecked or smoothed. Who, though, destroyed these monuments? And if the Tikal dynasty survived well into the 9th Century, why did the rulers of the polity not try to restore their missing history? To explain what appears to the modern viewer as a monumental hiatus, or an architectural divide between the Early and Late Classic Periods at Tikal, we must turn back the clock to the events surrounding AD 378. As I shall outline, turning back the clock is exactly what the 7th Century ruler of Tikal, Jasaw Chan K’awiil did as part of his successful efforts to reinvigorate the dynasty.

Central to the architectural and monumental changes at Tikal is the changing relationship between its dynasts and the powerful Central Mexican polity of Teotihuacan.³ David Stuart has convincingly argued that some Teotihuacanos actually entered the Maya Lowlands as powerful political or military figures during the late 4th

² The relationship of the Mundo Perdido (see Fig. 8.2) complex to the North Acropolis and Central Acropolis as “royal” architecture related to court activities is unclear. Although modification of its buildings continued well into the Late Classic period, it had attained its maximal size and basic layout well before the Early Classic/Late Classic divide (see Laporte and Fialko 1990, 1995). The massive and unexcavated South Acropolis also remains an enigma, and forms a significant blind spot in arguments based upon architectural development.

³ David Stuart (2000) provides an overview of the various hypotheses surrounding the nature of Teotihuacan influence in the Maya Lowlands.

Century (see also Coe 1965: 41; Coggins 1975, 1976, 1979a, 1979b, 1988; Culbert 1988: 142; Fash and Fash 2000; Haviland and Moholy-Nagy 1992: 59; Pasztory 1978: 121; Proskouriakoff 1993; Schele and Freidel 1990; Stone 1989). The brief date of 11 Eb recorded on Stela 31 is correlated with a long count date of 8.17.1.4.12 11 Eb 15 Mac, or January 16, 378 AD (Fig. 8.4). This date is also recorded on Stela 5 and 22, and the Tikal Marcador (Martin and Grube 2000: 28; Laporte and Vialko 1990, 1995; Proskouriakoff 1993: 8-9; Stuart 2000). Although the content of these inscriptions all differ in particularities, all mention Siyaj K'ak' as the protagonist of an "arrival" event on 11 Eb. According to Stela 31, the reigning ruler of Tikal, Chak Tok Ich'aak I, may have died on the very day that Siyaj K'ak' arrived (Martin and Grube 2000: 29; Stuart 2000: 476-478; see also Footnote 8 in this chapter). It is not a son of Chak Tok Ich'aak I who succeeds him to the throne following the 11 Eb arrival event, but rather a foreign lord named Yax Nuun Ayiin (or Curl Snout) who acceded in AD 379, under the supervision of his overlord Siyaj K'ak' (Martin and Grube 2000: 32; Stuart 2000: 479; see Houston 1993:139 for a discussion of overlordship).

Siyaj K'ak' was active at other sites in the Maya Lowlands, including an appearance at the site of Bejucal where he oversaw the accession of a king in c. AD 381 (Stuart 2000: 479). He appeared also at the site of El Peru a mere eight days before his arrival at Tikal (Stuart 2000: 479). Most confusing of all are the occurrences of his name at Copan, mentioned on the Xukpi Stone in association with Yax K'uk' Mo (Martin and Grube 2000: 30; Sharer 1999, n.d.), and at Rio Azul in AD 393 (Martin and Grube 2000: 30).⁴

⁴ The mention of Siyaj K'ak' at Copan in AD 437, five decades after his apparent arrival at Tikal, is

Though he was not the son of Chak Tok Ich'aak I, Yax Nuun Ayiin was the son of another king: Spear Thrower Owl. Spearthrower Owl, like Siyaj K'ak', was accorded the title *kaloomte'*. This title, as well as *ochk'in kaloomte'* (west kaloomte') “conveys a supreme status within a political hierarchy. It is the office for high kings of Late Classic Tikal and possibly Calakmul . . . [possibly] overlords or ‘emperors’ of conquered territories” (Stuart 2000: 487). Stuart (2000: 481-482) suggests that Spear Thrower Owl was the ruler of Teotihuacan who reigned there from AD 374 – 439, a conclusion entirely consistent with the associations of his name in the Maya area and imagery depicted in murals at Teotihuacan. Interestingly, and perhaps most importantly, Martin and Grube (2000: 31) note that a fragmentary text might indicate that Spear Thrower Owl was married to a Tikal Lady.

The descendants of Yax Nuun Ayiin were able to hold the throne of Tikal without apparent problems through three generations, until the death of Chak Tok Ich'aak II in AD 508 (Martin and Grube 2000: 36).⁵ Serious issues apparently arose with the death of Chak Tok Ich'aak II. His demise is recorded not at Tikal, but at Tonina. Thirteen days after his demise, warriors from Yaxchilan captured one of his vassals (Martin and Grube 2000: 37, 120). These inscriptions may indicate the waning power of Tikal's rulers, and the difficulties that its dynasts experienced in exerting coercive force over such a distance.

somewhat problematic. The relationship expressed between Yax K'uk' Mo' and Siyaj K'ak' in the inscription is unclear, and doubts have been expressed about whether the name on the Xukpi Stone is, in fact, that of the same individual at Tikal (Robert Sharer, personal communication 2002).

⁵ The continuing use of dynastic names such as Siyaj Chan K'awiil and Chak Tok Ich'aak by rulers following the arrival event of AD 378 is further evidence, alongside the continuity of building programs in the North and Central Acropolis, that the material and immaterial properties of the royal house remained largely intact despite changes in lineage (see discussion of the House Society in Chapter 4.5).

A probable daughter of Chak Tok Ich'aak II, the "Lady of Tikal," became an ajaw at six years old, and is linked to an individual named Kaloomte' Balaam, identified merely as the nineteenth in the dynastic line. A twentieth ruler dubbed "Bird Claw" may also have ruled Tikal at some point, but the particularities of his reign are unclear. Yet, despite what are clearly issues of problematic succession, as noted above there are no signs of flagging, or significant divergences, in building programs at this time.

A son of Chak Tok Ich'aak II did come to the throne as Wak Chan K'awiil ("Double Bird") in c. AD 537. The dynastic vicissitudes that preceded him, however, had likely eroded the authority of the Tikal rulers to the benefit of the dynasty of Calakmul. Wak Chan K'awiil was forced to wage war against his former client at the site of Caracol in AD 556, enforcing an overlordship that should have been consensual. Although he was victorious in the initial battle, the war was lost in AD 562, when a Calakmul/Caracol alliance successfully waged a 'star war' against Tikal, apparently ending the patriline that had begun with Yax Nuun Ayiin (Houston, 1987; Martin and Grube, 2000: 40). It is at this moment in history that a gap in monumental inscriptions begins – although the gap may not have been *created* at this time. Though monuments may indeed have been dedicated following the defeat, no monument or monument fragment from the period spanning AD 562 until 692 has survived or been excavated.

In the light of our increased knowledge of Maya political history over the past several decades, it is apparent that the waning fortunes of Tikal at this time were tied directly to the political ascendancy of Calakmul (seeLooper, 1999; Martin and Grube, 2000: 104). Nevertheless, it is tempting to see the decline of Tikal not merely as a result of internal dynastic problems and the incursions of a regional rival, but also as part of the

complex withdrawal of Teotihuacan – in some sense the “sponsor” of the Tikal dynasty - as a political entity in the Maya Lowlands.

Recent radiocarbon and archaeomagnetic data indicate that the population of Teotihuacan itself was in full decline by the 7th Century AD, and possibly as early as the 6th Century (Cowgill, 1996: 328-329; Wolfman, 1990). The withdrawal from the Maya Lowlands must have begun earlier, however, as the Central Mexican polity declined politically, and could no longer exercise authority at a distance.⁶ Although, as discussed below, there is circumstantial evidence that as late as AD 510 a figure from Teotihuacan was involved in the politics of the Usumacinta capitals such as Piedras Negras, by the latter half of the 6th Century the rulers of the Central Mexican center could no longer aid their erstwhile political progeny.

The Calakmul/Caracol incident in AD 562 must have thrown the royal court of Tikal into turmoil, but despite the serious setback there is no evidence of widespread devastation or significant changes in the architecture of the North Acropolis until after the interment of Burial 195, several decades later. As mentioned above, it does appear that some new traits appeared in burial styles. Jones (1991: 119; see also Coggins, 1975) suggests that these new traits are derived from Caracol, but the root cause or origins of these changes is unclear.

Although no new monuments are known to have been dedicated at Tikal until AD 682, several kings from this period have been identified from texts on ceramics and monuments at other sites. “Animal Skull” acceded to the throne at some point after AD 562. His kinship ties to previous dynasts are weak at best, perhaps through the matriline,

⁶ Gordon Willey (1974) suggested that the withdrawal of the far-flung Teotihuacan centered trade

with neither of his parents among Tikal's long list of rulers (Martin and Grube, 2000: 41-42). Whether he was a puppet or an independent ruler is impossible to say. Martin and Grube (2000: 41) suggest that a bowl from his reign that lists the Tikal rulers who preceded the 11 Eb arrival event represents an attempt by Animal Skull, or his supporters, to "ally himself with the city's *ancien régime*." Whatever his connection to foreign authorities, his burial (Burial 195) in the North Acropolis was accorded all of the ceremony given to earlier Tikal rulers, and immediately preceded a flurry of building around the Great Plaza.⁷

Tikal's 23rd and 24th dynasts are historical non-entities, but by the time another significant ruler emerged in the form of Nuun Ujol Chaak, the machinations of Calakmul were once again having dire consequences for Tikal. At Dos Pilas, a rival to the Tikal throne had been established under the supervision of the ruler of Calakmul (Houston, 1993; Martin and Grube, 2000: 42-43, 56-57, 108-109). Nuun Ujol Chaak waged a back and forth war with the Dos Pilas/Calakmul alliance over a period of some twenty years between AD 657 and 679, before eventually being defeated. Almost miraculously, Jasaw Chan K'awiil I, the son of Nuun Ujol Chaak, came to the throne three years after his father's final defeat and, within a decade, led Tikal in a successful effort to shake off the political decline of the previous one and one-half centuries.

According to the text on Lintel 3 from Temple I, Jasaw Chan K'awiil I downed the "flint and shield" of the Calakmul lord Yich'aak K'ak' on 5 August 695 (Fig. 8.5). Though Tikal's realm of influence had been reduced, it was never again threatened by

networked disrupted the authority of Maya rulers.

⁷ The interment of a ruler at the end of a period of minimal architectural modification, followed by a flurry of construction in the site's royal architecture, recalls similar patterns that probably followed the deaths of

Calakmul or its allies. Jasaw Chan K'awiil I was obviously able to organize the military might to overthrow his enemies – something his predecessors had been unable to accomplish. But he combined this assault with a resurgence not merely of coercive force, but of the moral authority of the Tikal dynasty through the manipulation of chronological signs.

In an event dating to September 14, 695 AD, Lintel 3 from Temple I records the 13 K'atun anniversary of the death of Spearthrower Owl. On this date Jasaw Chan K'awiil is said to have “conjured the holy one.” Lintel 2 from this same temple “depicts a Teotihuacan warrior above a toponymic register of cacti and cattails (Fig. 8.6; Taube, 1992). As Stuart says “given the anniversary celebrated, it is tempting to see this as a portrait of Spearthrower Owl himself, but this again is conjecture” (Stuart, 2000: 490; see also Martin and Grube, 2000: 45). Yet, it seems a very good conjecture given the circumstances.

All of these events surrounding the revitalization of both the spirit of Spear Thrower Owl and the fortunes of the Tikal dynasty may seem at first extraneous to the destruction of monuments that accounts for the ‘hiatus’, but the monument destruction was, in fact, integral to this Tikal renaissance. The patterns of monument destruction, some broken and disposed of carelessly, others reset in distant locations, and still others buried with some reverence, would seem to be accounted for by two different and temporally distinct actions. On the one hand, the ‘star war’ event wreaked on Tikal by the Calakmul-Caracol alliance may account for the massive destruction, while “a

restoration or reintegration of the Old Tikal line would explain the reverence later accorded [some of] the old monuments” (Jones, 1991: 118).

The different treatment accorded to different monuments sheds important light onto the political chronology that Jasaw Chan K’awiil was striving to establish. Stela 17, for instance, is the only monument known for the defeated Wak Chan K’awiil. This monument was broken, moved, and unceremoniously dumped over the side of a causeway (Jones, 1991: 117). The two monuments of Yax Nuun Ayiin, Stelae 4 and 18, were reset (Stela 4 upside down) in front of 5D-34 and not eliminated (Jones and Satterthwaite, 1982:14, 42; Martin and Grube, 2000: 33). In contrast, Jasaw Chan K’awiil had Stela 31, the monument of the powerful Siyaj Chan K’awiil, buried in Structure 5D-33-1 with some reverence (Coe, 1990: 841). I propose that, as had the rulers of Piedras Negras, Jasaw Chan K’awiil was struggling to re-establish ties to an appropriate dynastic history that would help to maintain his resurgent dynasty.

Stepping back from the events contemporary with Jasaw Chan K’awiil for a moment, I turn once again to the events of the late 4th Century, for they impinge directly on the behaviors of the 7th Century ruler. Stuart (2000: 481) argues that the arrival of Siyaj’ K’ak’ and Teotihuacan-linked rulership at Tikal was violent, citing the death of Chak Tok Ich’aak I on the day of Siyaj K’ak’s arrival. I would suggest an alternative, though highly speculative, explanation: the Teotihuacanos were invited into the Tikal dynasty.⁸

⁸ Explaining the death of Chak Tok Ich’aak I on the day that Siyaj K’ak’ arrived remains an interpretive problem. However, it is important to remember that the inscriptions do not record an objective historical truth, but rather a selective political history. As will be discussed below for Copan, although Yax K’uk’ Mo’ is said to have arrived at Copan on a specific date on Altar Q, there are hints that he was in fact present in the area before his rhetorical arrival date (Stuart, n.d.). A similar situation at Tikal might offer

Helms (1998) notes that aristocrats cross-culturally are often considered fundamentally different from normal individuals, even in terms of their emotional displays and bodily functions (see also Houston, 2001). She (Helms, 1998: 116) cites an African example in the work of Maquet (1961: 18 - 19), for instance, which has a particular resonance with the Maya case, “it was taken for granted that only vulgar persons showed off all of their emotions . . . The Tutsi . . . come from another world. They were human beings like the Hutu, but not in quite the same way and thus they were entitled to rule.” Of course, we need only watch our television sets to witness the reserved spectacle of the English Queen, who must maintain her composure at funerals and weddings so as not to appear “common” – a staid, reserved, and decidedly “otherly” nature that has characterized the portrayal of European royalty for centuries.

Similarly, for Maya rulers whose legitimacy was, in part, based on their nature as definitively moral beings, their authority depended significantly on their ability to maintain their emotional composure.⁹ Maya rulers had themselves portrayed on monuments and ceramics as ideally controlled moral beings. They avoided such debased displays as terror, drunkenness, or lewd acts that would denote amoral and animalistic

alternatives such as: 1) Siyaj K'ak' was present in the Tikal area (perhaps El Peru) prior to the death of Chak Tok Ich'aak, and only entered Tikal proper on 11 Eb, 2) Siyaj K'ak' was physically present before the death of Chak Tok Ich'aak, but rhetorically “arrived” on 11 Eb, or 3) Chak Tok Ich'aak was physically deceased before 11 Eb, but the need to prevent a dynastic/temporal rupture required that rhetorically he die only when Siyaj K'ak' was present. Finally, Stephen Houston (personal communication, 2002) informs me that the phrase *ochi-b'ih*, generally translated as death, may not mean death in this case, and that the precise translation in this text remains problematic.

⁹ Houston (et al., n.d.) suggest that it is useful to model the K'uhul Ajaw as the integrative mechanism of Classic Society, and as an individual who acted as an object of “moral authority.” From such a perspective the ruler may be interpreted as having been central to the legal, economic, and religious existence of the polity. The object of moral authority is effectively engaged in a contractual agreement with the participants in the community. The power of the K'uhul Ajaw was neither exclusively coercive nor consensual, although coercion was not required for the day-to-day operation of the polity. Power and authority in this situation stemmed from the ability of the K'uhul Ajaw to fulfill a moral contract – to fulfill his role as a moral being - and to meet thereby the social obligations of the office (Sharer and Golden, 2001).

behavior; behaviors associated with animals, captives, and supernatural beings among others (Houston 2001).¹⁰

I do not wish to take this relationship between morality and physical composure too its extremes, but it is worth noting that ethnographic, ethnohistoric and epigraphic evidence all suggest a linkage as well between time, morality, and the body. On a panel found in the vicinity of Palenque, one date (9.13.10.0.0 7 Ahau 3 Cumku) is said to be at the back of another date (Stuart, 1990). Other examples of a similar physical relationship between moments in time exist at Palenque and the site of La Corona (Stephen Houston, personal communication, 2002). In some cases full figure glyphs emphasize this physicality, depicting the various temporal cycles as burdens carried by deified numbers (see Aveni, 2001: 30).

For the modern Kaqchikel, Monaghan (1998: 139) makes an argument that the word *vach*, which means both face and destiny (as defined by time of birth), “is at the same time part of the body *and* subject to an outside power – the internal and external complexly intersecting.” Similarly, for the Colonial Period, in but one of many examples from the Book of Chilam Balam of Chumayel, the K’atun 5 Ahau is a lord whose destiny and moral status is defined by his face, “Harsh is its face, harsh its tidings, to the ruler” (Roys, 1967: 152). This harsh face brings with it governance by morally bankrupt lords, “It is the opossum chieftan, the fox chieftan . . . The blood-sucking chieftan, the avaricious ones of the town” (Roys, 1967: 152-153). Such “blood-suckers” were not

¹⁰ It may be no coincidence that Teotihuacan’s art is so staid and so appealing to the Maya sensibility – if lack of human emotion is the ideal moral state (Houston 2001) than the stiff pose of Teotihuacano art may have been particularly appealing.

long for the world of politics, they are “the two-day occupant of the throne, the two-day occupant of the mat” (Roys, 1967: 153).

Recall also, as described in Chapter 4.5, that Maya rulers often bore regnal names that included some version of the k’inich ajaw (sun-faced, or sun-eyed lord) title. This relationship between the body – particularly the face – time, and morality clearly has a great time depth in the Maya area, and may provide yet more insight into the need for Maya lords to maintain their physical composure in order to maintain a moral temporal state.

The efforts of Jasaw Chan K’awiil at chronological manipulation, too, were closely tied to the notion that time had a moral aspect, and that Maya rulers ruled, in part, via moral authority (Houston et al., n.d.; Sharer and Golden, 2001). The ability to create such a dramatic difference between “moral” rulers and the vulgar masses may depend on the ability of the ruler to connect with beings who embody ancestral figures – beings from another time or place. Again, cross-culturally these connections can be made with living personages, often in the form of foreign wife-takers, whose origins are distant in space, time, or both. Such affinal relations provide demonstrable connections to a moral otherness unobtainable to the masses (Helms, 1998).¹¹

If Chak Tok Ich’aak I – the ruler of a Tikal whose power was on the rise – died without heir, a suitable successor would have been needed from elsewhere.¹² Apparently

¹¹ We know that in the case of the Aztec rulers, for instance, uniquely royal status was acquired through affinal ties to the Culhua dynasty, and through the Culhua connection to Toltec Tula. These ties were achieved through the marriage of the first Aztec ruler (Acamapichtli) to a Culhua princess (Gillespie, 1989: 57).

¹² We do not understand the nature of female succession to the throne of Maya polities. In almost all cases such successions fall in the midst of problematic periods for Maya polities. At Tikal, for instance, the “Lady of Tikal” apparently was never able to accede to the throne, and is not listed among the numbered rulers of the dynasty (Martin and Grube, 2000: 38).

Spear Thrower Owl, the ruler of Teotihuacan, had taken a woman of Tikal as his spouse (Martin and Grube 2000: 31), possibly before the demise of Chak Tok Ich'aak I in AD 378. Certainly the influence of Teotihuacan on the architecture and ceramic assemblage of Tikal can be seen much earlier than the 11 Eb arrival event (see Laporte and Fialko 1990, 1995). If, and this is a significant if, Chak Tok Ich'aak I did require an heir to maintain his dynasty, an affine in the form of a Teotihuacan prince would have provided the perfect source for a Tikal in need of a new ruler.¹³ This would not be the first time in world history that a foreign power, related by marriage to a moribund royal line, had been asked to provide a suitable monarch in substitute for a local member of a cadet lineage.

Looking at an ethnographic example of the connection between time, space, and morality in Mesoamerica, Gossen (1974: 29) states that Chamulas interpreted Massachusetts as being so distant as to lie in the previous era of creation. This distance, indivisible as space and time, has a moral aspect for the Chamulas, for different creations have different moral characteristics. Ethnohistorically too, different temporalities and spaces, have different moral associations. This is evident in the books of Chilam Balam, where K'atun historical-prophecies are associated with the location of the seating of the K'atun, and the different katunob are bound up with moral judgments about human behaviors (see Roys, 1967). Recall also the willingness of the Itza ruler Kan Ek' to recognize *only* the authority of the governor of Yucatan because of his ancestral

¹³ I wish to reiterate here that there is *no* evidence suggesting that Chak Tok Ich'aak I and his forebearers were historically disowned as dynastic predecessors by Tikal's rulers after the arrival of Siyaj K'ak'. Rulers continue to be numbered back to the same dynastic founder, and the names of earlier rulers – including that of Chak Tok Ich'aak – continue to be reused and must obviously have represented connections to these early rulers.

relationship to the authority of Mayapan – time and distance were intimately connected to his moral obligations as the Itza ruler (this volume Chapter 4.3; Villagutierre Soto-Mayor, 1983: 211). Indeed, Monaghan (1998: 141) notes that across Mesoamerica temporality is associated not merely with destiny and personality in the sense of Western horoscopes, but with morality.

The foreign origins of ruling groups are common cross-culturally and through time (Helms, 1988, 1998). In Mesoamerica these origins are often phrased in terms of Tollan, Zuyua or Aztlan among others (Boone, 2000; Gillespie, 1989; Stuart, 2000; López Austin and López Luján, 2000; Recinos, 1999: 171-173; Roys, 1967: 88-98; Tedlock, 1985: 167-176). There is no reason to suppose that these foreign origins not only served a political ideological need, but that they had a “basis in certain historical realities, particularly as seen in the Petén histories” (Stuart, 2000: 302).

From this perspective, the withdrawal of Teotihuacan from the Maya Lowlands in the late 6th Century may indeed have disrupted trade networks (Willey, 1974), but more importantly it created a political vacuum that the rulers of Tikal could not immediately fill. There was, for a time, insufficient moral and military authority to back the Tikal ruler’s claim to the *kaloomte’* titles wielded by Spearthrower Owl, Siyaj K’ak, Nuun Yax Ayiin and their immediate successors. They lacked the claim to otherness – to being outside of the time(s) and place(s) occupied by their competitors – and therefore lacked a claim to a uniquely aristocratic nature. They no longer proved capable sponsors of other dynasties, such as their clients at Caracol, through consensual authority, and they lacked the military capacity to enforce their rule. This was a vacuum into which the dynasty of Calakmul was able to insinuate itself for over one hundred years. Exactly what claim the

rulers of Calakmul may have had on a similar authority may have been is not evident in the surviving hieroglyphic record.¹⁴

Somehow able to garner the physical force needed to overcome his foes, Jasaw Chan K'awiil set about creating a new place in time for himself and his dynasty through evocative monuments and associated performances. His summoning of Spear Thrower Owl in AD 695 was not merely the invocation of a long dead predecessor, but the creation or renewal of an appropriately moral space and time. As with the rulers at Piedras Negras, though his ties were to the past, Jasaw Chan K'awiil took the opportunity to make a separation between himself and his immediate predecessors. What is important to understand in this process is that Jasaw Chan K'awiil had no one necessary history with which to link himself. Instead, he, and probably members of his royal court, chose from a broad range of chronological possibilities that were limited by socially, culturally and politically viable options. He selected which historical connections to make, and which to studiously ignore, in order to reinvigorate the dynastic power of Tikal.

The construction of Str. 5D-33-1, and the interment of Stela 31 effectively ended the function of the North Acropolis as royal necropolis.¹⁵ His reign and that of his son initiated a fervor of construction in the Central Acropolis, the East Plaza and the Great Plaza, including the construction of Temples I and II, and the East Plaza marketplace complex (Harrison, 1970: Chart 1; Jones, 1991: 119). Even in terms of his titles Jasaw Chan K'awiil made a significant change, for he did not use the *kaloomte'* title as had

¹⁴ The Calakmul dynasty may have parleyed its ties to the Preclassic rulers of El Mirador – via proximity and perhaps descent – into political authority as legitimate, and “truly Maya,” overlords as an effective counter to Tikal’s claims on Teotihuacan descent (Martin and Grube 2000: 102-103, 114; Sharer and Golden 2001; Marcello Canuto, personal communication 2002). However, an altar that may be from Calakmul and is now in the Dallas Museum of Art does bear Teotihuacan related imagery (Stephen

most, if not all, of his predecessors since the 11 Eb arrival event. That title had lost its value for Jasaw Chan K'awiil, who had erased the breaks in the chronological façade between AD 376 and 695, and was thus able to move forward in new directions.

8.3: Copan: Early History Lost, Broken and Buried

The royal architecture of Copan is dominated by the massive Acropolis – a complex of temples and monuments that towers above the Great Plaza to the north and the Cementario Group to the South (Fig. 8.7). Tunneling excavations from the Corte (a cut made into the Acropolis by the Copan River), as well as more typical vertical excavations from the surface, have revealed a complex stratigraphy dating back to the Preclassic (for comprehensive overviews of the architectural development of the Acropolis see Fash, 1998; Fash et al., 1992; Sharer, 1996; Sharer, et al., 1999a, 1999b, n.d.). The concern for this work, of course, is the period spanning the 6th and 7th Centuries, and so I shall concentrate on the architectural changes that were undertaken during that era. The more compact nature of Copan's Acropolis when compared to Tikal's, the development of the various projects in the Copan Acropolis as “conjunctive” efforts initiated with the intent of integrating text and archaeological data (see Fash and Sharer, 1991), rapid advances in the interpretation of hieroglyphic texts, and the sheer abundance of texts at Copan all contribute to our ability to closely tie construction projects to individual rulers.

Time Span 2 in the Acropolis, ca. AD 532 – 551, represents “the reversal of the fundamental architectural pattern of the entire Acropolis. For with this final northward

expansion of [the Mini-Acropolis of the South] there was no space for another northern courtyard complex” (Sharer et al., 1999a: 235). Although this represents a significant change in architectural patterns, it seems to be one of function or convenience. Chronological and ideological connotations cannot be ruled out, but it does not seem to be part of the pattern typically identified as the Early to Late Classic shift.¹⁶

These changes occurred during the reign of Wil Ohl K'inich, Copan's eighth dynast. Having supervised one of the great building programs of Copan's Acropolis, Wil Ohl K'inich established patterns that were maintained through the reign of the eleventh ruler Butz' Chan (reigned AD 578 – 628; Sharer et al., n.d.; Sharer et al., 1999a: 239). He dedicated the Ante/Ani structure in c. AD 540, and dedicated Rosalila (beneath 10L-16) as a revitalization of the important connection between Temple 16 and the tombs of the dynastic founder and his spouse that lay below (Stuart, n.d.; cf. Martin and Grube, 2000: 198-199). Construction following the demise of Ruler 8 slowed to a crawl for decades, but there is no direct evidence of dramatic architectural destruction in this period.¹⁷ Although Ruler 10 (“Moon Jaguar”) reigned for 25 years, he apparently accomplished little in the way of building programs (Sharer et al., n.d.).

The traditionally assigned shift from Early to Late Classic around AD 600 encompasses the reign of the eleventh dynast, Butz' Chan (AD 578 – 628). It is at this time that the Acropolis again experienced a surge of building and the East and West

¹⁵ Jasaw Chan K'awiil's own burial was placed under Temple I (Jones, 1991: 119).

¹⁶ In fact, Traxler (n.d.) interprets the fundamental template of the Copan Main Group to have been established in the time of the dynastic founder Yax K'uk' Mo', and to have been retained until the demise of the dynasty despite expansion and modification.

¹⁷ It is worth noting that archaeologists often place a great emphasis on the visual drama that would have been associated with archaeologically visible termination rituals, noting (as I do in Chapters 5 and 7) that the burning, smashed vessels, and elaborate artifact scatters would have been spectacles of demolition. The destruction of any masonry structure in the heart of an acropolis would have been accompanied by noise,

Courts appeared. Despite the burial of the Time Span 2 Court, Rosalila was maintained and in use after the development of the East Court (Sharer et al., 1999a: 243). When it was finally superceded by newer versions of Temple 16, Rosalila was buried intact and covered with protective fill, rather than demolished like all earlier temple superstructures in the Temple 16 sequence (Agurcia, 1996; Sharer et al., 1999a: 243).

The architectural changes in the Acropolis undertaken during the reign of Butz' Chan were significant. Looking at the monuments of Copan furthers the impression of dramatic political change or upheaval in the late 6th Century. As Sharer (n.d.) states, although "there is no evidence of further dynastic change or major political disruption during Copan's Early Classic Period, there is evidence of an apparent flurry of destruction, recalling a similar pattern seen in Tikal's Early Classic monuments and several royal tombs." At least two buildings are known to have been demolished and burned, c. 550 – 560, in the Main Group: Structure 10L-2-3rd at the north end of the Great Plaza, and a funerary temple immediately above the "Sub-Jaguar" tomb. The latter was almost entirely demolished and burned. This is a notable departure from the standard Copanec pattern of architectural termination, which involved partial demolition without burning (Cheek, 1983: 108; Sharer, n.d.; Traxler, n.d.).

In addition to architectural demolition, there is striking evidence that numerous monuments were destroyed, and that "the end of the destruction of Copan's Early Classic monuments can be defined by a clear-cut transition between smashed and complete monuments, dating to the decade between 9.6.0.0.0 and 9.6.10.0.0 (AD 554 – 564)" (Sharer n.d.). All but four monuments from the period AD 435 to 554 are mutilated in

some fashion or buried, but all 26 stelae after AD 564 are complete – some are broken but not dramatically defaced. Of these four, two were buried well before the 554 – 564 period. As for the remaining two monuments, Stela 63 is a monument dedicated by K'inich Popol Hol that was found within Papagayo, an earlier version of Temple 26. The stela was broken and had part of its text selectively erased. A final text from a stair in Papagayo dedicated by K'altuun Hix was also erased (Fash 1992, 1998; Sharer et al. 1999a, 1999b). These last two monuments may have been mutilated in the Late Classic (Sharer, n.d.).

The two monuments whose dedication dates fall within the period from AD 554 to 564 are Stelae 9 and 17. Moon Jaguar (reigned 553 – 578) dedicated both of these monuments. Stela 17 was located in the Great Plaza and, like nearly all other early monuments in the Main Group, was smashed. A fragment of Stela 17 was found in 1912, associated with Str. 10L-2, and later excavators located a second fragment (Baudez, 1983: 157).

Stela 9 either survived the destructive episode or, more likely, postdates it. It was not placed in the Great Plaza or the Acropolis, but rather in association with Group 9, an architectural group now buried under the modern town of Copan Ruinas (Baudez, 1994; Martin and Grube 2000: 198). It would appear that Moon Jaguar sought to reestablish the authority of the dynasty first in Group 9, not in the Main Group. Perhaps this was an area of ancestral, even predynastic, authority.¹⁸

¹⁸ If a return to an ancestral location for the reinvigoration of the dynasty, the actions of Moon Jaguar would be similar to those of Ruler 1 of Piedras Negras who emphasized his connections to the South Group of that site (see Chapter 7).

It was not until the reign of Butz' Chan that the rulers of Copan began to dedicate monuments again in the Great Plaza or Acropolis. This pattern is intriguing, and reminiscent of those described for Piedras Negras. An architecturally "fallow" period in the Acropolis in the mid-6th Century was accompanied by a move to a new – or perhaps very old – location for the dedication of royal monuments. After a generation there is a return in force of both monuments and monumental construction to the Acropolis.

Once again, I believe that a political maneuver was being made here that required the manipulation of signs of chronology. But how can the necessity of such a move be explained? Despite the evidence provided by burned buildings and smashed monuments, we lack the "smoking gun" of textual evidence that Copan suffered a military defeat at this time, as is clearly the case at both Tikal and Piedras Negras.¹⁹

As with Tikal's dynastic and monumental turmoil, answers must be sought in the centuries leading up to the crisis. Like Tikal, Copan had experienced an "arrival" event that initiated a new dynastic line. The text on Copan Altar Q lays out the most complete account of this event. On 8.19.10.10.17 5 Caban 15 Yaxk'in (4 September 426 AD) an individual named K'uk Mo' Ahaw received the K'awiil scepter, and was thus accorded divinely sanctioned rulership (Stuart, 2000: 490-494, n.d.). Three days later, with the regnal name of K'inich Yax K'uk Mo', he is said to have come from the building where he had acceded to power, and five months later he arrived at Copan in what may have been a violent takeover (Schele, Fahsen, and Grube, 1993; Sharer, 1999).

An alternative to the violent takeover hypothesis is that Yax K'uk Mo' was already present in Copan prior to his accession. He may be mentioned in a series of

¹⁹ Although there is circumstantial epigraphic evidence for such a defeat discussed below.

inscriptions, including Stela 15 and an incised peccary skull, spanning fifty years prior to his accession (Sharer, n.d.; Stuart, 2000, n.d.). How Yax K'uk' Mo' was integrated into the dynasty prior to his accession is unclear, but circumstantial evidence suggests that he was a foreigner, married to a local noblewoman (see below). This would offer parallels to my suggestion above for the affinal relationship between Tok Chak Ich'aak and the ruler of Teotihuacan.

The location of Yax K'uk' Mo's accession is given by a glyph that may read *wi'te'naah*. This is a building or buildings seemingly connected to Teotihuacan associated personages, however the exact meaning of the name is unknown (Stuart 2000: 492-493; Martin and Grube, 2000: 192). In later monuments, Yax K'uk' Mo' is also often assigned the west kaloomte' title associated with Spearthrower Owl, Siyaj Kak' and numerous Tikal rulers, apparently derived from their Teotihuacan associations. It is interesting to note that relatively contemporary monuments such as the Motmot marker do not attribute him with this title.²⁰

Although the rulers of Tikal maintain their dynastic links as the “Nth ruler in the line” of a founder who predates Chak Tok Ich'aak I in the aftermath of the 11 Eb arrival events, similar enumeration at Copan begins with Yax K'uk' Mo'. He is referred to either by name, or simply the *wi'te'* title associated with his place of accession.²¹

²⁰ The precise point of origin of Yax K'uk' Mo' remains a point of conjecture. Strontium isotope analysis of the bones in the Hunal tomb – the most likely candidate for the resting place of Yax K'uk' Mo' – reveal that the individual was raised neither in the Copan Valley, nor in Teotihuacan, but rather in the Central Péten. Given the associations of Tikal with Teotihuacan, and the mention of Siyaj Kak' on the Xukpi Stone among other pieces of evidence, Sharer (1996; 1999; Sharer et al. 1999a, 1999b) concludes that the most likely point of origin is Tikal (see also Stuart 2000, n.d.).

²¹ The individual buried within the Hunal Tomb was interred with a shell collar bearing a name tag “read yu-ha WI'-TE”, evidently a simple name-tag for the object composed of (u)y-uh, ‘the necklace of...’ and a curious name or personal reference *wi'te'*...the name of a ritual location that is...intimately and exclusively associated with K'inich Yax K'uk' Mo'” (Stuart, nd)

Occasional and very fragmentary mention is made on Late Classic monuments of rulers who governed Copan prior to the arrival of Yax K'uk' Mo', but the relationship of these individuals to the known dynasts is opaque (Martin and Grube, 2000: 193; Schele, Grube and Fahsen, 1993: 3; Sharer, 1999; Stuart, 1992, 2000: 490, nd).

If Yax K'uk' Mo' was a foreigner, as it would appear, it is interesting that prior to the Late Classic he was not uniformly depicted as such. His foreignness was not stressed by his immediate successors to the same degree as in later centuries (Sharer, 1999; Stuart, 2000: 500). On the Motmot marker – dedicated at a time when Yax K'uk' Mo' was probably alive (Stuart, n.d.) – he is depicted with his son and heir, and both individuals are depicted in typically Maya regalia. It not until the Late Classic period that Yax K'uk' Mo' was universally portrayed as a Teotihuacano with goggle covered eyes.²²

Following the burial of Yax K'uk' Mo', the Teotihuacan-influenced talud and tablero structure called Hunal that houses his tomb was quickly buried by his successor K'inich Popol Hol within a “typically” Maya structure dubbed Yehnal. In turn, Yehnal was covered by “Margarita.” A tomb within Margarita has been convincingly argued to contain the mother of K'inich Popol Hol, a woman who was both native to the Copan region and the wife of Yax K'uk' Mo' (Fash and Fash, 2000: 442-443; Sharer, 1996, 1999; Sharer et al., 1999a, 1999b).²³ Despite references to Yax K'uk' Mo' on the façades of the structure of Yehnal, Margarita and subsequent versions of Temple 16 (Martin and Grube, 2000:195; Sharer et al., 1999b: 10; Stuart, n.d.), the Margarita tomb

²² Late Classic rulers of Copan emphasize their Central Mexican otherness to the degree of creating a “Teotihuacanoid” text to parallel a Maya text in the temple inscription of Temple 26 (Stuart, 2000: 495 – 498).

²³ Strontium isotope analysis indicates that the individual buried in the Margarita tomb was raised within the Copan region (Sharer, 1999; Sharer et al., 1999a, 1999b).

is the most elaborate yet found at Copan and is a focal point of the Temple 16 construction sequence. Much as at Tikal, a foreign lord appears to have taken a local wife and this affinal relationship played a significant role in the establishment of the Copan dynasty.

With the collapse of the Tikal/Teotihuacan connection, the dynasty of Copan, too, was at a loss. Its claims to foreign authority could no longer be substantiated through ties to a living Central Mexican polity any more than could that of the lords of Tikal. If the Copan dynasty's ties were more directly with Tikal, the situation would have proven equally trying as the rulers of Tikal struggled to maintain their authority in the face of Calakmul's onslaught. The evidence for the locally sponsored destruction of buildings and monuments, as opposed to invasive military defeat, at Copan is equivocal (Sharer, n.d.). However, it is interesting to note that the only site, other than Quirigua, that clearly mentions a ruler of Copan is Caracol. The reference is made on Caracol Stela 16, dated to AD 534, a period shortly before the onset of hostilities between Tikal and the Caracol/Calakmul axis (Martin and Grube, 2000: 87; Sharer, n.d.). It is impossible to say for certain if Copan was directly involved in the hostilities of AD 562, but it is suspicious that Copan Stela 17 (AD 554) was smashed, while Stela 9 (AD 564) was not.

Even in the absence of a direct military defeat at Copan, the regional situation would have set in motion a complex local political program aimed at "recreating" the moral authority of the Copan dynasts. Moon Jaguar sought to re-establish the authority of the dynasty by erecting his Stela 9 in Group 9, an area of significance because of its long occupational history, perhaps with ties to the pre-dynastic rulers of Copan. But it was during the reign of Butz' Chan that a return to the Main Group became politically

and chronologically feasible. His first monument, Stela 7, was dedicated in AD 613 and erected in an outlying group. His second monument, Stela P, was dedicated in AD 623 and placed in the West Court of the Main Group.²⁴ It is also Butz' Chan who was responsible for carrying out the makeover of the Acropolis that buried the Time Span 2 Court, leaving exposed Rosalila.²⁵

Lacking a vital link to foreign authority in the absence of Teotihuacan or Tikal, the rulers of Copan compensated by incorporating appropriately foreign aspects of their dynastic founder and restructuring the notion of dynasty and rulership at Copan. As at Tikal, the Late Classic rulers of Copan framed moral and spatial otherness as temporal otherness. Thus, Yax K'uk' Mo' was associated on numerous monuments with the period ending 9.0.0.0.0 8 Ahau 13 Ceh, for "the end of the bak'tun was a cosmic founding or renewal event . . . coupled with his non-Maya 'otherness,' K'inich Yax K'uk' Mo' became a symbolic figure that fused temporal, geographical and ethnic distance, when at the same time he stands at the focal point for the entire dynastic history of the polity" (Stuart, 2000: 494, n.d.).

This is not to say that Yax K'uk' Mo' did not actually participate in the ceremonies for the 9.0.0.0.0 ending – the contemporary Motmot marker seems to indicate just such a participation. Rather, the importance of this event to later dynastic rulers was exaggerated because of a need to emphasize that moment as *the* moment of foundation for authority. This despite the fact that Yax K'uk' Mo' arrived at Copan on a different

²⁴ "Galindo's Tomb" was located against the south side of the Ante Structure when the Time Phase 2 court was buried, and may have been the burial place of Moon Jaguar, placed there by his son Butz' Chan as part and process of the dynastic return to the Acropolis (Robert Sharer, personal communication 2002).

²⁵ Rosalila's dramatic façade depiction of Yax K'uk' Mo', may be one reason why the building was maintained. One also wonders at the survival of the Rosalila façade in a period of such turmoil. Such

date, possibly even earlier than that assigned for his arrival on Altar Q (Sharer, n.d.; Stuart, n.d.). Yax K'uk' Mo' is thus established in the inscriptions as the ruler who founded the current bak'tun and, as depicted on Altar Q, he is the ultimate source of authority – a figure who is not outside of time, but rather founds an era and an unbroken dynasty (Fig. 8.8). References to “pre-dynastic” rulers may have served other political agendas of Late Classic rulers, but these hazy figures could not be associated effectively with such a benchmark moment.

Clearly there were very real, and very difficult, economic and military problems to overcome with the onset of the 6th and 7th Century turmoil in the Péten. Whatever, the proximate cause of the 6th Century destruction at Copan, the rulers of Calakmul did eventually succeed in sinking their grip into the Southeastern Lowlands. In 9.15.5.0.0 (AD 736) the ruler of Quirigua dedicated a monument under the supervision of a lord of Calakmul, despite the fact that he was the nominal subordinate of the ruler of Copan (Looper 1999: 270). This situation parallels Tikal's woes with Caracol and Calakmul, and indeed the ruler of Quirigua waged a successful war (perhaps with military aid from Calakmul) against the ruler of Copan, c. AD 738, much as Caracol had helped to wreak havoc on the Tikal dynasty. But these issues developed much later in time, after the patterns of abandonment, monument destruction and renewal initiated by the 6th and early 7th Century rulers of Copan had successfully reestablished much of the authority of their dynasty in the wake of Early Classic/Late Classic divide.

8.4: Altar de Sacrificios: Shifting Palaces and the End of the Early Classic

Although the epigraphic record from Altar de Sacrificios (Graham, 1972; see also Houston, 1986; Nelson, 1998) is more poorly preserved and understood than that of Piedras Negras, Copan or Tikal, it nonetheless provides interesting patterns of dates associated with architecture that allow for many points of comparison. Altar de Sacrificios also provides a useful point of comparison with Piedras Negras, as it lies in the Usumacinta drainage and has known material ties to Piedras Negras (Adams, 1971: 131-133). There is no evidence for direct interaction between the rulers of Altar de Sacrificios and Teotihuacan, nor is there evidence for their direct involvement with the machinations of Tikal and Calakmul. This does not, however, mean that Altar de Sacrificios was not subject to the regional perturbations that affected other sites. Tangled up in the political landscape of the Maya Lowlands, the rulers of Altar de Sacrificios, much as at Copan, Tikal and Piedras Negras, used architecture and monuments, among other signs, to reestablish stability in the aftermath of upheaval.

Monumental architecture at Altar de Sacrificios is almost exclusively restricted to four patio groups: the B Group, the C Group, and the North and South Plazas of the A Group (Fig. 8.9). For much of the early history of the site, all monumental construction was focused on the B and C Groups (Smith, 1972: 110 – 113). Structure B-1 was of central importance to the early rulers of Altar de Sacrificios, as all but one of the surviving Early Classic stelae were found in association with that building (Fig. 8.10; Graham, 1972). A nearly complete sequence of period ending dates is recorded on Stelae 1 – 13, beginning in 9.1.0.0.0 (AD 455) and continuing through the 9.4.10.0.0 (AD 524) half-period ending recorded on Stela 12. All of these monuments were

associated with Structure B-1. Following the dedication of Stela 12, Altar de Sacrificios falls silent until 9.9.5.0.0 (AD 618) (Graham, 1972: 115-120; Willey, 1973: 67-68).

It is Graham's (1972: 67) argument that monuments from the nearly eighty-year period did at one time exist but were smashed, and may have been reused in construction fill. The first part of his argument is based on the organization of monuments associated with Str. B-1, there being "a gap in the balanced arrangement of monuments there suggesting that a monument was planned for the 9.5.0.0.0 ending" (Graham, 1972: 67). The second part of his argument is stylistic, and he notes that carving styles had changed dramatically between the final monuments dedicated in Group B and the initial monuments dedicated in Group A. Such a change indicates to Graham that artists had the opportunity to practice their skills during a period that only appears in retrospect as a hiatus in monument dedication (Graham, 1972: 68). Though Willey (in Graham, 1972: 68) does not accept Graham's argument that only a small group of monuments from within the AD 524 to 618 time range would have been smashed, circumstantial evidence and the comparison with Tikal, Copan and Piedras Negras indicates that, in fact, such selective destruction is almost a certainty at Altar de Sacrificios as well.

As at Piedras Negras, an inscriptional "hiatus" also signals a sea change in the architectural program at Altar de Sacrificios. At some time during this historical gap, monumental construction ceased in the B and C Groups, and was initiated to the east in the North and South Plazas of the A Group (Smith, 1972; Willey, 1973: 40, 44). Although some minimal construction took place in the B Group into the 7th Century, no major construction took place, most Late Classic ceramics are restricted to surface

scatters, and the façades of structures in Group B appear to have been robbed for construction in Group A (Adams, 1971; Smith 1972; Willey, 1973).

When Altar did emerge from its years of silence, it did so in a most unusual way. Graham (1972: 67) argues that Stela 18, found in the South Plaza of the A Group, had actually been moved there from its original position among the monuments associated with Structure B-1 where it had been dedicated on 9.4.0.0.0 (AD 514; see Fig. 8.9). Once in place in Group A, Stela 18's back, originally without carving, was inscribed with the date 9.9.5.0.0 (AD 618). Graham (1972: 67-68) infers that "since the original 9.4.0.0.0 portrait and text of the front of the stela were not altered, it suggests that the rulers of the day sought identification with earlier authority and, to a certain extent, were reiterating the old orthodoxy."²⁶

Houston (personal communication, 2002; 1986: 2-4) raises two other interesting points about the inscriptions of Altar de Sacrificios that are of importance to this discussion. The first is that the emblem glyph used on Early Classic monuments at the site is distinct from that used on Late Classic monuments, perhaps indicating a break in the dynastic line (Fig. 8.11). Second, Late Classic monuments from Altar de Sacrificios, such as Stela 9, record a dynastic succession of as many as thirty-six rulers (see also Nelson 1998: 32). Houston questions whether this lengthy dynasty was local, or instead came to Altar de Sacrificios after the 6th Century. Unfortunately, we simply cannot reconstruct the historical particularities of the Altar de Sacrificios dynasty to the same degree as the other three sites discussed here.

²⁶ Stephen Houston (personal communication, 2002) has expressed doubts about Graham's interpretation of Stela 18. If, however, Stela 18 was initially dedicated in the South Plaza and never moved this does not change the substance of the argument for this work, which is that the renewal of monument dedication at

The relationship between the rulers of Teotihuacan and Altar de Sacrificios is similarly vague. There is no textual evidence of a connection, and the material ties between the two sites are minimal. All evidence of Teotihuacan associated ceramic styles pertains to the late Ayn Phase assemblage (c. AD 450 – 554) at Altar de Sacrificios. These ceramic types are entirely absent in the Veremos Phase assemblage, dated to between AD 554 and 570 (Adams, 1971; Graham, 1972).

The disappearance of these influences is certainly related to the withdrawal of Teotihuacan's presence across the Maya Lowlands, but there is no indication that rulership at Altar de Sacrificios was derived in any part from Central Mexican overlords as at Tikal, Copan and Piedras Negras. Furthermore, whether Altar de Sacrificios was directly involved in the strife between the dynasties of Calakmul and Tikal is also unclear at best. The Tikal ruler Animal Skull is mentioned at Altar de Sacrificios in AD 628, but the context of this reference is uncertain, making it difficult to speculate on the relationship between the rulers of Tikal and Altar de Sacrificios (Martin and Grube, 2000: 41).

Whatever the local nature of the turmoil that befell Altar de Sacrificios in the 6th Century, the reactions of the site's rulers were in many ways similar to the patterns witnessed at Tikal, Copan and Piedras Negras in general outline. Attempting to mend the chronological rift and restore dynastic rule to its proper course, a move was made from Group A to Group B. This was apparently not accompanied by the drama of shattered palaces as at Piedras Negras, but the abandonment and neglect of the old royal architecture in Group B must have been a powerful sign of disconnection from the past in

Altar de Sacrificios took place in the A Group and not the B Group.

and of itself. However, in order to provide the signs of connection with an appropriate – and perhaps appropriated – past, the rulers of Altar de Sacrificios selected the 9.4.0.0.0 period ending recorded on Stela 18 to dedicate the new seat of royal authority in Group A. Once again, continuity with the past was tied to a conscious newness that signaled the strength of the dynasty and the polity.

8.5: The Early Classic/Late Classic Divide at Piedras Negras in terms of Regional Events

In light of these regional events I wish to return to the issue of the chronological manipulations made by the rulers of Piedras Negras. In Chapter 7, I framed these in terms of very local events: c. AD 554 a ruler of Piedras Negras was defeated by forces from Pomona, and subsequent rulers manipulated their building programs, located their monuments, and erased historical evidence in an attempt to eliminate signs of a discredited regime, and to reforge ties with a past that could better legitimate the dynasty. These local events, however, were obviously part of a pan-regional upheaval extending from Central Mexico to Honduras that had a profound effect on the dynasties of many Maya polities. Where, then, does Piedras Negras fit into these regional patterns? How was Piedras Negras linked either to Teotihuacan and its withdrawal from the Maya Lowlands, or to the violent politics of the Tikal/Calakmul conflict?

There do seem to have been definite ties – or at least a claim was laid to ties - between the Early Classic dynasty of Piedras Negras and the lords of Teotihuacan. Panel 12 from Piedras Negras records, among other events, the rituals surrounding the k'atun ending of 9.4.0.0.0 (AD 514). The individual performing the scattering ritual,

presumably Ruler C of Piedras Negras, is called the *yajaw*, or the possessed lord, of an *ochk'in kaloomte'*. As discussed above with regards to the Tikal and Copan dynasties, the latter title is typically carried by individuals with ties to Teotihuacan (Martin and Grube, 2000: 141).

The much-later Panel 2 records an event that hearkens back to the events recorded on Panel 12. Though the contemporary actions of Panel 2 occur in AD 658, Ruler 2's acceptance of the Teotihuacan-associated *ko'haw* headdress is rhetorically equated with the same event in AD 510: The then ruler of Piedras Negras, "Turtle Tooth", is presented with the *ko'haw* headdress by another ruler named Tajoom Uk'ab' Tuun, who carries the title of *ochk'in kaloomte'* (Martin and Grube, 2000: 141, 143-144). This is almost certainly intended to legitimize the accession of the rulers of Piedras Negras under the auspices of Teotihuacan, much as Siyaj' K'ak' had overseen the accession of Yax Nuun Ayiin of Tikal.²⁷

This Teotihuacan connection is also hinted at on a wooden box recently discovered in a cave in a valley just north of Piedras Negras in Tabasco, Mexico (Fig. 8.12). The text on the box makes reference to an individual who bears the title *wite' naah ajaw* (recalling the location where Yax K'uk' Mo' received the K'awiil scepter) as well as *ochk'in kaloomte'*. The individual's name closely resembles Tajoom Uk'ab' Tuun, the same figure mentioned on Piedras Negras Panel 2 (Anaya et al., 2001). Anaya (et al. 2001) interprets the fragmentary date remaining on the box as falling only six days after the events recorded at Piedras Negras.²⁸ In all, it would seem that Teotihuacan was still

²⁷ No "arrival" event is evident in the inscriptions of Piedras Negras.

²⁸ The date recorded at Piedras Negras reads [9.3.16.0.5] 8 Chikchan 3 Ceh (11 November, 510 AD), and on the box it is interpreted as 1 Chuwen 9 Ceh (Anaya et al. 2001). It is worth reiterating that both Panel 2

active in the politics of the Usumacinta region as late as AD 510, long after the death of Yax K'uk' Mo' and Siyaj' K'ak'.

By the mid-6th Century, however, the reach of Teotihuacan's rulers was on the wane - trade routes were collapsing and royal visits had effectively ceased. For the dynasts of Piedras Negras, this created serious problems relating to the maintenance of authority; an ideological blow that was made manifest in a staggering military defeat around 554. With no *kaloomte'* from abroad to help maintain the legitimacy of the Maya dynasty, it would have been imperative to establish a new political foundation. Certainly the emphasis on Teotihuacan imagery in Late Classic monuments at Piedras Negras recalls the efforts of rulers at both Tikal and Copan to establish themselves as foreign, morally unique and distant, both in space and time, from other members of society within and without their polity (see Stone, 1989).

What, though, of the conflicts that raged around Calakmul and Tikal in the 6th Century, conflicts that were themselves related to changing relations with Teotihuacan? The politics of the Usumacinta were certainly significant in the Calakmul/Tikal conflict. A ruler of Yaxchilan, Knot-eye Jaguar, captured a noble from Tikal in AD 508 (Martin and Grube, 2000: 120; Schele and Mathews, 1991: 234-239). In the late 6th and early 7th Centuries, Palenque suffered grave defeats at the hands of Calakmul, and sheltered Nuun Ujol Chaak of Tikal after his defeat (Martin and Grube 2000: 42, 159-160, 164). Despite long running antagonistic relationships with both Palenque and Yaxchilan, however, the role of Piedras Negras in this conflict is entirely unknown.

and the wooden box make retrospective references to these events, as both were carved in the 7th Century or

8.6: Conclusion: Reevaluating the Reality and Utility of the Early Classic/Late

Classic Divide in the Maya Lowlands.

The primary question remaining, as far as this work is concerned, is ascertaining what the insight gleaned from Tikal, Copan, Altar de Sacrificios and Piedras Negras regarding the political role of indigenous chronologies reveals about the reality and utility of an archaeological chronology that divides the 6th and 7th Centuries along an Early to Late Classic divide. This was undoubtedly a time of massive political upheaval across the lowlands, with an important relationship to the decline of Teotihuacan, which had ramifications for trade networks, ideology, and warfare. I would argue that the rulers of the sites examined in this study perceived this as an era of potential disjuncture that they sought to heal by eliminating the gap in authority, bridging it through the manipulation of chronological signs to create the appearance and reality of an unbroken cycle of events reestablishing legitimate moral and political authority.

It is tempting to see this as related to the calendrical cycles of the Long Count, for the majority of the events appear, at first glance, to focus around the 9.6.0.0.0, or AD 554, k'atun ending. It was in AD 556 that the ruler of Tikal axed the very Caracol lord he had seated only 3 years before. It was around AD 554 that the forces of Piedras Negras were defeated by those of Pomona. It was between AD 554 and 564 that the monuments of Copan were almost entirely destroyed, and several buildings burned. We don't have the same precision for Altar de Sacrificios, but the same period fits generally with the monumental and architectural changes described for that site as well.

To focus on this k'atun ending, however, would be to ignore both the beginning and the end of this problematic era.²⁹ The ruler of Calakmul had already presided over the accession of Aj Wosal of Naranjo in AD 546, and lost a vassal lord to Yaxchilan in AD 537 (Martin and Grube 2000: 72, 121). On the other end of the conflict, it was not until AD 695 that Jasaw Chan K'awiil was able to overcome the ruler of Calakmul, and effectively create what appears to archaeologists 1,400 years later as a "hiatus."

The evidence points to regional events that were, in some sense, precipitated by the decline of Teotihuacan. That some dynasties were dependant, in large part, on their origins at, or connections to, that Central Mexican regime for their moral authority resulted in a political, moral and chronological vacuum in the Maya Lowlands that the rulers of sites such as Calakmul rushed to fill. The results were not only far-flung regional conflicts, but also very local events causing different outcomes, and reacted to differently at each site. Those rulers who managed to successfully negotiate this period did so by creating what we see as the Early Classic/Late Classic divide: The need to reattach to an appropriate space and place after a political convulsion. It is perhaps more correct to say that some Maya rulers attempted in many ways to *eliminate the appearance of a divide*. This is a point discussed further in the concluding chapter.

Finally, were the chronological manipulations that were so important to the dynasts in this study, and their royal courts, evident and important at all levels of society?

²⁹ The problem of inter-polity warfare, of course, plagued the Maya Lowlands throughout its history. I refer here only to the particularities of the Calakmul/Tikal conflict as Calakmul extended its hegemony although I recognize that it is impossible to entirely separate out these events from the historical scope of the Maya Lowlands, any more than the Napoleonic Wars can be separated out from the course of European history before or after the 19th Century.

They must have been. Even if the majority of people could not read the texts on the Late Classic monuments, it would not have gone unnoticed that a palace was burning, that monuments were smashed, and that new royal imagery was being used. But these changes were probably not immediately resultant in change at all levels of society – except, perhaps, for those effects that were the immediate result of warfare, economic dislocation or other trauma. The chronologies of the houses of commoners would almost certainly have witnessed very different connections and disconnections than those seen in the houses of kings. Furthermore, the majority of these royal signs of chronology were intended not merely, or even primarily, to differentiate commoner from king, but rather to differentiate suzerain from subordinate noble. As such there is no necessary direct relationship between the chronologies of royal and common houses. I conclude in the next chapter with some final thoughts and questions about archaeological and indigenous chronologies in the Maya Lowlands and beyond.

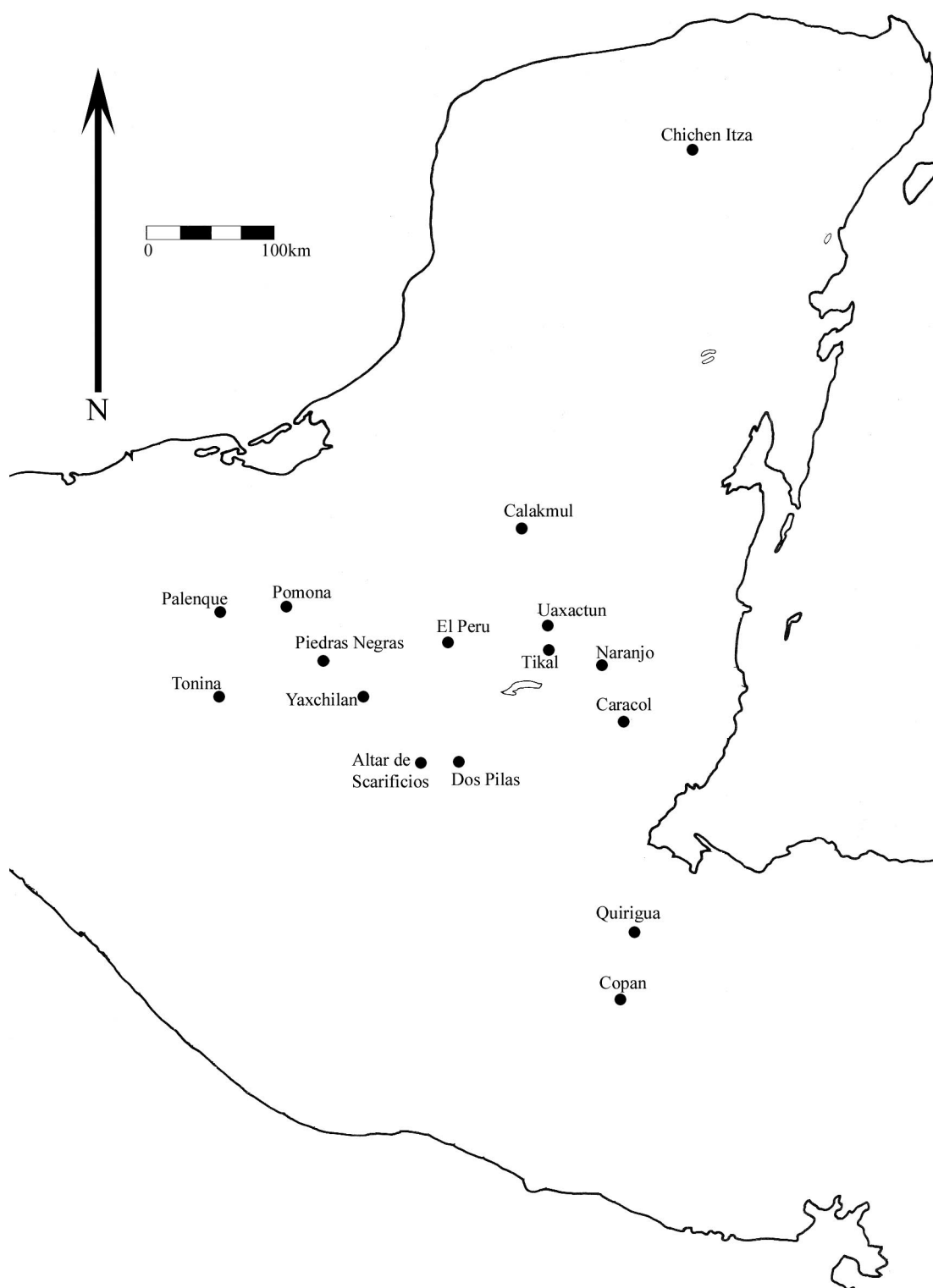


Fig. 8.1: Map of the Maya area showing sites mentioned in text.

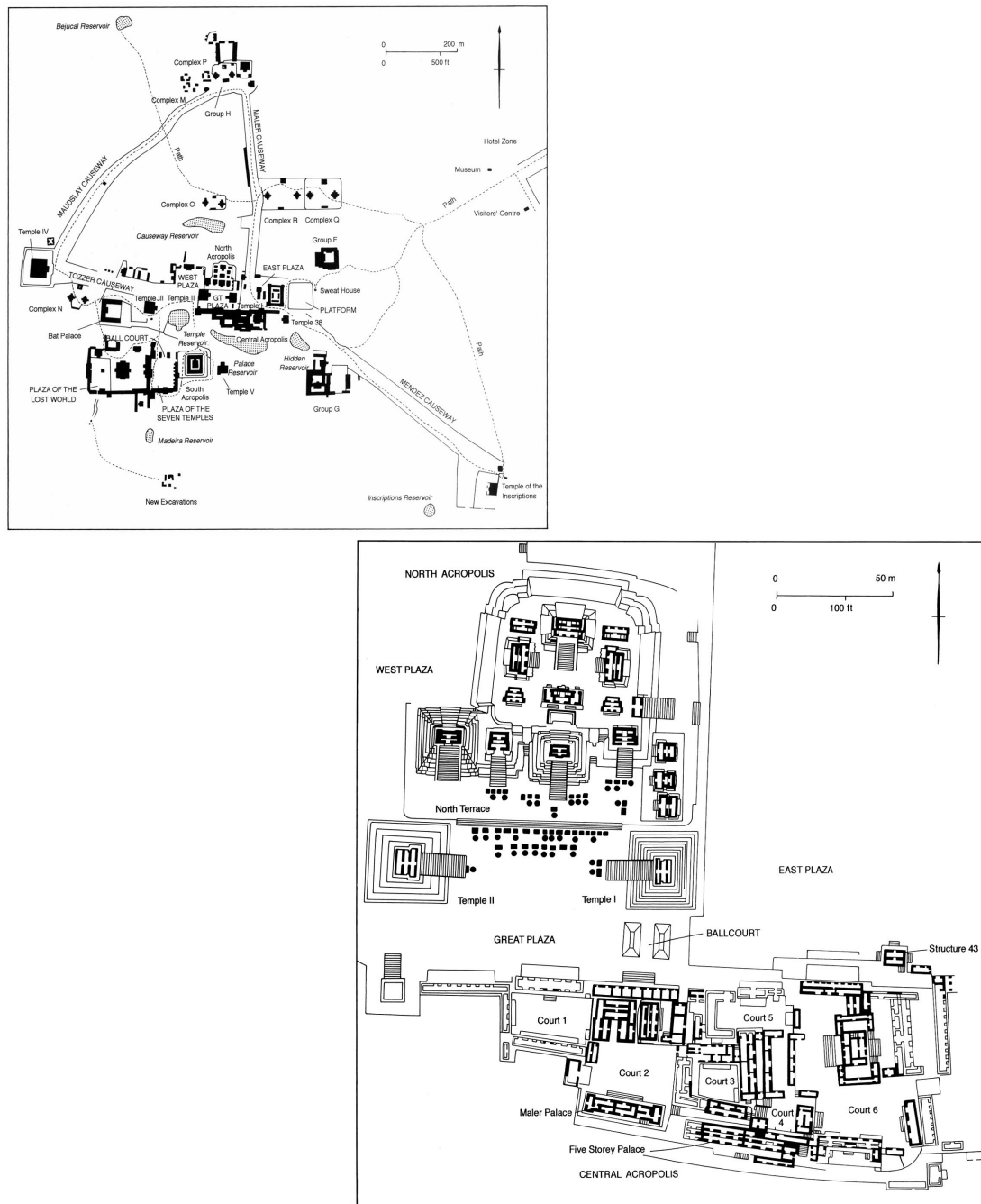


Fig. 8.2: Map of the major architectural complexes at Tikal, Guatemala, with the North Acropolis and Central Acropolis enlarged (from Harrison, 1999: 16, 17).

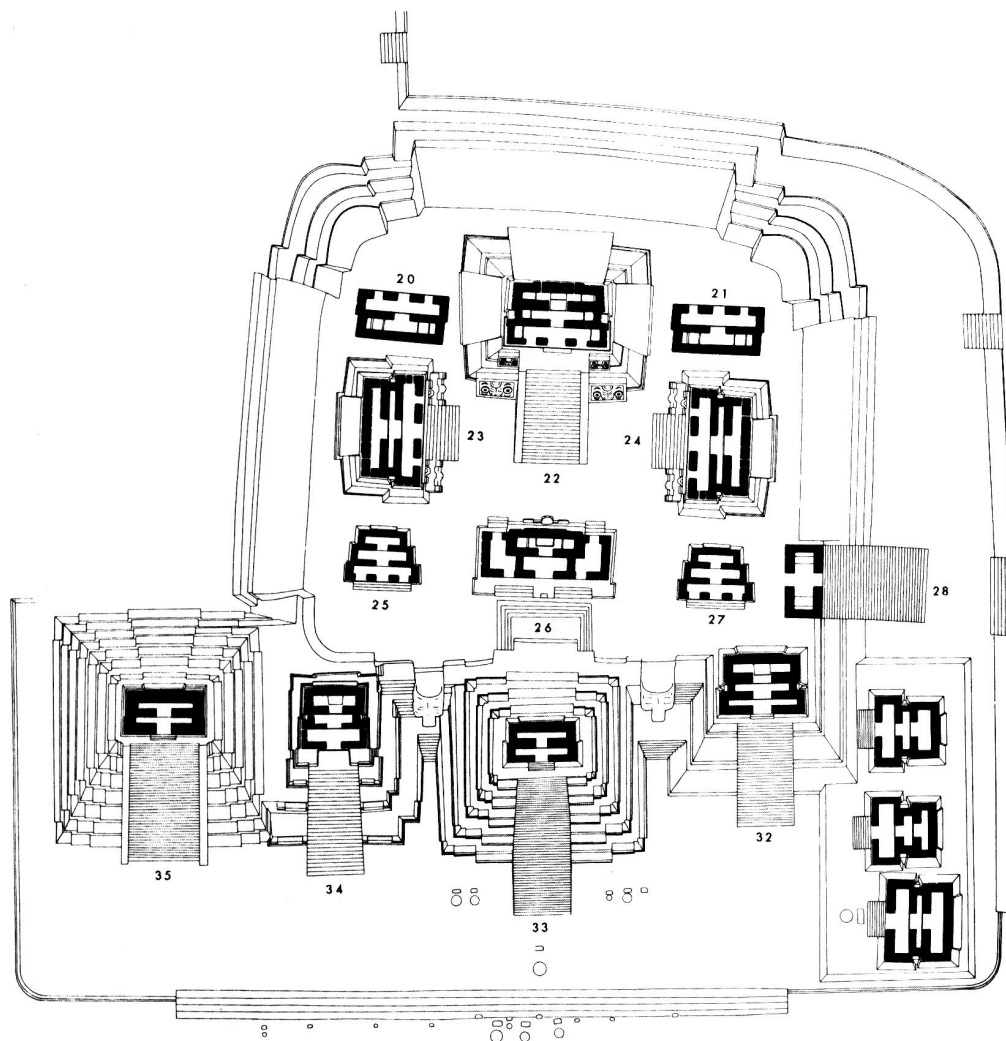


Fig. 8.3: Map of the North Acropolis, Tikal, Guatemala, with structures numbered in the 5D series (e.g., 5D-33; from Harrison, 1999: 74).

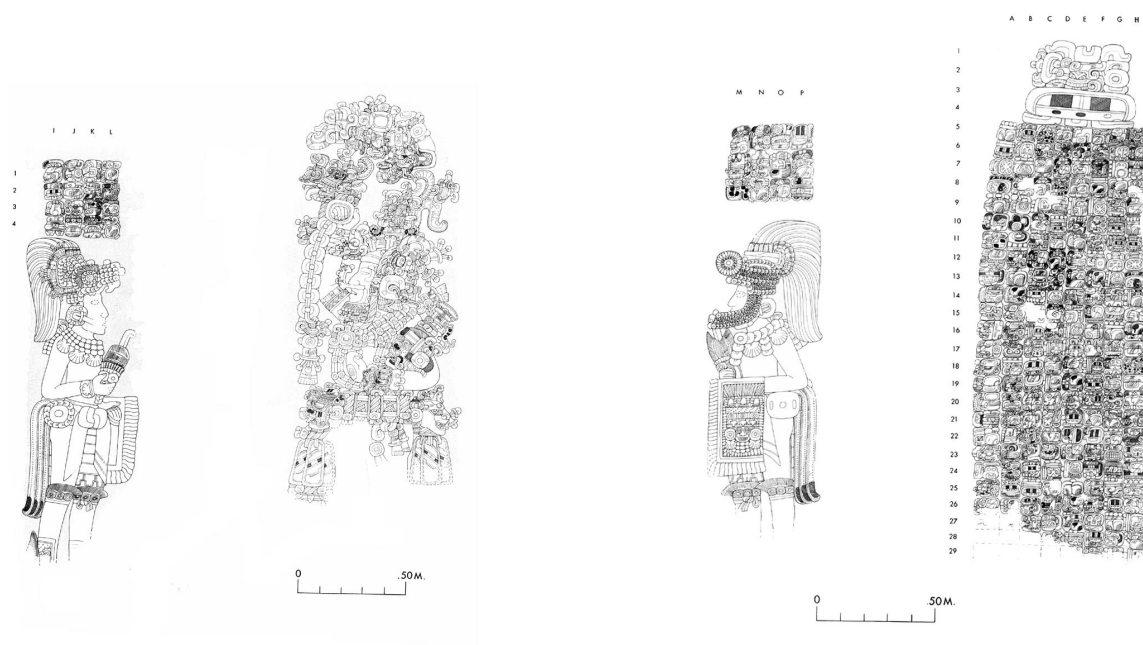
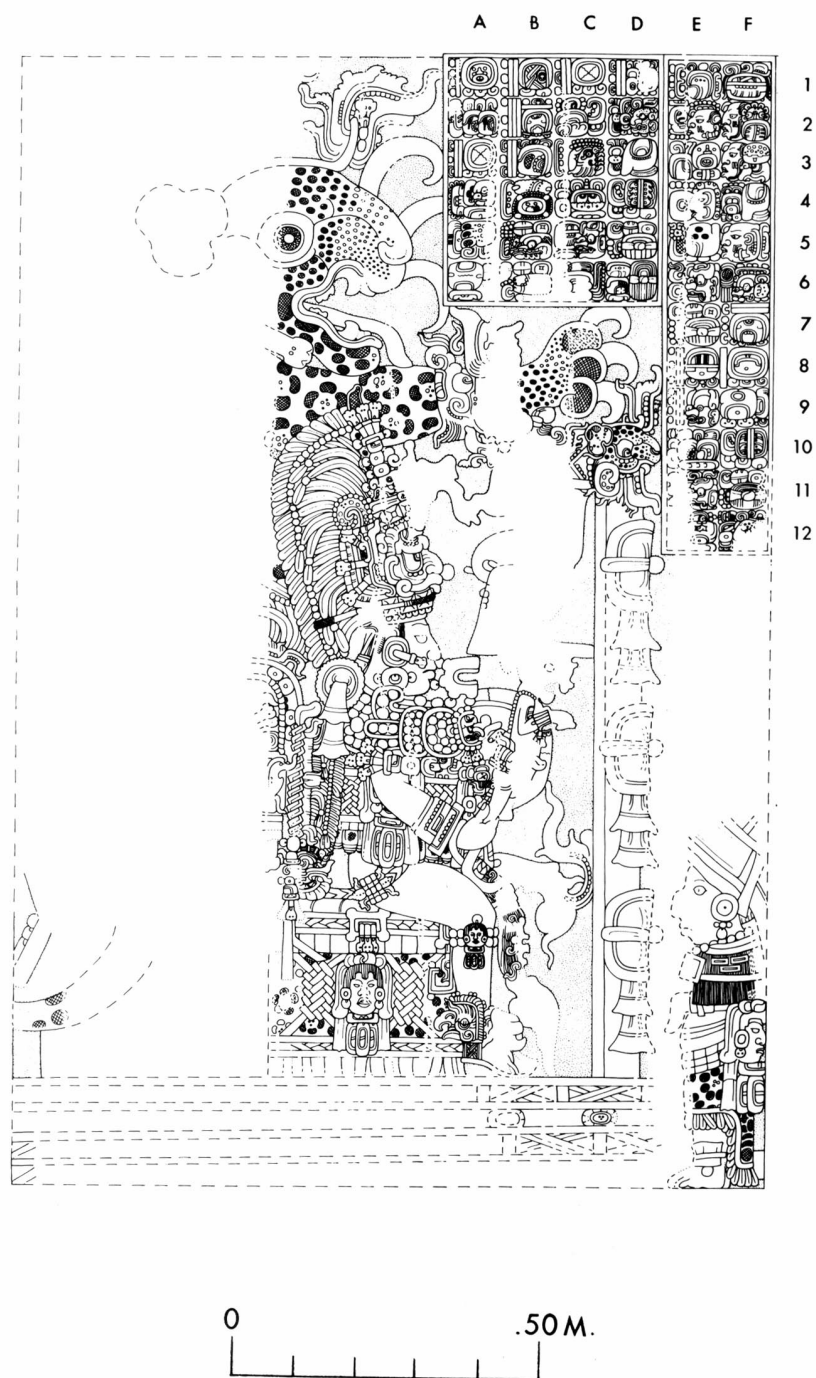


Fig. 8.4: Tikal Stela 31, with Yax Nuun Ayiin shown as a Teotihuacano on the (a) left and (c) right sides. Siyaj Chan K'awiil (b) raises a headdress containing the name of his grandfather Spearthrower Owl. The text on the reverse (d) records the arrival of Siyaj K'ak' (from Jones and Satterthwaite, 1982: Figs. 51 and 52).



Tikal Str. 5D-1-1st (Temple I):Li. 3.

Fig. 8.5: Lintel 3, Temple I, Tikal. Jasaw Chan K'awiil I downed the "flint and shield" of the Calakmul ruler Yich'aak K'ak' on 5 August 695, and on 14 September he conjured Spearthrower Owl (from Jones and Satterthwaite, 1982: Fig. 70).



Tikal Str. 5D-1-1st (Temple I):Li. 2.

Fig. 8.6: Lintel 2, Temple I, Tikal. Jasaw Chan K'awiil I is depicted as a Teotihuacan warrior, and his throne sits atop a register of war serpent imagery and cattails, perhaps intended to place the scene in Teotihuacan itself (from Jones and Satterthwaite, 1982: Fig. 69).

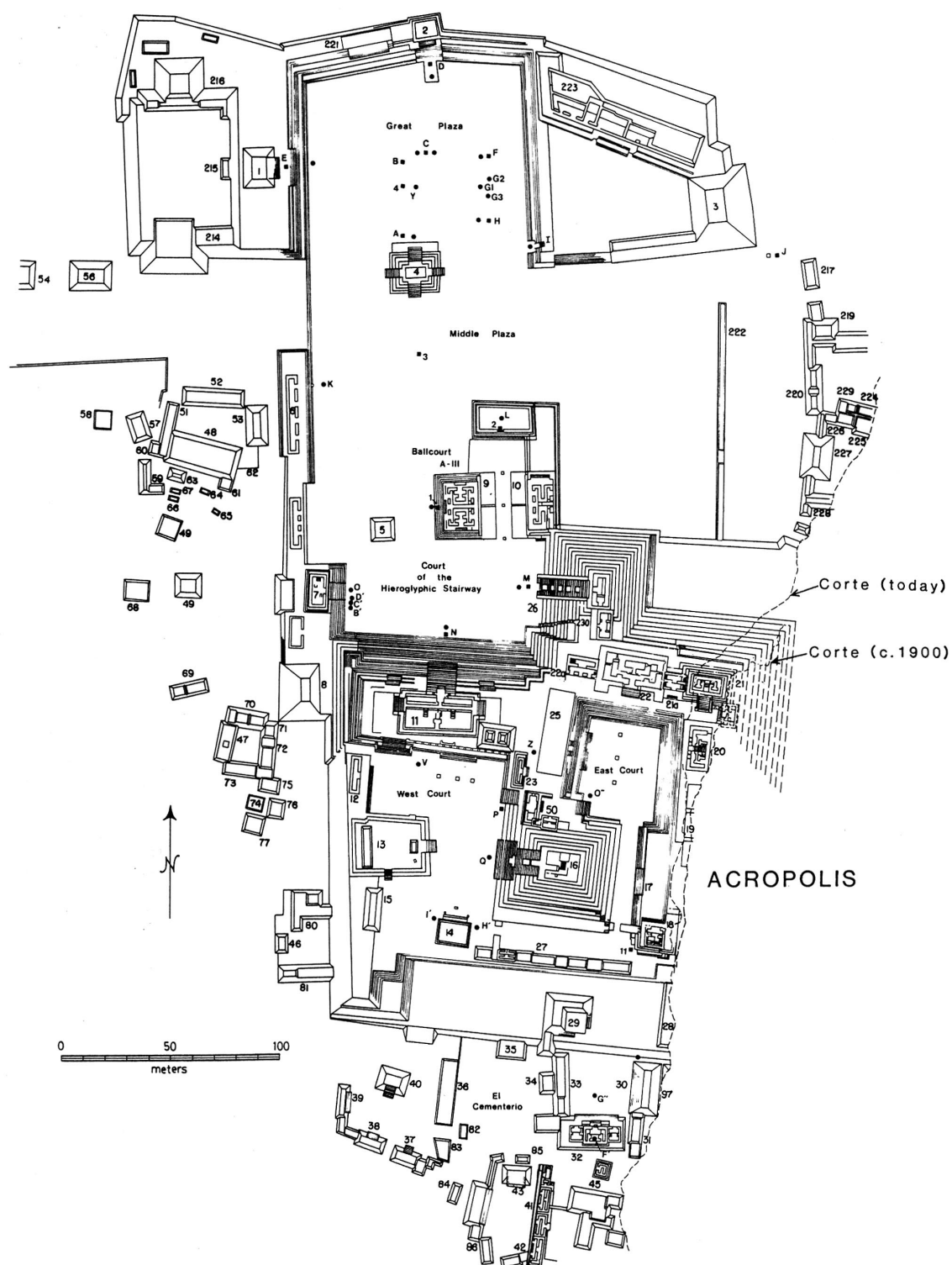


Fig. 8.7: Map of the Acropolis, Copan, Honduras, c. AD 700 – 800 (from Sharer et al., 1992: 146).

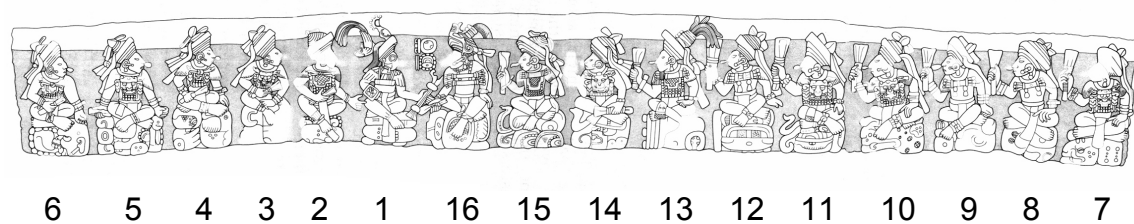
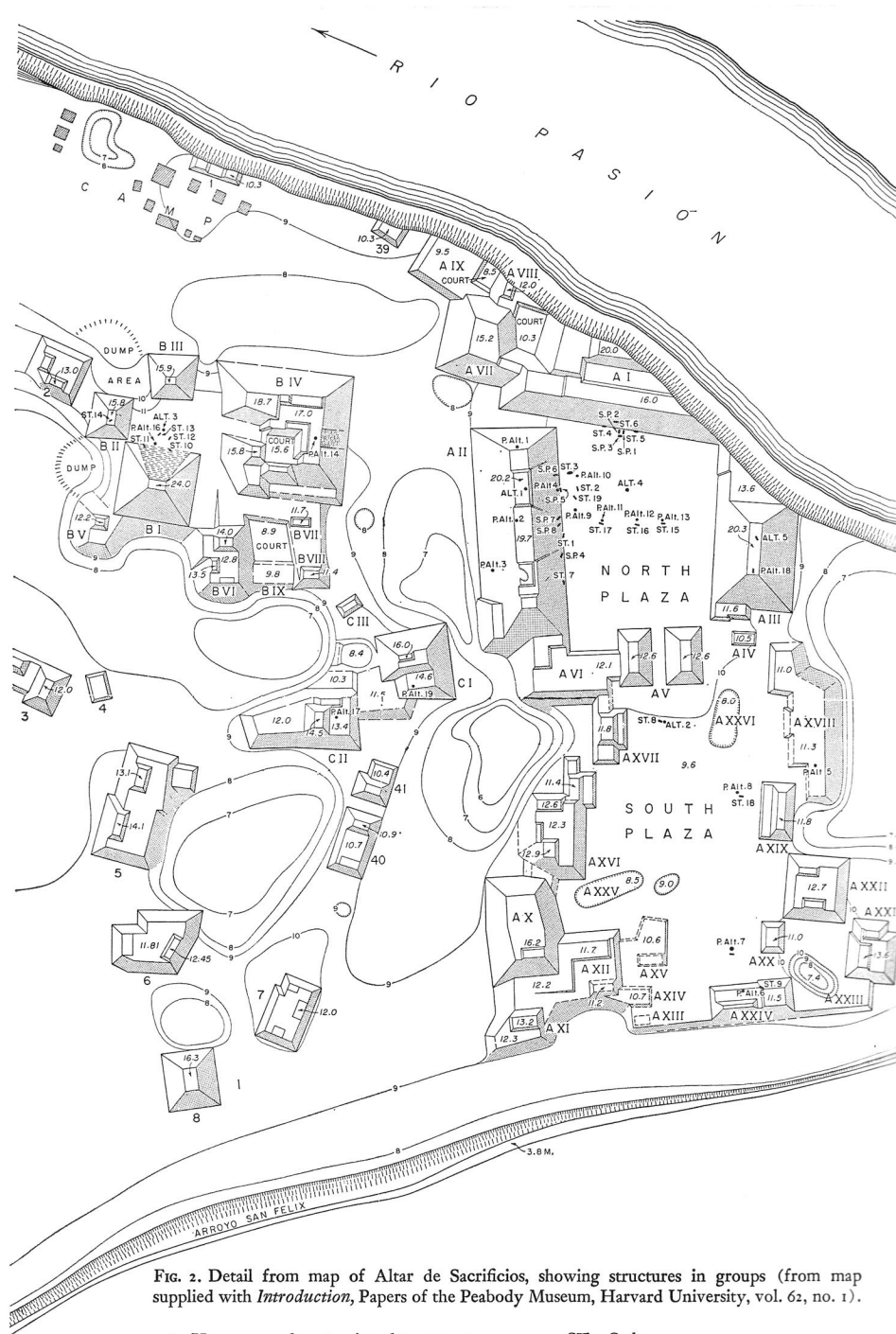


Fig. 8.8: Rollout drawing of the sides of Copan Altar Q, showing the 16th dynast receiving a staff of office from Yax K'uk' Mo' (from Baudez, 1994: 96).



- 1-8 House mounds not assigned to groups — ST. Stela
 AI-CIII Structures in groups — S.P. Sculptured panels
 ● ALT. Altar Contour interval is 1.0 meter
 ● P.Alt. Plain Altar Elevation on top of Altar 4 is 10.0 meters

Fig. 8.9: Map of Altar de Sacrificios, Guatemala (from Willey, 1973: 8).

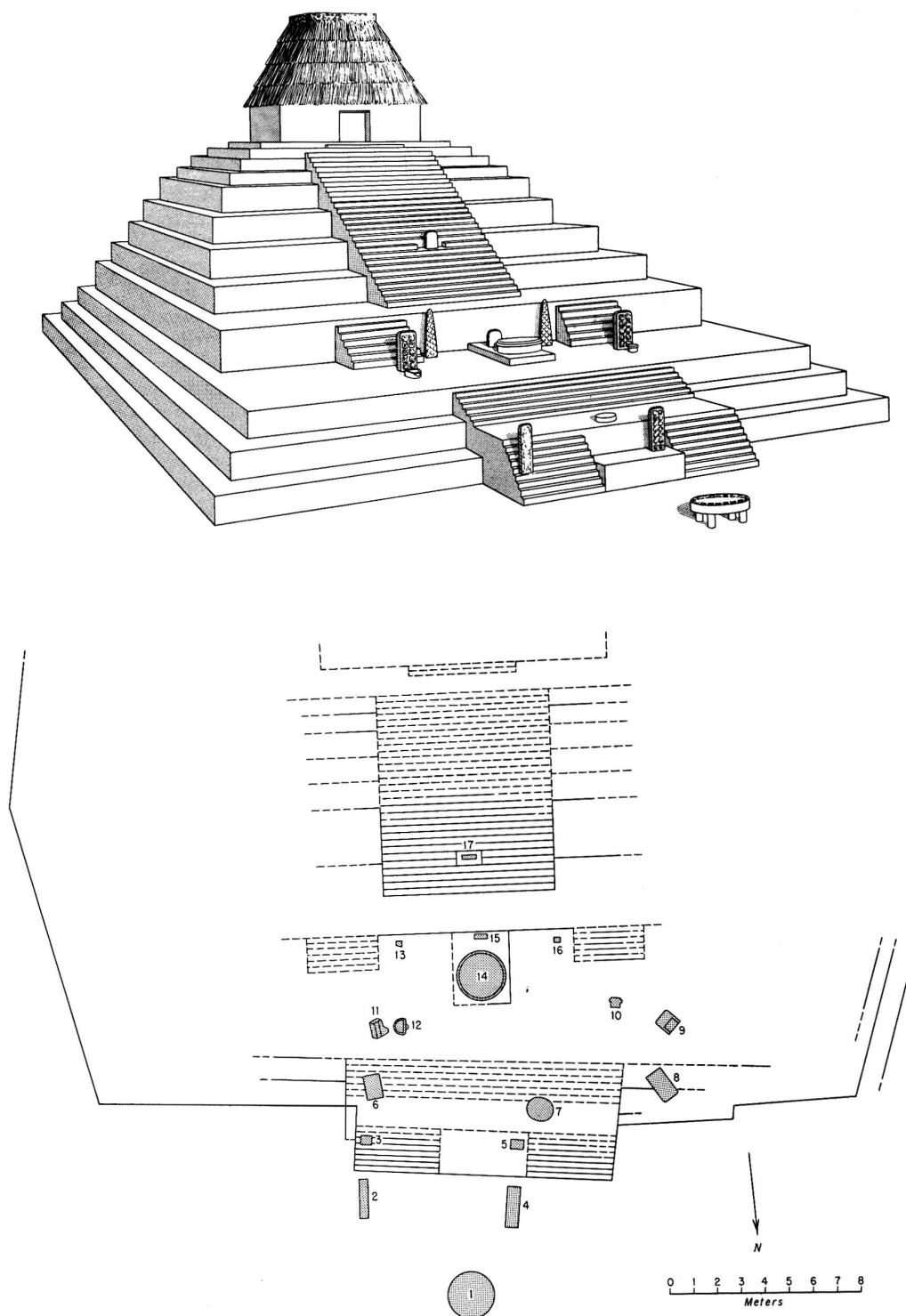
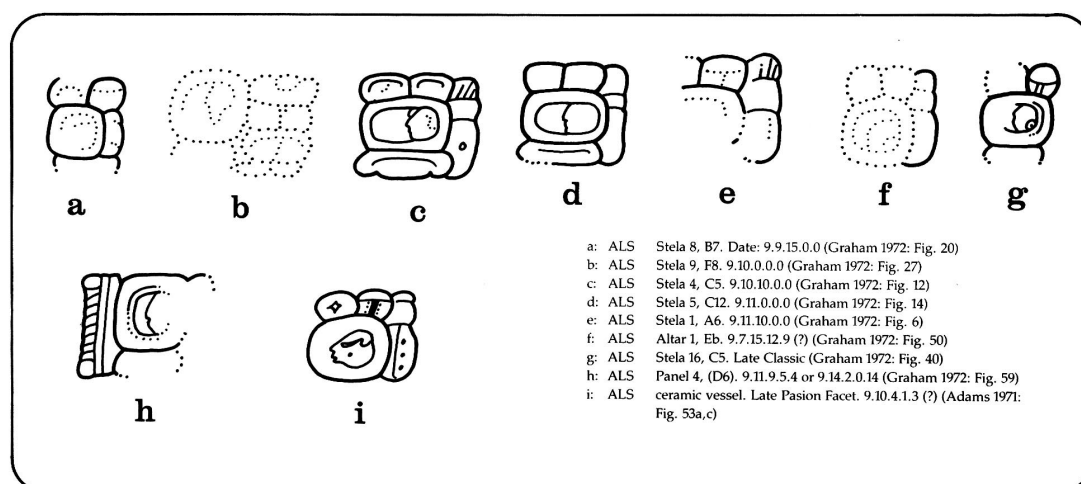
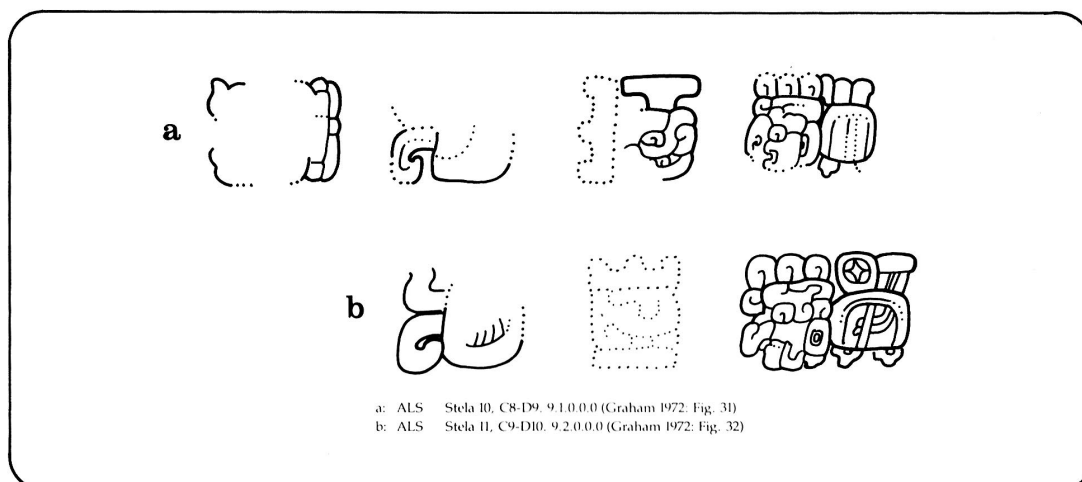


Fig. 8.10: Perspective drawing of Str. B-1, and plan view showing the location of Early Classic monuments (from Graham, 1972: Fig.2).



a



b

Fig. 8.11: Emblem glyphs of Altar de Sacrificios, (a) in the Late Classic, and (b) the Early Classic (from Houston, 1986: Figs. 3 and 5).

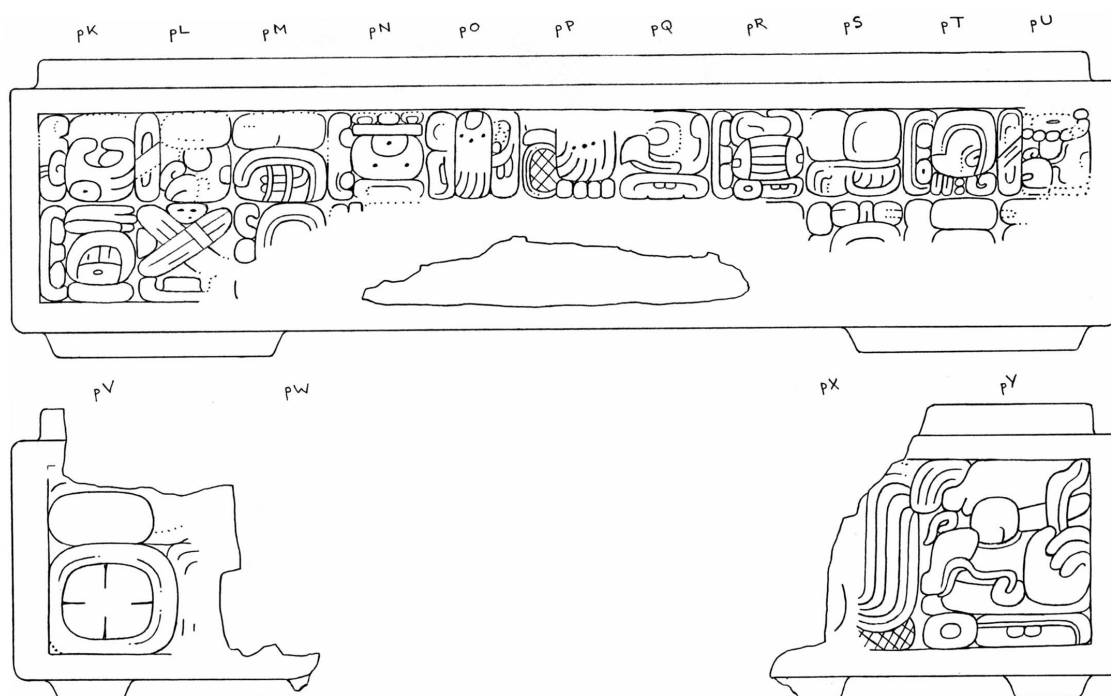


Fig. 8.12: Inscribed wooden box, recently discovered in a cave near Panhale, Tabasco, Mexico. Wite'naah ajaw glyph is evident at L2, the name of Tajoom Uk'ab' Tuun appears at L1 – K2, and again at U1-T2. Och'kin kaloomte' title is reconstructed from V1-W1 (from Anaya et al., 2001).

Chapter 9: The Utility and Liability of Chronologies for Archaeology

9.1: Archaeological Chronologies

I wish to offer in this final chapter some concluding remarks that do not merely summarize the interpretations and data found in other chapters, but also look forward to remaining problems, questions and possibilities regarding the use of both archaeological and indigenous chronological categories in the analysis of material culture. The chronologies that play such an integral part in structuring the interpretation of archaeological data in the Maya area have stood largely unchanged for decades. This is not because archaeologists have failed to challenge them – quite the opposite is true. Yet, every attempt to address the nature of the chronological touchstones in the Maya Lowlands such as the Terminal Classic Collapse, the change from Preclassic to Classic society or the shift from Early to Late Classic – has yielded similar results: although the dating or details of these chronological crossroads have been refined, they have remained largely unchanged for over fifty years, for they do seem to note “moments” of change in the materials that archaeologists rely upon to study ancient cultures.

These standardized chronologies have remained, therefore, because they serve a purpose. They allow for some measure of comparability between sites within the Maya Lowlands, and between regions elsewhere in Mesoamerica. They also seem to provide for the recognition of interaction between distant areas, as between the Maya area and Teotihuacan in Central Mexico. These chronologies take account of changes in ceramic styles, architectural styles, the pace of building programs, the form and content of

hieroglyphic inscriptions, as well as changes in political organization as interpreted from material data sets.

Yet, although the chronological indicators used by archaeologists do describe changes in material culture, they do not describe the internal logic or indigenous understandings of cultural change. If used uncritically, they help to maintain rather than overcome the fundamental problem that archaeologists have in bridging the gap between materials and the human behaviors that created those materials. They cannot serve the function of describing changes in material culture as such changes were conceived of and experienced by the people being studied.

9.2: Indigenous Chronological Practice: Possibilities and Problems in the Maya Lowlands, Mesoamerica and Beyond

If, however, there are undeniably dramatic periods of change in material culture – periods that spanned less than one generation, or one human lifetime – then these material changes must have been significant chronological markers for the subjects of our study. They would have served as objects of reference in the relationship between time, space and person that plays such an integral role in social interaction. Focusing in on the divide between the Early and Late Classic periods in the Maya Lowlands, people certainly would have noticed ruined buildings, smashed, erased and missing monuments, and dramatically new ceramic styles that entered into use. Indeed, some people were responsible for these changes. Furthermore, the integration of people at all levels of the social hierarchy into new or dramatically changed system of political organization would

have had a profound impact on a person's or society's understanding of where the present stood in relationship to their past and future.

For Maya rulers, the period spanning the second half of the 6th Century AD through the 7th Century represented an era of crisis. Building on the work of other archaeologists, I have proposed in Chapters 7 and 8 that this was precipitated, in no small part, by the collapse of Teotihuacan. That capital of Central Mexico, physically and temporally distant from the Lowlands, had provided at least some Maya rulers with a claim on authority that could no longer be substantiated and opened the door for rival dynastic rulers to challenge the moral authority of regional overlords. The loss of authority was caused or aggravated by the devastating military losses suffered by the rulers of sites such as Piedras Negras and Tikal. Reacting to this political situation, the rulers of Piedras Negras, Tikal, Copan, and Altar de Sacrificios enacted changes intended to restore their power through signs of history that located them in an appropriately moral place and time – perhaps, in some cases, even Teotihuacan itself.

The key to these shifts for Maya rulers was to find a balance between the appropriate past, the establishment of a new course for the future and the creation of a sense of timeless authority through the manipulation of architecture, monuments and other signs of the times, restructuring or eliminating indications of the period of upheaval and making the present natural rather than mere artifice. Such signs were particularly dramatic when associated with the royal palace – the house of the royal court that formed the fundamental corporate group within the Maya body politic. This was not based in the passive sense of knowing “how to forget things at the proper time just as well as one knows how to remember at the proper time” (Nietzsche, 1995: 90), but required dramatic

performances on the part of Maya rulers involving the demolition of buildings and monuments, public rituals associated with the dedication of monuments, and the donning of regalia based on that of Teotihuacan warriors that acted not merely as costumes, but as actual invocations of an authority based in Teotihuacan.

Such acts helped conceptually to eliminate the breach in authority of dynasts, which was otherwise glaringly evident during this tumultuous period. Conversely, the rulers of Tikal, Copan and Piedras Negras, among others, sought to recreate a temporal distance from society at large, in order to replace the connections with spatially distant Teotihuacan that were no longer available. The goal was to maintain or recreate a uniquely royal identity that was in many ways foreign, and distinctly “other” in relation to competing nobility. The reestablishment of their authority through an invocation of a selected past allowed Maya rulers the ability to actually move forward and chart new patterns in rulership that had not been possible during the Early Classic. It is ironic that the attempts of Maya rulers to eliminate the appearance of breaks with authority lodged in the past, an attempt to plaster over chronological breaks and reform temporal cycles, has been interpreted by archaeologists as a break with the past in a linear sense.

The importance of ideology in framing these behaviors, and the consensual authority that must have been afforded Maya rulers, does not preclude the use of coercive force in the re-establishment of dynastic stability. In recent decades the Late Classic has been identified as a period of increased warfare, as attested in mounting numbers of references to wars and captives in the epigraphic record. Although it is true that captives had long been displayed on royal monuments, we cannot doubt that warfare along the frontiers between Maya polities must have increased in the wake of the 6th Century as

more and more rulers laid claim to prestigious titles and moral authority over what – at least in the cases of Tikal and Copan – appears to have been diminishing territories. Thus, the moral authority of Maya rulers was not merely derived from the creation of temporal, spatial and social difference, it was also *enforced* along the boundaries of consensual authority.

More to the point of chronological practice as discussed in Chapters 2, 3, and 4, Maya rulers did not merely gloss over discontinuities and return to a predetermined point in history in order to construct their authority in space and time. Instead, we can see the interplay of choices made, and a variable emphasis on the possibilities of expressing chronological junction and disjunction. Any number of historical possibilities must have presented themselves to Maya rulers as constructive historical possibilities for linking the past and present, but we do not have access to all of those potentialities.

We can only see the chronological practice that was attempted and left material correlates, and here I want to summarize the different ways in which multiple chronological schemes were employed in concert in royal practice, to maintain kingship in the face of political threats. One such chronological framework evident at three of the sites discussed in Chapter 8 is denomination of a ruler as “Nth ruler in the line” from a dynastic founder. This linear chronology offered rulers different possibilities about where to begin the count that bears no evident connection with what we would view as the beginnings of settlement or of hierarchical political organization at a site. In the case of Tikal, all rulers extend this count back to the same individual, Yax Ehb’ Xok, who may have lived in the 1st Century AD (Martin and Grube 2000: 26). This count is maintained in spite of all the dynastic perturbations otherwise attested in the inscriptional

record. At Copan, on the other hand, despite hints that there were kingly rulers prior to Yax K'uk' Mo', rulers after his accession mark him as the dynastic founder. We do not know who the founder of the dynastic sequence may have been at Altar de Sacrificios, but at least some rulers made claims for a succession spanning thirty-six individuals. Unusually, though, a new emblem glyph is employed at Altar de Sacrificios after the 6th Century, belying the sense of continuity implied by the dynastic count.

Given these three cases, and others from across the lowlands, it is interesting that no such sequence was recorded at Piedras Negras. For unknown reasons such claims to continuity from a dynastic founder evidently were not considered important for the maintenance of rulership at Piedras Negras. This potentially useful chronological possibility – certainly available to the site's rulers – was ignored in practice, or signaled in ways that we do not yet recognize.

Architecture provided a set of chronological signs that was almost infinitely malleable. From their predecessors, the rulers of different Maya sites inherited different sets of signs built into the royal architecture. But reinterpretation through performance, the dedication of monuments, burials, demolition and new construction were always options so long as the resources to do so could be provided. At Tikal, chronological continuity was in some ways maintained, as the North Acropolis was not destroyed, but rather sealed off by Jasaw Chan K'awiil with the construction of Str. 5D-33-1. New royal building and burial patterns, beginning Temple I, which did not obviously reference discontinuity with the patterns of the North Acropolis could be carried out by Jasaw Chan K'awiil and his successors.

At Piedras Negras, the available options were quite different, and so too were the actions of Ruler 1 and his successors. Having suffered a defeat that likely resulted in the destruction of some, if not most, of the royal palace, the rulers of Piedras Negras opted to bury the ruins and leave the area architecturally fallow. They renewed their dynastic ties to older portions of the site through the construction of temple-pyramids and the dedication of monuments. Only when a sufficient period of time had elapsed – and we do not have insight into what may have defined sufficient in this case – did the rulers of Piedras Negras begin to build anew in the Acropolis. But this building was not phrased as renewal or cyclical rebirth. Rather, the Acropolis that rose from the long cold ashes was intended to be in many ways a *de novo* sign of rulership, expressing disconnection with what had come before.

Copan's rulers followed a similar pattern in some regards, but chose different connections and disconnections that were appropriate to the history of that site and its dynasty. Following a period of upheaval that resulted in damage to the site's Main Group and the destruction of many of its royal monuments, Moon Jaguar, who had survived this turmoil, sought renewal by dedicating a new monument in an outlying group that may have had ties to ancestral authority – although we don't know what the specifics of that connection were. Whereas the dynasts of Piedras Negras waited over a generation or more to return to building in the Acropolis of that site, at Copan the rebuilding of the Acropolis began in dramatic fashion with Butz' Chan's complete overhaul of the East and West Courts. Yet, Butz' Chan's renovation did not signal disjunction as was the case at Piedras Negras. Instead the architectural patterns established in the 5th Century were maintained, and the temple of Rosalila, with its iconographic references to the dynastic

founder, was maintained in use, even as all other contemporary structures were demolished and buried beneath the rising East Court over the course of the next century.

At Altar de Sacrificios we are left with, perhaps, the most perplexing case of all. No archaeologically evident signs of warfare mark the architecture, and yet the locus of royal architecture (Group B) was abandoned in favor of an architectural complex (Group A) with no antecedents. Thus, it would seem, whatever the proximate cause of the move, the rulers of Altar de Sacrificios attempted a chronological break with the architectural sequence established in the Early Classic, building a *de novo* sign in and of history for the royal court just to the east.

Monuments too, both in their imagery and in their texts, offered another set of chronological possibilities. Again, these royal monuments seem in many cases to co-vary with architectural changes, as architectural destruction is mirrored in monumental destruction. But it is a mistake to see them as paired sets of chronological possibilities, for choices made about architectural continuities and discontinuities were often very different than those practices involving monuments.

Copan, Tikal, Piedras Negras, and Altar de Sacrificios all experienced what archaeologists have, in the past, described as a inscriptional hiatus. Yet, it would appear in light of the data currently available that these sites did have monuments from this period that were subsequently destroyed. The length of the “hiatus” (i.e., the range of monument dedication dates that was eliminated) is site specific and was determined, in some cases, by the needs of the ruler who immediately postdated the period of missing history.

Thus, at Piedras Negras, there are no dedication dates within the range from AD 539 to 608. That this gap began at approximately the same time (AD 554) that other epigraphic and archaeological data suggest that the ruler of Piedras Negras was defeated in battle is not surprising. However, the fact that some monuments predating the period of destruction were preserved and emulated (e.g., Panel 12 served as the model for Panel 2; see Chapter 7.3) strongly suggests that if monuments were destroyed, the destruction was carried out by the rulers of Piedras Negras in the aftermath of defeat. The significance of sixty-nine years in terms of this hiatus is unclear.

At Tikal, invading forces may have broken some of the monuments during the attack of the Calakmul/Caracol alliance in AD 562. The only monument of the defeated ruler of Tikal, Wak Chan K'awiil, was broken and unceremoniously disposed of. However, this doesn't explain the hiatus lasting until AD 682. Unlike Piedras Negras, Tikal bears no architecturally evident devastation or disjunction. Although its kings had been defeated, the dynasty was maintained. Given the elaborate tombs from this period, and the continued involvement of Tikal's rulers in regional politics, there is no reason to suspect that rulers could not dedicate monuments in the aftermath of the defeat.

With the accession of Jasaw Chan K'awiil, though, the need for chronological relocation required a direct connection to a foreign ruler who predated the upheaval of the 6th and 7th Centuries. Stela 31 was ceremoniously mutilated and disposed of within Str. 5D-33-1, while the monuments of Yax Nuun Ayiin (perhaps damaged by invaders) were reset in the Great Plaza. With no ancestral lords except the Teotihuacano Yax Nuun Ayiin present,¹ Jasaw Chan K'awiil was free to invoke Spearthrower Owl. The former

¹ It is important to consider that rulers depicted on intact monuments were likely considered to be

could make a direct and unbroken connection between himself and the ruler of Teotihuacan, who was not understood to be dead and absent, but very much present in the late 7th Century world of Tikal being created by Jasaw Chan K'awiil.

At Copan, the historical break is brief – no more than a decade. Yet, here we actually have the direct evidence of smashed monuments such as Stela 9. The Copan break fell between AD 554 and AD 564, and this seems more than a coincidence given that Tikal fell to Calakmul in AD 562, and the near certainty of ties between the dynasties of Tikal and Copan. Yet, once again, the destruction seems highly selective and suggests that the Copanec lords carried out the breaking of at least some monuments themselves. Stela 63, for instance, was accessible within the Papagayo structure during this period and was not broken until the Late Classic. Unusually, a ruler from this period of upheaval, Moon Jaguar, survived to erect a new monument that was not destroyed.

As for Altar de Sacrificios, Graham's (1972: 67) suggestion that a monument was planned for the 9.5.0.0.0 period ending is hard to substantiate, but it is clear that no monuments are known for the period spanning AD 524 to 618. We do not know enough about the history of Altar de Sacrificios to suggest a reason for the change in monument placement with the dedication of Stela 18 in the South Plaza. Whatever the proximate cause of the situation, the rulers of Altar de Sacrificios maintained a connection with rulers represented on the monuments placed around Str. B-1, but at the same time made a break with those dynasts by beginning a new pattern of monument placement in Group A.

The rulers of each site, then, struggled to put back together their dynastic authority following a period of upheaval. This was accomplished, in part, by placing themselves in a place in time that made connections with a past that supported their position, but studiously avoided other possibilities that would have been perceived as neutral or antagonistic to their cause.² Unfortunately, left only with evidence from those practices with material correlates, we can deduce only a fraction of the choices that were made. We can see, though, some of the reasons that monuments, architecture, and textual histories all involved different chronological potentials that were realized in ways that differed within any one site, as well as between sites. Rather than a unitary chronological shift that helps to define what we call the Early to Late Classic shift, these patterns were the result of nested chronologies in practice.

9.3: Ceramic Variation and the Early Classic/Late Classic Divide

It bears mentioning here that although the material focus of this work has been on patterns of architectural development, and the placement and treatment of hieroglyphic monuments, one of the building blocks of the archaeological divide between the Early and Late Classic periods is a perception that ceramic styles, too, underwent a dramatic change at this time. But this change takes place at the level of typological analysis, a point that is important when comparing our differential access to the indigenous chronological significance of ceramics and royal architecture.

² The choice by any one ruler to emphasize a particular chronological connection or disconnection does not mean that the other historical possibilities were eliminated. As noted in Chapter 7.4, Piedras Negras Ruler 1, being very nearly contemporary with a military defeat, acted to distance himself from that humiliation by eliminating the signs of chronological connection. The potential to draw upon that defeat to substantiate the dynasty, however, was not eliminated. In the 8th Century, Ruler 7 clearly considered it politically viable

At Piedras Negras, as at many other sites, the 7th Century AD was a period of ceramic innovation, both stylistically and technologically, during which the ceramic assemblage included an increasing number of what modern researchers identify as distinct types (see Holley, 1983; Muñoz, 1999, 2000; Muñoz and Golden, 2001). I do believe that ceramics may offer insight into the chronological understandings of the Maya. Certainly individual pieces that bear names, individual portraits and dynastic sequences in their iconography and glyphic texts may have been intended as very potent chronological statements. When considering ceramics as an assemblage of types, however, I see the overall shift in ceramics as being not unrelated, but rather parallel to, or intertwined with, political events that were framed chronologically in architecture and monuments.

The chronological practice that I outline in this dissertation was enacted by Maya dynastic rulers and the members of their royal court. Though, as I discussed in Chapter 4.5, modern notions of agency may not be attributable to Maya rulers with regards to every aspect of palace construction and demolition, the evidence indicates that the palace was perceived as a physical manifestation of the royal court, and as the locus of rulership. Thus, architectural modifications, demolition and construction can be described as acts attributable to the needs of the royal court during the reign of known rulers.

This is not the case with ceramics. Except for that minority of pots inscribed with personal names of rulers, nobles and artisans, we cannot attribute individual pots to individuals in order to understand the significance of object to person. Neither can we attribute ceramic types to individuals – again the level at which dramatic change is

to discuss the 6th Century humiliation of his predecessor in order to phrase his own victory as an act of

generally described for the Early to Late Classic shift – for the type has nothing to do with variation on the individual level. Modal variation, or changes at the level of the variety *might* be attributable to individual action (see Chapter 3.4; Gifford, 1960), but identifying who this individual was, or even where the ceramic piece was produced is an improbability at best. Taking this argument further, there is no evidence that ceramic production as described at the level of typological analysis was under the direct control of rulers or members of the royal court, although elite artisans may certainly have been influential in changing ceramic styles over great distances (see Ball, 1993).³

Furthermore, the nature of *dramatic* change with regards to ceramic types is far different than the drama involved in the smashing of buildings and monuments, and the rituals that we know were associated with the dedication of monuments, temples and palatial buildings. Change in ceramic style at the typological level is a process that occurred over a period of years and almost certainly did not involve the same sort of spectacle as that involved in architectural changes. The presentation of certain extremely fine pieces in acts of exchange or tribute, the burial of such ceramics with important individuals, and the smashing of these vessels in termination rituals may have offered occasions of high drama, during which their innovative styles would have been recognized and perceived as having chronological significance. But again, the

vengeance.

³ I have addressed the issue of ceramic change at the Early Classic/Late Classic divide elsewhere with René Muñoz (Muñoz and Golden 2001). In brief, we see the increasing regionalization of ceramic styles that characterizes the Late Classic period in many parts of the Southern Maya Lowlands as a result, in part, of increased intra-polity and inter-polity competition between artists who were vying for social status and consciously attempting to create definitively new and unique ceramics (see also Ball 1993; Bey, in press). Displayed in the royal court, consumed in burials, caches, or other ritual activities, the influence of these unique vessels not only effected those high ranking artists involved in competitive displays, but also “trickled-down” through redistribution networks (e.g., LeCount, 1996, 1997, 1999) and were often adapted by artisans at all levels of society.

relationship between these events and change over several decades in typological content of the ceramic assemblage is unclear at best (see Muñoz and Golden 2001).

Architectural modifications in the royal palace and significant changes in the display of royal monuments, however, were *intended* to be dramatic signs of change or continuity, and they were accompanied by rituals that reinforced these chronological signs. The construction of a new building certainly took time, but it was often preceded by a dramatic dedication event. Moreover the rising form of a temple-pyramid, even if it took several years, must have been a dramatic event accompanied by the noise, dust, scaffoldings, and work crews that such construction entails. The demolition of enormous masonry structures, often accompanied by fire and elaborate termination rituals, was also a dramatic and very public announcement of change or continuity. These represent very different patterns of signification than that indicated by the typological change of ceramics.

A particularly important exception to this pattern may have been the abandonment of Teotihuacan-style cylinder tripod vessels, thin orange jars, hemispherical bowls with ring-bases, and post-fire stucco decoration. These vessels, some of them made in Teotihuacan and others imitated in the Maya lowlands, were clearly important to Maya rulers from the 4th through 6th Centuries AD, and appear in significant quantities in tombs both in the Highlands and Lowlands of the Maya area. Such objects were almost certainly an important component of the material construction of Maya rulership, as is evident in the Hunal Tomb at Copan (Sharer, 1999). Yet, the importation of these vessels from Central Mexico, and the local production of similar vessels, in the Maya area appear

to have ceased well within the limits of a human lifetime (see, for instance, Smith, 1971:129).

The collapse of trade routes linking the Maya area and Central Mexico may account for the disappearance of those vessels actually produced in Central Mexico. The rapid disappearance of locally produced versions of these materials, however, must be due to choices made by producers and consumers within the Maya Lowlands. These choices are likely to be related to other choices made by some Maya rulers and members of their courts to reposition themselves chronologically with regards to the notion of authority derived from Teotihuacan.

9.4: Multiple Chronologies at Multiple Levels

There are several fundamental problems, of course, in trying to discern the chronological practices of ancient Maya society. In the first place, we can posit what the material correlates of those chronological practices might look like, as is addressed in Chapter 4 of this work. But even if we can establish these correlates, and reconstruct a plausible argument for the resultant patterns as revealed through excavations, we have no way of knowing what the perception of these changes were. Were the rulers of Piedras Negras, Tikal, Copan and Altar de Sacrificios successful in reconstructing their chronological significance to the benefit of their authority? We must assume that they were in, some sense, effective. Their dynasties continued in power for several hundred years after the events described in Chapters 7 and 8, even though the authority of the ruler must have been indelibly changed for better or worse. We must conclude, however, that even if we can reveal some sense of intent, we have no way knowing if the

perception of their behaviors was in complete, or even near, accord with that intent.

Indeed, the need for coercion indicates that their acts were not successful in and of themselves.

Secondly, the practices described in Chapters 7 and 8 pertain only to one aspect of chronology: the chronology of the royal house.⁴ As Chapter 2 has outlined, all people operate in a world that is defined in large part by multiple chronologies. Even Classic Maya rulers did not always act on the basis of the chronologies based on their spatial and temporal location with regards to dynastic founders or other fonts of authority. Maya rulers cannot have been perpetually concerned with the maintenance, renovation and demolition of their palaces and monuments. They too operated within parameters defined by the chronologies of their bodily functions, interpersonal and family histories, and other nested chronologies that affect all people in different ways. We will never have access to all – or even the greater part – of the chronological signifiers within the life of a Maya ruler or royal house.⁵

Moreover, since the interpretation presented throughout this work has focused on the royal house, different houses at different hierarchical levels of society would enact very different practices for very different chronological needs towards very different ends. Within any Maya house we might expect to see many of the same patterns of chronological significance including caching, burials, renovations and movement around the landscape that are archaeologically evident. Yet, the archaeologically visible chronological manipulations evident in the house of a rural farmer would be dramatically

⁴ The same is generally true, of course, of standard archaeological chronologies (see Coe, 1990: 7-9).

⁵ Again, I am using the term “house” here as outlined in Chapter 4: “social hierarchies and corporate groups that have as their focus the ‘house’ as a physical structure or place on the landscape (Gillespie, 2000a,

different in their details than those evident in the royal palace. Although the content and style of the ceramic assemblage might show some parallels at all levels of society – though this too is likely to vary in the specifics – the perturbations described by archaeologists as the Early Classic/Late Classic divide did not have the same material correlates in all houses within a given polity.

What are the implications, then, for archaeologists seeking to develop site chronologies in the Maya area? On the one hand standard archaeological chronologies answer one set of questions that is very different from those questions answered in trying to reconstruct indigenous chronological practice. There is a necessity to placing artifacts and architecture in serial order such that they are comprehensible to us as the outcomes of a sequence of events. But our sequences would not necessarily have been significant to people with very different notions of how people and things came to be located in time and place.

9.5: The Intersection of Archaeological and Indigenous Chronological Practices

Yet if the cultural historical and the indigenous chronological frameworks do overlap in some sense, is there any way to bridge the gap between indigenous and modern archaeological chronologies? I cannot offer any truly conclusive statement in this regard, but I would suggest that beginning with an understanding of the variable ways in which different materials are attributed with chronological significance can help to answer the questions raised by numerous scholars as to why there is no real synchronization of the rates of change in architecture, ceramics, or other aspects of

2000b; Houston, 1998: 521; Inomata and Houston, 2001:9-10).”

material culture (see Coe 1990: 7-9; Childe 1951: 47; Hodder 1978: 4; Sharer 1978; Shennan, 1978). Largely because of their physical make-up and modes of production, different categories of material culture allow for different references to the past, present or future that occur at different moments and change at different rates.

Chronological charts are a staple of archaeological interpretation, but no one chart can suffice for the description of chronological practice in the cultures that we study. Much as typologies must change with the question being asked, so too must chronological questions and interpretations. Such models will always be modern. They are never indigenous in the sense of making us present at the point of decision-making or action. But they would take into account indigenous notions of how people deal with their location in place and time, something that most current archaeological chronologies fail to do.

9.6: Expanding the Scope – Chronologies elsewhere in Mesoamerica and Beyond

Of course the problems become manifold once we broaden the scope of this discussion to include other regions of Mesoamerica – but as in the Maya area much insight can be gained into indigenous chronological practice. Despite similarities in time-perception and time-use in Mesoamerica there are distinct differences. Ethnographically and Ethnohistorically among the Mixteca, for instance, there is no need for the “ensouling” events seen in construction episodes in the Maya area, and thus there is a concomitant difference in the nature of caches and burials associated with buildings (Monaghan, 1998). The nature of archaeological remains and the chronological practice that produced them, therefore, will have been fundamentally different for the notion of

the life-cycle of architecture is fundamentally different; different, but nonetheless accessible.

Some researchers have already re-examined the nature of indigenous chronological practice among the rulers of the Aztecs (e.g., Gillespie, 1989; Hassig, 2001). These studies, though, are largely drawn from ethnohistoric accounts, and the problems of comparing ethnohistoric sources with material remains in Central Mexico and elsewhere in the Americas has been well documented (see Donnan, 1990; McCafferty, 1996: 1; Moseley, 1990; Shimada, 1990; Smith, 1987; Smith and Berden, 1992). It would be intriguing to look into questions of chronological practice at Teotihuacan, for example, in order to determine if the rulers of that polity strove to create a perception of continuity in the face of their 6th Century decline.

If we look beyond Mesoamerica, the question is not different in its fundamental basis, but the nature of chronological practice will differ greatly in the specifics. In general terms it is a fact that people everywhere rely upon and manipulate material culture in order to identify their location in time and space. Beginning with this proposition, archaeologists working in all parts of the world, and in all time periods, may very well be able to gain insight into the meaning of material culture as part of indigenous chronological practice, and as something more than merely the ordering of objects and events in serial.

This does not mean that chronological practice as it structures archaeological remains cannot be fruitfully addressed in areas lacking identical data sets. Certainly the chronological practice of societies in other parts of the Americas, for example, has been innovatively addressed in recent years by a number of researchers. Stephen Lekson's

(1999) notion of the Chaco Meridian challenges archaeologists to look not only within sites, but also to observe the use of landscapes between sites for evidence of chronological practice. Snead and Preucel (1999) have addressed issues of chronological connection made via architectural form at the historical pueblo of Kotyiti.

In South America, Joan Gero (1991), working with far less direct evidence of cultural practice than is available in the Maya area, has attempted to gain insight into the indigenous perspective on what archaeologists describe as the Early Intermediate Period. Working from specific analogy and the artifacts uncovered in her excavations, Gero presents an intriguing narrative of site-specific chronological practice. Notions of indigenous chronological practices have also been addressed at the late Preconquest center of Chan Chan (e.g., Conklin, 1990; Kolata, 1982: 82). Conklin (1990: 70), in particular, has addressed the possibility for archaeologists to see the chronological choices made by people in the past, as they worked their way between innovation and ties to the past.

The ability to understand the nature of these signs, however, does require some understanding of ideologies and behaviors that are in large part immaterial. There can be no denying that those of us who work in Mesoamerica, and in the Maya Lowlands in particular, are privileged to have at our disposal a large body of native texts and ethnographic accounts from which to develop direct analogies about chronological significance in the past. We understand something of the performances associated with the monuments and architecture that form the foundation of this dissertation, and it is through those performances – both the dramatic and the mundane – that these artifacts and edifices acquire their chronological significance.

9.7 Concluding Remarks on Maya Chronology and the Nature of Cyclical Time

One last point bears addressing, for it is fundamental to the notion of temporality in Mesoamerica and among the Maya, and this is the notion of a dichotomy between cyclical and linear time. This issue was addressed in some detail in Chapter 4, but it is worth reiterating some of those points in light of the interpretations drawn in Chapters 7 and 8. Is there a distinction between linear and cyclical time? The immediate response to this question is that all cultures operate with notions of time that incorporate both linear and cyclical periods. January will come again. The year 2002 will not.

Yet, it is undeniable that Maya notions of how time flows are based largely in notions about spatio-temporal cycles that bring the same social state into, out of, and into being again. A perception of destiny, morality and fundamental personhood among the ancient Maya was deeply rooted in these cycles, and is dramatically different than our own notions of the relationship between time, person and place. No one, though, operated on the basis of a single cycle. Chronological practice was not defined by any one idealized notion of a “Truly Maya” cosmology. Any given moment represented for the Classic Maya – as, indeed, it does for us – a point at an intersection with innumerable cycles, going off in innumerable directions, with a concomitant breadth in the possibility of social action.

Any action not only had the ability to be perceived as a repetition of the point of a cycle, it also had the potential to change the significance of that point in the cycle. Every K’atun 8 Ajaw was different, and changed the expectation of the next K’atun 8 Ajaw. These cycles represented possibilities that had to be realized in action. They could, and were, used and changed towards social and politically advantageous ends by Maya rulers

and all others that had the ability to do so. Even a peasant can manipulate the important cycles of life to some degree – though the rooster is crowing, it is not *quite* time to wake up and start work for day, better to change the cycle and sleep in a few more minutes today.

For those of us functioning in what has been conceived of as “linear time” social action is framed by a different grammar, but is nonetheless only realized in practice. This is the beginning of my thirty-first year. This is the end of a graduate career. It is the middle of winter. It is the middle of the night. Which of these is the most important? What will be the material correlates of my choice? It depends on who is asking and why.

Table 1, Appendix I: Ceramic Weight by Lot

This table records the raw data of ceramic weight by lot, collected by René Muñoz between 1998 and 2000. Initial weight indicates the total of all ceramics collected in excavations. Discard weight represents the initial weight, less all but 15% of all typologically non-diagnostic sherds. For those lots that contained no typologically diagnostic sherds, 15% of all sherds were retained. No sherds were discarded from some lots upon the request of the excavator. Chapter references for each lot are recorded in the column on the far right. The initials NR indicate that data were not recorded. Some lots discussed in the text of the dissertation are not listed on this table as those data are unavailable at the time of writing.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

This table provides a synthetic overview of all of the lots excavated as PN-11, PN-46, PN-50, and PN-54, discussed in the text of the dissertation (see Chapters 5 and 6). Ceramic phases were determined by the author on the basis of a preliminary type-variety analysis of ceramics. This analysis is subject to revision by ongoing analyses being conducted by other members of the Piedras Negras Archaeological Project. It is anticipated that such revisions will offer refinements of the findings described in this table rather than substantive changes affecting interpretation. It should be noted that the “estimated date of deposit” is not necessarily in accord with the ceramic phase dates for the deposit (as outlined in Chapter 5, Figs. 5.4 and 5.5). Comments as to the dating of the deposit are noted in the column on the far right.

Table 3, Appendix I: Preliminary Artifact Count, PN-46F through PN-46I

This table offers a preliminary count of artifacts recovered in excavations of Court 4 during the 2000 field season. These artifacts are currently being analyzed by Zachary Hruby (lithics), Kitty Emery (faunal remains), Andrew Scherer (human remains), A. René Muñoz, Mary Jane Acuña, and Griselda Pérez (ceramics), Matilda Ivic and Jessica Child (figurines). Counts indicate individual fragments, except where otherwise indicated. The number of faunal remains is sometimes listed with a “+” next to the count, indicating the extremely small fragments recovered and the general friability of these materials.

Table 4, Appendix I: Preliminary Artifact Count, 54A

This table offers a preliminary count of artifacts recovered in excavations of Court 4 during the 2000 field season. These artifacts are currently being analyzed by Zachary Hruby (lithics), Kitty Emery (faunal remains), Andrew Scherer (human remains), A. René Muñoz (ceramics), Matilda Ivec and Jessica Child (figurines). Counts indicate individual fragments, except where otherwise indicated. The number of faunal remains is sometimes listed with a “+” next to the count, indicating the extremely small fragments recovered and the general friability of these materials.

Year Excavated	Provenience	Initial Weight (kg)	Discard Weight (kg)	% Retained After Discard	Chapter
1997	PN-11a-001-001	0.65	NR	NR	5
1997	PN-11a-001-003	7.43	NR	NR	5
1997	PN-11b-001-001	0.93	NR	NR	5
1997	PN-11b-002-001	0.99	NR	NR	5
1998	PN-11a-003-001	0.05	0.00	100.0%	5
1998	PN-11a-004-006	0.10	0.10	0.0%	5
1998	PN-11a-005-001	3.00	1.75	41.7%	5
1998	PN-11a-005-002	0.20	0.10	50.0%	5
1998	PN-11a-005-003	0.30	0.20	33.3%	5
1998	PN-11a-005-004	2.45	1.25	49.0%	5
1998	PN-11a-005-005	6.25	2.25	64.0%	5
1998	PN-11a-006-001	1.50	0.60	60.0%	5
1998	PN-11a-006-002	0.25	0.25	0.0%	5
1998	PN-11a-006-003	0.15	0.10	33.3%	5
1998	PN-11a-006-003	0.25	0.25	0.0%	5
1998	PN-11a-006-003	0.35	0.35	0.0%	5
1998	PN-11a-006-003	2.20	0.75	65.9%	5
1998	PN-11a-007-002	0.30	0.15	50.0%	5
1998	PN-11a-007-003	0.65	0.65	0.0%	5
1998	PN-11a-007-005	0.30	0.10	66.7%	5
1998	PN-11a-008-001	0.25	0.25	0.0%	5
1998	PN-11a-008-001	0.45	0.45	0.0%	5
1998	PN-11a-008-001	0.85	0.20	76.5%	5
1998	PN-11a-009-001	0.25	0.10	60.0%	5
1998	PN-11a-009-001	0.60	0.35	41.7%	5
1998	PN-11a-009-002	0.35	0.15	57.1%	5
1998	PN-11a-009-002	0.45	0.25	44.4%	5
1998	PN-11a-009-003	0.25	0.25	0.0%	5
1998	PN-11a-009-004	0.10	0.10	0.0%	5
1998	PN-11a-009-004	0.50	0.50	0.0%	5
1998	PN-11a-009-004	1.45	0.70	51.7%	5
1998	PN-11a-009-004	1.45	0.45	69.0%	5
1998	PN-11a-010-001	1.80	1.10	38.9%	5
1998	PN-11a-010-002	1.25	0.60	52.0%	5
1998	PN-11a-010-003	0.30	0.30	0.0%	5
1998	PN-11a-010-003	0.85	0.20	76.5%	5
1998	PN-11a-011-001	0.75	0.50	33.3%	5
1998	PN-11a-011-002	1.55	0.75	51.6%	5
1998	PN-11a-012-001	1.60	0.85	46.9%	5
1998	PN-11a-012-002	1.35	0.80	40.7%	5
1998	PN-11c-001-001	1.50	0.55	63.3%	5
1998	PN-11d-001-003	0.85	0.50	41.2%	5

1998	PN-11d-002-001	0.50	0.50	0.0%	5
1998	PN-11e-001-001	0.90	0.45	50.0%	5
1998	PN-11e-001-002	0.40	0.20	50.0%	5
1998	PN-11e-001-003	0.10	0.10	0.0%	5
1998	PN-11e-002-002	1.30	0.45	65.4%	5
1998	PN-11e-002-002	1.85	1.00	45.9%	5
1998	PN-11e-002-002	2.50	0.90	64.0%	5
1998	PN-11e-002-003	0.10	0.10	0.0%	5
1998	PN-11e-002-003	0.35	0.35	0.0%	5
1998	PN-11e-002-003	0.50	0.50	0.0%	5
1998	PN-11f-001-0??	0.20	0.85	-325.0%	5
1998	PN-11f-001-001	0.15	0.15	0.0%	5
1998	PN-11f-001-001	1.00	0.65	35.0%	5
1998	PN-11f-001-002	1.50	0.35	76.7%	5
1998	PN-11f-001-003	0.95	0.45	52.6%	5
1998	PN-11f-001-004	1.55	0.70	54.8%	5
1998	PN-11f-001-005	0.20	0.20	0.0%	5
1998	PN-11f-001-006	1.30	0.65	50.0%	5
1998	PN-11f-001-007	2.30	2.30	0.0%	5
1998	PN-11f-001-007	4.40	1.95	55.7%	5
1998	PN-11f-001-008	1.35	0.65	51.9%	5
1998	PN-11f-001-009	1.10	0.20	81.8%	5
1998	PN-11f-002-001	0.10	0.10	0.0%	5
1998	PN-11f-002-002	2.00	1.20	40.0%	5
1998	PN-11f-002-003	0.85	0.30	64.7%	5
1998	PN-11f-002-003	1.85	0.90	51.4%	5
1998	PN-11f-002-003	2.15	0.80	62.8%	5
1998	PN-11f-002-004	0.65	0.25	61.5%	5
1998	PN-11f-002-005	0.30	0.30	0.0%	5
1998	PN-11f-002-006	0.40	0.40	0.0%	5
1998	PN-11f-002-006	2.90	1.30	55.2%	5
1998	PN-11f-003-001	1.40	0.70	50.0%	5
1998	PN-11f-003-002	1.50	0.50	66.7%	5
1998	PN-11f-003-003	2.20	0.85	61.4%	5
1998	PN-11f-003-004	1.35	1.35	0.0%	5
1998	PN-11f-003-004	1.55	1.55	0.0%	5
1998	PN-11f-003-004	1.85	1.45	21.6%	5
1998	PN-11f-003-004	1.85	1.00	45.9%	5
1998	PN-11f-003-005	2.20	1.10	50.0%	5
1998	PN-11f-005-002	1.35	0.65	51.9%	5
1998	PN-11f-006-002	1.30	0.45	65.4%	5
1998	PN-11f-007-002	0.50	0.25	50.0%	5
1998	PN-11f-010-004	1.70	0.90	47.1%	5
1998	PN-11g-001-001	0.75	0.35	53.3%	5
1998	PN-11g-001-002	1.00	0.50	50.0%	5

1998	PN-11g-001-002	1.50	0.90	40.0%	5
1998	PN-11g-001-003	0.35	0.15	57.1%	5
1998	PN-11g-002-002	1.20	0.30	75.0%	5
1998	PN-11g-002-002	1.45	0.55	62.1%	5
1998	PN-11g-004-001	0.80	0.35	56.3%	5
1998	PN-11g-004-001	1.30	0.35	73.1%	5
1998	PN-11g-006-001	1.50	1.20	20.0%	5
1998	PN-11g-006-001	1.80	1.20	33.3%	5
1998	PN-11g-006-003	1.00	0.75	25.0%	5
1998	PN-11g-006-004	0.15	0.00	100.0%	5
1998	PN-11g-006-005	1.50	0.45	70.0%	5
1998	PN-11g-006-006	0.35	0.25	28.6%	5
1998	PN-11h-001-002	0.50	0.35	30.0%	5
1998	PN-11h-002-002	0.25	0.25	0.0%	5
1999	PN 46a-001-001	1.15	0.84	27.0%	6
1999	PN 46a-001-001	1.87	1.47	21.4%	6
1999	PN 46a-001-002	1.33	0.94	29.3%	6
1999	PN 46a-001-002	2.87	0.00	100.0%	6
1999	PN 46a-001-002	4.66	3.95	15.2%	6
1999	PN 46a-001-002	5.20	3.55	31.7%	6
1999	PN 46a-001-002	5.61	4.71	16.0%	6
1999	PN 46a-001-003	0.85	0.00	100.0%	6
1999	PN 46a-001-003	4.17	3.30	20.9%	6
1999	PN 46b-001-001	3.45	2.56	25.8%	6
1999	PN 46b-001-001	4.06	2.55	37.2%	6
1999	PN 46b-001-001	4.07	2.58	36.6%	6
1999	PN 46b-001-001	4.50	3.60	20.0%	6
1999	PN 46b-001-002	0.90	0.36	60.0%	6
1999	PN 46b-001-002	1.33	0.07	94.7%	6
1999	PN 46b-001-002	2.04	1.61	21.1%	6
1999	PN 46b-001-002	3.48	2.08	40.1%	6
1999	PN 46b-001-002	4.50	3.40	24.4%	6
1999	PN 46b-001-002	4.95	3.55	28.3%	6
1999	PN 46b-001-003	1.12	0.40	64.3%	6
1999	PN 46b-001-004	4.15	2.45	41.0%	6
1999	PN 46b-001-005	2.28	0.00	100.0%	6
1999	PN 46b-001-005	5.30	4.10	22.6%	6
1999	PN 46b-001-006	2.70	1.37	49.3%	6
1999	PN 46b-002-002	1.81	1.20	33.7%	6
1999	PN 46b-002-003	1.32	0.55	58.3%	6
1999	PN 46b-002-004	5.70	3.69	35.3%	6
1999	PN 46b-002-005	1.65	1.24	24.8%	6
1999	PN 46b-002-005	2.81	0.01	99.6%	6
1999	PN 46b-002-005	4.12	2.60	36.9%	6
1999	PN 46b-002-005	4.50	3.16	29.8%	6

1999	PN 46b-002-006	3.91	2.97	24.0%	6
1999	PN 46b-003-001	3.61	2.39	33.8%	6
1999	PN 46b-003-003	0.50	0.35	30.0%	6
1999	PN 46b-003-004	4.85	0.97	80.0%	6
1999	PN 46b-003-004	4.86	2.85	41.4%	6
1999	PN 46b-003-005	1.14	0.00	100.0%	6
1999	PN 46b-003-005	2.62	0.00	100.0%	6
1999	PN 46b-003-005	2.80	2.80	0.0%	6
1999	PN 46b-003-005	3.24	2.47	23.8%	6
1999	PN 46b-003-005	4.35	3.30	24.1%	6
1999	PN 46b-004-001	1.76	1.37	22.2%	6
1999	PN 46b-004-004	1.56	0.00	100.0%	6
1999	PN 46b-004-004	5.28	4.11	22.2%	6
1999	PN 46b-004-006	3.70	1.96	47.0%	6
1999	PN 46b-005-001	2.80	2.31	17.5%	6
1999	PN 46b-005-002	1.56	0.96	38.5%	6
1999	PN 46b-005-003	1.10	0.74	32.7%	6
1999	PN 46b-005-004	1.71	0.00	100.0%	6
1999	PN 46b-005-004	6.87	4.94	28.1%	6
1999	PN 46b-005-006	2.27	1.75	22.9%	6
1999	PN 46b-006-001	2.07	1.46	29.5%	6
1999	PN 46b-006-002	0.99	0.68	31.3%	6
1999	PN 46b-006-003	0.70	0.41	41.4%	6
1999	PN 46b-006-004	5.75	4.11	28.5%	6
1999	PN 46b-03-002	1.01	0.65	35.6%	6
1999	PN 46b-Penn -Trench	5.12	3.91	23.6%	6
1999	PN 46b-Penn-Trench	2.36	0.00	100.0%	6
1999	PN 46b-Penn-Trench	3.62	2.45	32.3%	6
1999	PN 46c-001-001	0.92	0.83	9.8%	6
1999	PN 46c-001-002	1.73	1.25	27.7%	6
1999	PN 46c-001-003	4.16	2.90	30.3%	6
1999	PN 46c-001-004	0.55	0.26	52.7%	6
1999	PN 46d-001-001	1.43	0.60	58.0%	6
1999	PN 46d-001-002	2.61	1.77	32.2%	6
1999	PN 46d-001-003	1.00	0.56	44.0%	6
1999	PN 46d-002-001	1.97	1.40	28.9%	6
1999	PN 46d-002-002	0.80	0.60	25.0%	6
1999	PN 46d-002-002	3.70	2.23	39.7%	6
1999	PN 46d-003-001	2.87	1.93	32.8%	6
1999	PN 46d-003-002	4.50	3.44	23.6%	6
1999	PN 46d-003-002	5.95	4.09	31.3%	6
1999	PN 46e-001-001	0.60	0.30	50.0%	6
1999	PN 46e-001-002	0.79	0.29	63.3%	6
1999	PN 46e-001-003	0.20	0.00	100.0%	6
1999	PN 50a-001-001	1.30	1.11	14.6%	5

1999	PN 50a-001-002	0.56	0.60	-7.1%	5
1999	PN 50a-001-004	1.76	1.03	41.5%	5
1999	PN 50a-001-005	0.15	0.00	100.0%	5
1999	PN 50a-001-006	0.62	0.52	16.1%	5
1999	PN 50b-001-001	1.50	0.91	39.3%	5
1999	PN 50b-001-002	1.14	0.66	42.1%	5
2000	PN 46f-0.31-001	4.68	0.00	100.0%	6
2000	PN 46f-001-001	2.78	0.00	100.0%	6
2000	PN 46f-001-001	2.10	0.00	100.0%	6
2000	PN 46f-001-001	2.35	0.00	100.0%	6
2000	PN 46f-001-001	0.77	0.00	100.0%	6
2000	PN 46f-001-001	3.09	0.00	100.0%	6
2000	PN 46f-001-001	4.28	0.00	100.0%	6
2000	PN 46f-001-001	2.15	0.00	100.0%	6
2000	PN 46f-001-002	4.14	0.00	100.0%	6
2000	PN 46f-001-002	3.49	0.00	100.0%	6
2000	PN 46f-001-002	4.45	0.00	100.0%	6
2000	PN 46f-002-001	4.22	2.72	35.6%	6
2000	PN 46f-002-001	4.17	1.81	56.5%	6
2000	PN 46f-002-002	2.32	0.00	100.0%	6
2000	PN 46f-002-002	4.14	0.00	100.0%	6
2000	PN 46f-002-002	0.48	0.00	100.0%	6
2000	PN 46f-002-002	4.05	0.00	100.0%	6
2000	PN 46f-002-002	3.51	0.00	100.0%	6
2000	PN 46f-002-002	3.66	0.00	100.0%	6
2000	PN 46f-002-002	4.68	0.00	100.0%	6
2000	PN 46f-002-002	4.45	0.00	100.0%	6
2000	PN 46f-002-002	4.51	0.00	100.0%	6
2000	PN 46f-002-002	3.91	0.00	100.0%	6
2000	PN 46f-002-003	0.45	0.00	100.0%	6
2000	PN 46f-003-001	2.35	0.00	100.0%	6
2000	PN 46f-003-002	5.61	3.54	36.9%	6
2000	PN 46f-003-002	4.51	1.76	61.0%	6
2000	PN 46f-003-002	4.59	2.38	48.1%	6
2000	PN 46f-003-002	4.73	2.66	43.7%	6
2000	PN 46f-003-002	5.10	2.75	46.1%	6
2000	PN 46f-003-002	5.56	3.74	32.7%	6
2000	PN 46f-003-002	4.76	3.15	33.9%	6
2000	PN 46f-003-002	2.66	1.16	56.4%	6
2000	PN 46f-003-002	4.99	3.23	35.2%	6
2000	PN 46f-003-002	4.82	2.86	40.6%	6
2000	PN 46f-003-002	5.36	3.37	37.0%	6
2000	PN 46f-003-002	4.88	3.03	37.8%	6
2000	PN 46f-003-002	4.05	2.52	37.8%	6
2000	PN 46f-003-002	0.43	0.00	100.0%	6

2000	PN 46f-003-002	4.03	0.00	100.0%	6
2000	PN 46f-003-002	1.33	0.00	100.0%	6
2000	PN 46f-003-003	2.01	0.00	100.0%	6
2000	PN 46f-004-001	3.29	2.44	25.9%	6
2000	PN 46f-004-001	4.62	2.78	39.9%	6
2000	PN 46f-004-001	5.10	3.03	40.6%	6
2000	PN 46f-004-002	1.47	0.00	100.0%	6
2000	PN 46f-004-002	5.05	3.51	30.3%	6
2000	PN 46f-004-002	4.88	3.54	27.3%	6
2000	PN 46f-004-002	4.96	3.15	36.6%	6
2000	PN 46f-004-003	3.57	0.00	100.0%	6
2000	PN 46f-004-004	5.33	0.00	100.0%	6
2000	PN 46f-004-004	3.37	0.00	100.0%	6
2000	PN 46f-004-005	0.26	0.00	100.0%	6
2000	PN 46f-005-001	1.79	1.22	31.7%	6
2000	PN 46f-005-001	1.25	0.00	100.0%	6
2000	PN 46f-005-001	4.76	2.64	44.6%	6
2000	PN 46f-005-001	4.14	2.92	29.5%	6
2000	PN 46f-005-002	4.05	2.58	36.4%	6
2000	PN 46f-005-002	3.09	1.59	48.6%	6
2000	PN 46f-005-002	3.97	2.27	42.9%	6
2000	PN 46f-005-002	4.42	2.58	41.7%	6
2000	PN 46f-005-002	5.19	3.29	36.6%	6
2000	PN 46f-005-002	4.88	3.60	26.2%	6
2000	PN 46f-005-002	4.28	2.95	31.1%	6
2000	PN 46f-005-002	5.05	3.63	28.1%	6
2000	PN 46f-005-002	5.19	3.80	26.8%	6
2000	PN 46f-006-001	3.97	0.00	100.0%	6
2000	PN 46f-006-001	4.37	0.00	100.0%	6
2000	PN 46f-006-002	3.71	0.00	100.0%	6
2000	PN 46f-006-002	3.85	2.41	37.5%	6
2000	PN 46f-007-001	2.69	0.00	100.0%	6
2000	PN 46f-007-002	0.06	0.00	100.0%	6
2000	PN 46f-007-003	1.93	0.00	100.0%	6
2000	PN 46f-008-001	5.33	3.51	34.0%	6
2000	PN 46f-008-001	4.99	3.40	31.8%	6
2000	PN 46f-008-002	0.34	0.00	100.0%	6
2000	PN 46f-008-002	4.34	2.58	40.5%	6
2000	PN 46f-008-002	4.85	3.51	27.5%	6
2000	PN 46f-008-002	5.30	3.40	35.8%	6
2000	PN 46f-008-002	3.40	2.32	31.7%	6
2000	PN 46f-009-002	1.93	0.88	54.4%	6
2000	PN 46f-009-002	4.20	2.92	30.4%	6
2000	PN 46f-009-002	4.90	3.46	29.5%	6
2000	PN 46f-009-003	2.55	1.70	33.3%	6

2000	PN 46f-009-003	5.05	0.00	100.0%	6
2000	PN 46f-009-003	4.48	2.38	46.8%	6
2000	PN 46f-009-003	4.37	2.49	42.9%	6
2000	PN 46f-009-003	4.51	2.55	43.4%	6
2000	PN 46f-009-003	4.56	2.04	55.3%	6
2000	PN 46f-009-003	2.07	1.02	50.7%	6
2000	PN 46f-009-003	4.39	0.00	100.0%	6
2000	PN 46f-012-001	2.95	0.00	100.0%	6
2000	PN 46f-012-001	4.90	0.00	100.0%	6
2000	PN 46f-012-002	4.62	0.00	100.0%	6
2000	PN 46f-012-002	5.10	0.00	100.0%	6
2000	PN 46f-012-002	3.51	0.00	100.0%	6
2000	PN 46f-012-002	4.25	0.00	100.0%	6
2000	PN 46f-012-003	2.27	0.00	100.0%	6
2000	PN 46f-012-003	2.92	0.00	100.0%	6
2000	PN 46f-012-005	5.30	0.00	100.0%	6
2000	PN 46f-012-005	3.26	0.00	100.0%	6
2000	PN 46f-012-005	3.74	0.00	100.0%	6
2000	PN 46f-013-001	3.20	0.00	100.0%	6
2000	PN 46f-013-001	4.42	0.00	100.0%	6
2000	PN 46f-014-001	1.87	0.00	100.0%	6
2000	PN 46f-014-001	4.51	0.00	100.0%	6
2000	PN 46f-014-001	4.71	0.00	100.0%	6
2000	PN 46f-016-001	4.62	0.00	100.0%	6
2000	PN 46f-016-001	0.40	0.00	100.0%	6
2000	PN 46f-016-002	0.45	0.00	100.0%	6
2000	PN 46f-016-003	3.83	0.00	100.0%	6
2000	PN 46f-016-004	0.00	0.00	NR	6
2000	PN 46f-017-001	4.68	0.00	100.0%	6
2000	PN 46f-017-001	0.74	0.00	100.0%	6
2000	PN 46f-017-002	4.51	0.00	100.0%	6
2000	PN 46f-017-002	2.75	0.00	100.0%	6
2000	PN 46f-017-003	4.71	0.00	100.0%	6
2000	PN 46f-017-003	3.80	0.00	100.0%	6
2000	PN 46f-017-003	4.51	0.00	100.0%	6
2000	PN 46f-017-003	4.65	0.00	100.0%	6
2000	PN 46f-017-003	4.00	0.00	100.0%	6
2000	PN 46f-017-003	3.71	0.00	100.0%	6
2000	PN 46f-017-003	4.65	0.00	100.0%	6
2000	PN 46f-017-003	4.28	0.00	100.0%	6
2000	PN 46f-017-003	0.82	0.00	100.0%	6
2000	PN 46f-017-004	4.51	0.00	100.0%	6
2000	PN 46f-017-004	51.42	0.00	100.0%	6
2000	PN 46f-017-004	3.34	0.00	100.0%	6
2000	PN 46f-017-004	5.39	0.00	100.0%	6

2000	PN 46f-017-004	3.74	0.00	100.0%	6
2000	PN 46f-017-004	4.88	0.00	100.0%	6
2000	PN 46f-017-005	0.68	0.00	100.0%	6
2000	PN 46f-017-006	4.37	0.00	100.0%	6
2000	PN 46f-017-007	1.30	0.00	100.0%	6
2000	PN 46f-017-008	0.00	0.00	NR	6
2000	PN 46f-018-001	1.13	0.00	100.0%	6
2000	PN 46f-018-002	4.45	0.00	100.0%	6
2000	PN 46f-018-002	4.88	0.00	100.0%	6
2000	PN 46f-018-002	1.11	0.00	100.0%	6
2000	PN 46f-018-003	2.55	0.00	100.0%	6
2000	PN 46f-018-005	0.65	0.00	100.0%	6
2000	PN 46f-018-005	0.23	0.00	100.0%	6
2000	PN 46f-019-002	3.77	0.00	100.0%	6
2000	PN 46f-019-002	4.73	0.00	100.0%	6
2000	PN 46f-019-003	1.13	0.00	100.0%	6
2000	PN 46f-019-005	1.13	0.00	100.0%	6
2000	PN 46f-019-006	0.00	0.00	NR	6
2000	PN 46f-020-002	2.27	0.00	100.0%	6
2000	PN 46f-020-002	5.19	0.00	100.0%	6
2000	PN 46f-020-002	4.05	0.00	100.0%	6
2000	PN 46f-020-002	4.08	0.00	100.0%	6
2000	PN 46f-020-003	0.00	0.00	NR	6
2000	PN 46f-020-004	0.00	0.00	NR	6
2000	PN 46f-021-001	1.33	0.00	100.0%	6
2000	PN 46f-021-001	2.44	0.00	100.0%	6
2000	PN 46f-021-004	3.49	0.00	100.0%	6
2000	PN 46f-021-005	2.44	0.00	100.0%	6
2000	PN 46f-021-005	1.84	0.00	100.0%	6
2000	PN 46f-021-005	8.19	0.00	100.0%	6
2000	PN 46f-022-001	1.76	0.00	100.0%	6
2000	PN 46f-023-001	4.99	0.00	100.0%	6
2000	PN 46f-023-002	3.88	0.00	100.0%	6
2000	PN 46f-023-002	4.79	0.00	100.0%	6
2000	PN 46f-023-003	1.36	0.00	100.0%	6
2000	PN 46f-023-003	4.82	0.00	100.0%	6
2000	PN 46f-023-003	5.13	0.00	100.0%	6
2000	PN 46f-023-003	5.02	0.00	100.0%	6
2000	PN 46f-023-003	4.85	0.00	100.0%	6
2000	PN 46f-023-003	3.68	0.00	100.0%	6
2000	PN 46f-023-004	2.61	0.00	100.0%	6
2000	PN 46f-023-004	3.80	0.00	100.0%	6
2000	PN 46f-023-005	2.27	0.00	100.0%	6
2000	PN 46f-023-005	0.00	0.00	NR	6
2000	PN 46f-023-005	0.14	0.00	100.0%	6

2000	PN 46f-023-005	5.24	0.00	100.0%	6
2000	PN 46f-023-005	4.71	0.00	100.0%	6
2000	PN 46f-023-006	2.92	0.00	100.0%	6
2000	PN 46f-023-007	1.56	0.00	100.0%	6
2000	PN 46f-023-008	2.35	0.00	100.0%	6
2000	PN 46f-023-009	0.57	0.00	100.0%	6
2000	PN 46f-023-011	0.00	0.00	NR	6
2000	PN 46f-024-001	2.83	0.00	100.0%	6
2000	PN 46f-024-002	2.72	0.00	100.0%	6
2000	PN 46f-024-003	2.92	0.00	100.0%	6
2000	PN 46f-024-004	1.33	0.00	100.0%	6
2000	PN 46f-024-004	3.74	0.00	100.0%	6
2000	PN 46f-025-001	3.51	0.00	100.0%	6
2000	PN 46f-025-001	3.97	0.00	100.0%	6
2000	PN 46f-025-002	32.03	0.00	100.0%	6
2000	PN 46f-025-002	4.34	0.00	100.0%	6
2000	PN 46f-025-002	4.00	0.00	100.0%	6
2000	PN 46f-025-003	2.61	0.00	100.0%	6
2000	PN 46f-026-001	2.21	0.00	100.0%	6
2000	PN 46f-026-003	4.85	0.00	100.0%	6
2000	PN 46f-027-001	0.94	0.00	100.0%	6
2000	PN 46f-027-002	4.51	0.00	100.0%	6
2000	PN 46f-027-002	5.47	0.00	100.0%	6
2000	PN 46f-027-002	3.51	0.00	100.0%	6
2000	PN 46f-028-001	0.54	0.00	100.0%	6
2000	PN 46f-028-002	4.51	0.00	100.0%	6
2000	PN 46f-028-002	4.68	0.00	100.0%	6
2000	PN 46f-028-002	3.94	0.00	100.0%	6
2000	PN 46f-028-002	3.80	0.00	100.0%	6
2000	PN 46f-028-002	1.39	0.00	100.0%	6
2000	PN 46f-028-002	4.03	0.00	100.0%	6
2000	PN 46f-028-003	5.02	0.00	100.0%	6
2000	PN 46f-028-003	4.96	0.00	100.0%	6
2000	PN 46f-028-004	1.79	0.00	100.0%	6
2000	PN 46f-028-006	0.00	0.00	NR	6
2000	PN 46f-029-001	0.79	0.00	100.0%	6
2000	PN 46f-029-002	3.88	0.00	100.0%	6
2000	PN 46f-029-002	4.48	0.00	100.0%	6
2000	PN 46f-029-002	4.51	0.00	100.0%	6
2000	PN 46f-029-002	4.62	0.00	100.0%	6
2000	PN 46f-029-002	4.76	0.00	100.0%	6
2000	PN 46f-029-003	0.82	0.00	100.0%	6
2000	PN 46f-029-005	0.00	0.00	NR	6
2000	PN 46f-029-006	5.19	0.00	100.0%	6
2000	PN 46f-029-006	1.79	0.00	100.0%	6

2000	PN 46f-029-007	0.28	0.00	100.0%	6
2000	PN 46f-030-001	2.92	0.00	100.0%	6
2000	PN 46f-030-001	3.29	0.00	100.0%	6
2000	PN 46f-030-002	4.76	0.00	100.0%	6
2000	PN 46f-030-002	4.65	0.00	100.0%	6
2000	PN 46f-030-002	4.65	0.00	100.0%	6
2000	PN 46f-030-002	5.05	0.00	100.0%	6
2000	PN 46f-031-001	3.32	0.00	100.0%	6
2000	PN 46f-031-002	3.00	0.00	100.0%	6
2000	PN 46f-031-003	0.31	0.00	100.0%	6
2000	PN 46f-031-003	4.65	0.00	100.0%	6
2000	PN 46f-031-003	4.73	0.00	100.0%	6
2000	PN 46f-031-003	3.85	0.00	100.0%	6
2000	PN 46f-031-003	1.76	0.00	100.0%	6
2000	PN 46f-031-003	3.66	0.00	100.0%	6
2000	PN 46f-031-003	4.45	0.00	100.0%	6
2000	PN 46f-032-001	5.10	0.00	100.0%	6
2000	PN 46f-032-001	4.65	0.00	100.0%	6
2000	PN 46f-032-002	3.60	0.00	100.0%	6
2000	PN 46f-032-002	3.26	0.00	100.0%	6
2000	PN 46f-032-002	4.73	0.00	100.0%	6
2000	PN 46f-033-001	2.52	0.00	100.0%	6
2000	PN 46f-033-002	4.51	0.00	100.0%	6
2000	PN 46f-033-002	3.43	0.00	100.0%	6
2000	PN 46f-033-003	0.40	0.00	100.0%	6
2000	PN 46f-033-004	1.76	0.00	100.0%	6
2000	PN 46f-033-006	0.00	0.00	NR	6
2000	PN 46f-034-001	0.45	0.00	100.0%	6
2000	PN 46f-034-002	0.91	0.00	100.0%	6
2000	PN 46f-034-002	1.30	0.00	100.0%	6
2000	PN 46f-035-001	1.45	0.00	100.0%	6
2000	PN 46f-035-002	1.16	0.00	100.0%	6
2000	PN 46f-035-003	1.13	0.00	100.0%	6
2000	PN 46g-001-001	0.99	0.48	51.4%	6
2000	PN 46g-002-001	4.59	2.75	40.1%	6
2000	PN 46g-006-002	2.21	1.22	44.9%	6
2000	PN 46g-006-003	1.59	0.00	100.0%	6
2000	PN 46g-006-003	1.13	0.00	100.0%	6
2000	PN 46g-008-001	0.60	0.00	100.0%	6
2000	PN 46g-010-002	2.27	1.05	53.7%	6
2000	PN 46g-012-001	0.60	0.00	100.0%	6
2000	PN 46g-012-001	3.20	1.67	47.8%	6
2000	PN 46g-012-002	1.33	0.00	100.0%	6
2000	PN 46g-012-003	0.23	0.00	100.0%	6
2000	PN 46g-012-004	0.09	0.00	100.0%	6

2000	PN 46g-012-006	0.74	0.00	100.0%	6
2000	PN 46h-001-001	0.74	0.00	100.0%	6
2000	PN 46h-001-002	5.27	2.86	45.7%	6
2000	PN 46h-001-002	4.85	2.69	44.4%	6
2000	PN 46h-001-002	4.31	2.01	53.3%	6
2000	PN 46h-002-001	1.81	0.68	62.5%	6
2000	PN 46h-002-002	1.30	0.79	39.1%	6
2000	PN 46h-002-003	4.34	2.18	49.7%	6
2000	PN 46h-003-001	2.32	1.30	43.9%	6
2000	PN 46h-003-001	5.67	3.68	35.0%	6
2000	PN 46h-004-001	5.87	2.86	51.2%	6
2000	PN 46h-004-002	5.44	3.40	37.5%	6
2000	PN 46h-004-002	1.16	0.71	39.0%	6
2000	PN 46h-005-002	5.56	3.63	34.7%	6
2000	PN 46h-005-002	4.85	3.15	35.1%	6
2000	PN 46h-005-002	6.26	3.51	43.9%	6
2000	PN 46h-005-002	5.50	3.51	36.1%	6
2000	PN 46h-005-002	5.30	3.20	39.6%	6
2000	PN 46h-005-002	4.90	2.69	45.1%	6
2000	PN 46h-005-002	5.27	3.66	30.6%	6
2000	PN 46h-006-001	3.37	1.59	52.9%	6
2000	PN 46h-006-002	3.85	1.90	50.7%	6
2000	PN 46h-007-001	3.68	2.15	41.5%	6
2000	PN 46h-007-001	1.90	1.39	26.9%	6
2000	PN 46h-007-002	1.11	0.00	100.0%	6
2000	PN 46h-007-002	4.54	1.16	74.4%	6
2000	PN 46h-007-002	4.85	2.18	55.0%	6
2000	PN 46h-007-002	5.56	3.88	30.1%	6
2000	PN 46h-007-002	5.73	2.95	48.5%	6
2000	PN 46h-007-002	4.65	2.15	53.7%	6
2000	PN 46h-007-002	4.88	2.61	46.5%	6
2000	PN 46h-007-002	4.93	2.52	48.9%	6
2000	PN 46h-007-002	5.36	3.09	42.3%	6
2000	PN 46i-001-002	5.78	3.34	42.2%	6
2000	PN 46i-001-002	5.30	2.95	44.4%	6
2000	PN 46i-001-003	1.59	1.87	-17.9%	6
2000	PN 46i-001-004	1.33	0.48	63.8%	6
2000	PN 46i-002-001	0.60	1.53	-157.1%	6
2000	PN 46i-002-002	1.87	6.07	-224.2%	6
2000	PN 46i-002-002	2.04	0.57	72.2%	6
2000	PN 46i-002-002	4.71	1.98	57.8%	6
2000	PN 46i-002-003	1.45	0.77	47.1%	6
2000	PN 46i-003-001	3.29	3.15	4.3%	6
2000	PN 46i-003-002	3.80	2.07	45.5%	6
2000	PN 46i-003-003	1.39	0.65	53.1%	6

2000	PN 46i-004-001	5.02	2.83	43.5%	6
2000	PN 46i-004-001	0.68	0.00	100.0%	6
2000	PN 46i-004-001	5.19	1.59	69.4%	6
2000	PN 46i-004-002	4.20	1.98	52.7%	6
2000	PN 46i-004-003	1.25	0.51	59.1%	6
2000	PN 46i-004-004	3.66	1.33	63.6%	6
2000	PN 46i-004-004	3.00	1.45	51.9%	6
2000	PN 46i-004-005	3.00	2.44	18.9%	6
2000	PN 46i-004-006	3.74	2.13	43.2%	6
2000	PN 54a-001-001	4.54	0.00	100.0%	6
2000	PN 54a-001-002	5.10	0.00	100.0%	6
2000	PN 54a-001-002	4.85	0.00	100.0%	6
2000	PN 54a-001-003	5.90	0.00	100.0%	6
2000	PN 54a-001-004	2.32	0.00	100.0%	6
2000	PN 54a-001-005	1.11	0.57	48.7%	6
2000	PN 54a-002-001	2.49	0.00	100.0%	6
2000	PN 54a-002-001	3.60	0.00	100.0%	6
2000	PN 54a-002-002	1.45	0.00	100.0%	6
2000	PN 54a-002-004	4.28	0.00	100.0%	6
2000	PN 54a-002-004	4.05	0.00	100.0%	6
2000	PN 54a-002-004	4.85	0.00	100.0%	6
2000	PN 54a-002-0043	5.07	0.00	100.0%	6
2000	PN 54a-002-005	2.83	0.00	100.0%	6
2000	PN 54a-002-005	4.85	0.00	100.0%	6
2000	PN 54a-002-005	5.53	0.00	100.0%	6
2000	PN 54a-003-001	3.17	0.00	100.0%	6
2000	PN 54a-003-001	5.81	0.00	100.0%	6
2000	PN 54a-003-001	0.88	0.00	100.0%	6
2000	PN 54a-003-001	0.17	0.00	100.0%	6
2000	PN 54a-003-002	4.82	0.00	100.0%	6
2000	PN 54a-003-002	0.45	0.00	100.0%	6
2000	PN 54a-003-002	2.47	0.00	100.0%	6
2000	PN 54a-003-002	3.26	0.00	100.0%	6
2000	PN 54a-003-003	3.71	0.00	100.0%	6
2000	PN 54a-003-004	1.08	0.54	50.0%	6
2000	PN 54a-003-005	0.34	0.00	100.0%	6
2000	PN 54a-004-001	4.79	0.00	100.0%	6
2000	PN 54a-004-001	0.26	0.00	100.0%	6
2000	PN 54a-004-001	2.47	0.00	100.0%	6
2000	PN 54a-004-002	5.22	0.00	100.0%	6
2000	PN 54a-004-003	1.22	0.00	100.0%	6
2000	PN 54a-004-004	1.11	0.74	33.3%	6
2000	PN 54a-005-001	3.91	0.00	100.0%	6
2000	PN 54a-005-001	5.27	0.00	100.0%	6
2000	PN 54a-005-002	4.73	0.00	100.0%	6

2000	PN 54a-005-002	5.33	0.00	100.0%	6
2000	PN 54a-005-002	3.74	0.00	100.0%	6
2000	PN 54a-005-002	4.73	0.00	100.0%	6
2000	PN 54a-005-003	4.73	0.00	100.0%	6
2000	PN 54a-005-003	5.10	0.00	100.0%	6
2000	PN 54a-006-001	3.37	0.00	100.0%	6
2000	PN 54a-006-001	4.28	0.00	100.0%	6
2000	PN 54a-006-001	5.92	0.00	100.0%	6
2000	PN 54a-006-002	4.17	0.00	100.0%	6
2000	PN 54a-007-001	5.92	0.00	100.0%	6
2000	PN 54a-007-002	2.24	0.00	100.0%	6
2000	PN 54a-007-002	5.67	0.00	100.0%	6
2000	PN 54a-008-001	3.09	0.00	100.0%	6
2000	PN 54a-008-001	5.39	0.00	100.0%	6
2000	PN 54a-008-001	1.05	0.00	100.0%	6
2000	PN 54a-008-001	5.44	0.00	100.0%	6
2000	PN 54a-009-001	3.34	0.00	100.0%	6
2000	PN 54a-010-001	1.53	0.00	100.0%	6
2000	PN 54a-012-001	4.79	0.00	100.0%	6
2000	PN 54a-012-001	1.84	0.00	100.0%	6
2000	PN 54a-013-001	5.81	0.00	100.0%	6
2000	PN 54a-013-001	0.65	0.00	100.0%	6
2000	PN 54a-014-001	4.48	0.00	100.0%	6
2000	PN 54a-015-001	4.54	0.00	100.0%	6
2000	PN 54a-016-001	0.17	0.00	100.0%	6
2000	PN 54a-016-001	3.46	0.00	100.0%	6
2000	PN 54a-016-001	4.54	0.00	100.0%	6
2000	PN 54a-018-001	4.25	2.07	51.3%	6
2000	PN 54a-019-001	1.96	1.11	43.5%	6
2000	PN 54a-020-001	4.79	0.00	100.0%	6
2000	PN 54a-020-001	3.40	0.00	100.0%	6
2000	PN 54a-020-001	4.90	0.00	100.0%	6
2000	PN 54a-021-001	5.87	0.00	100.0%	6

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
			Bold dates indicate an absolute date exists for the deposit.		Bold context indicates a burial or dedicatory/termination deposit.	
PN-11A-1-1	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date. AD 810 provided as end date, lacking any Late Facet Chacalhaaz Ceramics
PN-11A-1-2	n/a	n/a	AD 630 - 810	Court 3	Collapse/Subfloor fill	Probably mixed Chacalhaaz and Yaxche ceramics, with a broad Late Classic date the only secure assignment.
PN-11A-1-3	Naba	n/a	AD 450 - 550	Court 3	Termination Deposit	Abundant unusual - perhaps - unique ceramics. Consistent with Naba modes.
PN-11A-2-1	n/a	n/a	AD 810 - ?	Court 3	Humus	Ceramics eroded, date provided by stratigraphic associations.
PN-11A-2-2	Chacalhaaz	n/a	AD 730 - 810	Court 3/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11A-2-3	Yaxche	n/a	AD 630 - 730	Court 3/2nd Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11A-2-4	Naba	n/a	AD 450 - 550	Court 3	Termination Deposit	Ceramics consistent with stratigraphy to provide date.
PN-11A-3-1	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11A-3-2	Chacalhaaz	n/a	AD 730 - 810	Court 3/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11A-3-3	Yaxche	n/a	AD 630 - 730	Court 3/2nd Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11A-3-4	Naba	n/a	AD 450 - 550	Court 3	Termination Deposit	More polychromes and incised ceramics than other loci within deposit. Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11A-3-5	Naba	n/a	AD 450 - 550	Court 3	Subfloor fill	Fill beneath stone "mosaic" patio floor. Ceramics consistent with stratigraphy to provide date.
PN-11A-4-1	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11A-4-2	Chacalhaaz	n/a	AD 730 - 810	Court 3/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11A-4-3	Yaxche	n/a	AD 630 - 730	Court 3/2nd Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11A-4-4	Naba	n/a	AD 450 - 550	Court 3/I-20-sub-1	Termination Deposit	Ceramics consistent with stratigraphy to provide date.
PN-11A-5-1	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11A-5-2	n/a	n/a	AD 630 - 810	Court 3/1st Patio Floor	Subfloor fill	Few artifacts; ceramics are Late Classic types though no phase can be assigned, consistent with stratigraphy to provide date.
PN-11A-5-3	Naba	n/a	AD 450 - 550	Court 3	Termination Deposit	Ceramics consistent with stratigraphy to provide date.
PN-11A-5-4	Naba	n/a	AD 450 - 550	Court 3/I-20-sub-1	Termination Deposit	Ceramics consistent with stratigraphy to provide date.
PN-11A-5-5	Naba	n/a	AD 450 - 550	Court 3/I-20-sub-1	Fill	No prepared surface or structure. Ceramics consistent with stratigraphy to provide date.
PN-11A-6-1	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11A-6-2	n/a	n/a	AD 630 - 810	Court 3/1st Patio Floor	Subfloor fill	Few artifacts; ceramics are Late Classic types though no phase can be assigned, consistent with stratigraphy to provide date.
PN-11A-6-3	Naba	n/a	AD 450 - 550	Court 3	Termination Deposit	Ceramics consistent with stratigraphy to provide date.
PN-11A-6-4	Naba	n/a	AD 450 - 550	Court 3	Termination Deposit	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11A-7-1	Chacalhaaz	n/a	AD 810 - ?	Court 3/Chasm	Humus	Stratum is thin, and probably disturbed. Ceramics consistent with stratigraphy to provide date.
PN-11A-7-2	Naba	n/a	AD 450 - 550	Court 3/Chasm	Termination Deposit	Some mixture with stratum above, but date is provided by majority of ceramics and stratigraphy.
PN-11A-7-3	n/a	n/a	AD 450 - 830 (?)	Court 3/Chasm	Rubble fill	Fill of the chasm in Court 3, likely contemporary with Termination Deposit, but ceramics are mixed.
PN-11A-8-1	n/a	n/a	AD 450 - 830 (?)	Court 3/Chasm	Rubble fill	Fill of the chasm in Court 3, likely contemporary with Termination Deposit, but ceramics are mixed.
PN-11A-9-1	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11A-9-2	Chacalhaaz/ Yaxche	n/a	AD 630 - 810	Court 3	Fill	Ceramics a mix of Chacalhaaz and Yaxche types, stratigraphy indicates a date more likely in the AD 730 - 810 range.
PN-11A-9-3	n/a	n/a	AD 630 - 810	Court 3/1st Patio Floor	Subfloor fill	Few artifacts; ceramics are Late Classic types though no phase can be assigned, consistent with stratigraphy to provide date.
PN-11A-9-4	Naba	n/a	AD 450 - 550	Court 3/J-20-sub-1	Termination Deposit	Ceramics consistent with stratigraphy to provide date.
PN-11A-9-5	Naba	n/a	AD 450 - 550	J-20-sub-1	Platform fill	Minimal ceramics, date assigned largely on the basis of stratigraphy.
PN-11A-10-1	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11A-10-2	Yaxche/Naba	n/a	AD 450 - 730	Court 3	Fill/Termination Deposit	Some mixture with stratum above, but date is provided by majority of ceramics and stratigraphy.
PN-11A-10-3	Naba	n/a	AD 450 - 550	Court 3	Fill	Ceramics consistent with stratigraphy to provide date.
PN-11A-11-1	Chacalhaaz	n/a	AD 730 - 810	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11A-11-2	Yaxche/Naba	n/a	AD 450 - 730	Court 3	Fill/Termination Deposit	Some mixture with stratum above, but date is provided by majority of ceramics and stratigraphy.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11A-12-1	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11A-12-2	Yaxche/Naba	n/a	AD 450 - 730	Court 3	Fill/Termination Deposit	Some mixture with stratum above, but date is provided by majority of ceramics and stratigraphy.
PN-11B-1-1	n/a	n/a	AD 810 - ?	Court 3/J-18	Humus	Late Classic sherds, with context disturbed by excavations during the 1930s. Date provided by stratigraphy.
PN-11B-1-2	n/a	n/a	AD 630 - 730	Court 3/1st Patio Floor	Subfloor fill	No identifiable ceramics, date is assigned on the basis of stratigraphy.
PN-11B-1-3	n/a	n/a	AD 450 - 550	Court 3/J-18-sub-2	Fill	No ceramics. Date provided by loose rubble fill which covers Early Classic Str. J-18-sub-2.
PN-11B-2-1	n/a	n/a	AD 810 - ?	Court 3/J-18	Humus	Late Classic sherds, with context disturbed by excavations during the 1930s. Date provided by stratigraphy.
PN-11B-2-2	n/a	n/a	AD 630 - 730	Court 3/1st Patio Floor	Subfloor fill	No identifiable ceramics, date is assigned on the basis of stratigraphy.
PN-11B-2-3	n/a	n/a	AD 450 - 550	Court 3/J-18-sub-2	Fill	No ceramics. Date provided by loose rubble fill which covers Early Classic Str. J-18-sub-2.
PN-11C-1-1	n/a	n/a	n/a	Court 3/Bedrock	Humus	Humus overlying and within bedrock outcropping in Court 3. Impossible to assign a date, other than post-occupation.
PN-11D-1-1	Chacalhaaz	n/a	AD 730 - ?	J-23	humus	Context disturbed by excavations during the 1930s.
PN-11D-1-2	Chacalhaaz	n/a	AD 730 - ?	J-23	humus	Context disturbed by excavations during the 1930s.
PN-11D-1-3	Chacalhaaz	n/a	AD 730 - ?	J-23	humus	Context disturbed by excavations during the 1930s.
PN-11D-2-1	n/a	n/a	AD 730 - 810	J-23	Platform fill	No diagnostic sherds, date assigned on the basis of stratigraphy.
PN-11E-1-1	Chacalhaaz	n/a	AD 810 - ?	Court 3/J-19	Humus	Context consistent with stratigraphy to provide date.
PN-11E-1-2	Yaxche/Naba	n/a	AD 630 - 730	Court 3	Fill	Probable mixing of strata, with later stratum falling within the AD 630 - 730 range.
PN-11E-1-3	Balche/Naba	n/a	AD 550 - 730 (?)	Court 3/Chasm	Fill	No ceramics in this lot. Date provided by stratigraphy.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11E-2-1	Chacalhaaz	n/a	AD 810 - ?	Court 3/Bedrock	Humus	Context consistent with stratigraphy to provide date.
PN-11E-2-2	n/a	n/a	AD 550 - 730 (?)	Court 3/Chasm	Fill	No ceramics in this lot. Date provided by stratigraphy.
PN-11F-1-1	Chacalhaaz/Yaxche	n/a	AD 810 - ?	J-20-2nd	Humus	A mix of Chacalhaaz and Yaxche Phase types, with stratigraphy providing the date.
PN-11F-1-2	Chacalhaaz	n/a	AD 730 - 810	J-20-2nd	Staircase fill	Ceramics consistent with stratigraphy to provide date.
PN-11F-1-3	Chacalhaaz	n/a	AD 730 - 810	Court 3/1st and 2nd Patio Floors	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11F-1-4	Yaxche	n/a	AD 630 - 730	Court 3/3rd Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11F-1-5	Naba	n/a	AD 450 - 550	Court 3/4th and 5th Patio Floors	Subfloor fill/Term. Deposit (?)	Ceramics consistent with stratigraphy to provide date.
PN-11F-1-6	Naba	n/a	AD 450 - 550	Court 3	Termination Deposit	Ceramics consistent with stratigraphy to provide date.
PN-11F-1-7	Naba	n/a	AD (395 - 499) - 550	Court 3	Termination Deposit	Radiocarbon date of 1,503+-52 provides lower date of AD 395 - 499. Stratigraphy suggests closer to AD 550.
PN-11F-1-8	Naba	n/a	AD 450 - 550	Court 3	Termination Deposit	Ceramics consistent with stratigraphy to provide date.
PN-11F-1-9	Naba	n/a	AD 450 - 550	Court 3	Termination Deposit	Ceramics consistent with stratigraphy to provide date.
PN-11F-2-1	Chacalhaaz	n/a	AD 810 - ?	J-20-2nd	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11F-2-2	Chacalhaaz	n/a	AD 730 - 810	J-20-2nd	Staircase fill	Ceramics consistent with stratigraphy to provide date.
PN-11F-2-3	Chacalhaaz/Yaxche	n/a	AD 630 - 810	Court 3/J-20-2nd	Staircase fill	A mix of Chacalhaaz and Yaxche Phase types, with stratigraphy lacking to provide a more secure date.
PN-11F-2-4	n/a	n/a	AD 450 - 550	Court 3	Subfloor fill	Very few ceramics, date suggested by stratigraphic association with PN-11F-1-5.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11F-2-5	Naba	n/a	AD 450 - 550	J-20-sub-1	Termination Deposit	Includes 1/2 Aguila Orange drum found upright on building surface. Ceramics consistent with stratigraphy to provide date.
PN-11F-3-1	Chacalhaaz	n/a	AD 810 - ?	J-20-2nd	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11F-3-2	Chacalhaaz	n/a	AD 730 - 810	J-20-2nd	Staircase fill	Ceramics consistent with stratigraphy to provide date.
PN-11F-3-3	n/a	n/a	AD 630 - 810	Court 3	Subfloor fill	Few artifacts; ceramics are Late Classic types though no phase can be assigned, consistent with stratigraphy to provide date.
PN-11F-3-4	Naba	n/a	AD 450 - 550	Court 3	Subfloor fill/Term. Deposit (?)	Ceramics consistent with stratigraphy to provide date.
PN-11F-3-5	Naba	n/a	AD 450 - 550	Court 3	Termination Deposit	Ceramics consistent with stratigraphy to provide date.
PN-11F-4-1	Chacalhaaz	n/a	AD 810 - ?	J-20-2nd	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11F-4-2	Chacalhaaz	n/a	AD 730 - 810	J-20-2nd	Staircase fill	Ceramics consistent with stratigraphy to provide date.
PN-11F-5-1	Chacalhaaz	n/a	AD 810 - ?	J-20-2nd	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11F-5-2	Chacalhaaz	n/a	AD 730 - 810	J-20-2nd	Staircase fill	Ceramics consistent with stratigraphy to provide date.
PN-11F-6-1	Chacalhaaz	n/a	AD 810 - ?	J-20-2nd	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11F-6-2	Chacalhaaz	n/a	AD 730 - 810	J-20-2nd	Staircase fill	Ceramics consistent with stratigraphy to provide date.
PN-11F-7-1	Chacalhaaz	n/a	AD 810 - ?	J-20-2nd	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11F-7-2	Chacalhaaz	n/a	AD 730 - 810	J-20-2nd	Staircase fill	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11G-1-1	n/a	n/a	AD 730 - 810 (?)	J-20	Humus/Collapse	Context disturbed by excavations during the 1930s.
PN-11G-1-2	Chacalhaaz	n/a	AD 810 - ?	J-20/J-23	Collapse/Subfloor fill	Collapse occurred at some point after the abandonment of J-20 and J-23, though terminal date of deposit is unclear.
PN-11G-2-1	Chacalhaaz	n/a	AD 810 - ?	J-20/J-23	Humus/Collapse	Context disturbed by excavations during the 1930s.
PN-11G-2-2	Chacalhaaz	n/a	AD 810 - ?	J-20/J-23	Collapse/Subfloor fill	Collapse occurred at some point after the abandonment of J-20 and J-23, though terminal date of deposit is unclear.
PN-11G-3-1	Chacalhaaz	n/a	AD 810 - ?	J-20/J-23	Humus/Collapse	Context disturbed by excavations during the 1930s.
PN-11G-3-2	Chacalhaaz	n/a	AD 810 - ?	J-20/J-23	Collapse/Subfloor fill	Collapse occurred at some point after the abandonment of J-20 and J-23, though terminal date of deposit is unclear.
PN-11G-4-1	n/a	n/a	n/a	J-23/J-21-2nd	Humus	Context disturbed by excavations during the 1930s.
PN-11G-4-2	n/a	n/a	n/a	J-23/J-21-2nd	Collapse	Collapse occurred at some point after the abandonment of J-20 and J-23, though terminal date of deposit is unclear.
PN-11G-5-1	n/a	n/a	n/a	J-23/J-21-2nd	Humus	Context disturbed by excavations during the 1930s.
PN-11G-5-2	Chacalhaaz	n/a	n/a	J-23/J-21-2nd	Collapse	Collapse occurred at some point after the abandonment of J-20 and J-23, though terminal date of deposit is unclear.
PN-11G-6-1	n/a	n/a	n/a	J-21-1st/J-21-2nd	Humus	Context disturbed by excavations during the 1930s.
PN-11G-6-2	n/a	n/a	AD 810 - ?	J-21-1st/J-21-2nd	Collapse	No identifiable ceramics, date is assigned on the basis of stratigraphy.
PN-11G-6-3	Chacalhaaz/Yaxche	n/a	AD 730 - 810	J-21-1st	Platform fill	Both Chacalhaaz and Yaxche types represented, with the former providing, in conjunction with stratigraphy, the date assigned.
PN-11G-6-4	Yaxche	Late	AD 680 - 730	J-21-2nd	Platform fill	Ceramics show Late Facet Yaxche Phase modes in vessel form, consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11G-6-5	Yaxche/Balche	n/a	AD 630 - 730	J-21-1st	Platform fill	Early Yaxche or Balche Phase ceramics, along with stratigraphy provides the range of dates.
PN-11G-7-1	n/a	n/a	AD 730 - 810	J-23-2nd	Platform façade masonry	No ceramics, but date is derived from the estimated date of the J-23-2nd platform.
PN-11H-1-1	Chacalhaaz	n/a	AD 810 - ?	J-20	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11H-1-2	n/a	n/a	AD 730 - 810	J-20	Platform fill	No ceramics, stratigraphy provides date.
PN-11H-2-1	Chacalhaaz	n/a	AD 810 - ?	J-20	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11H-2-2	n/a	n/a	AD 730 - 810	J-20	Platform fill	No ceramics, stratigraphy provides date.
PN-11H-1-1	Chacalhaaz/Yaxche	n/a	n/a	Backdirt	Backdirt	Context is backdirt from 1930s excavations. No date assigned.
PN-11H-1-2	Chacalhaaz/Yaxche	n/a	AD 810 - ?	Court 3	Humus	Context disturbed by excavations during the 1930s. Date defined by stratigraphy.
PN-11H-1-3	Yaxche	n/a	AD 630 - 810	Court 3	Collapse	Stratigraphy suggests a later date than that indicated by ceramic assemblage.
PN-11H-1-4	n/a	n/a	AD 550 - 730 (?)	J-18-sub-2	Fill	Ceramics insufficient to assign phase. J-18-sub-1 was buried in 6th C., but patio fill may have been disturbed throughout Late Classic.
PN-11H-2-1	Chacalhaaz/Yaxche	n/a	n/a	Backdirt	Backdirt	Context is backdirt from 1930s excavations. No date assigned.
PN-11H-2-2	n/a	n/a	AD 810 - ?	Court 3	Humus	Context disturbed by excavations during the 1930s. Probably Chacalhaaz Phase ceramics, but date defined by stratigraphy.
PN-11H-2-3	n/a	n/a	AD 630 - 810	Court 3	Fill	Ceramics insufficient to assign phase. Stratigraphy allows for the assignment of a Late Classic date.
PN-11H-2-4	Yaxche	n/a	AD 630 - 730	Court 3/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11H-2-5	Naba	n/a	AD 550 - 730 (?)	Court 3	Fill	Ceramics are clearly Naba Phase, but stratigraphy allows for the possibility that fill was deposited later than ceramics would indicate.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11I-2-6	Naba	n/a	AD 450 - 550	J-18-sub-2	Fill	Fill covering Str. J-18-sub-1 strongly suggests a date closer to AD 550.
PN-11I-2-7	n/a	n/a	AD 450 - 550	J-18-sub-2	Fill	Fill covering Str. J-18-sub-1 strongly suggests a date closer to AD 550.
PN-11I-3-1	Chacalhaaz/Yaxche	n/a	n/a	Backdirt	Backdirt	Context is backdirt from 1930s excavations. No date assigned.
PN-11I-3-2	Chacalhaaz	n/a	AD 810 - ?	Collapse	Court 3/J-19	Ceramics consistent with stratigraphy to provide date.
PN-11I-3-3	Yaxche	n/a	AD 630 - 810	Court 3	Fill	Stratigraphy allows for the assignment of a Late Classic date.
PN-11I-3-4	Yaxche	n/a	AD 630 - 730	Court 3/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11I-3-5	n/a	n/a	AD 550 - 730 (?)	Court 3/J-18-sub-2	Fill	Ceramics insufficient to assign a phase. Stratigraphy indicates deposition following interment of J-18-sub-2 (c. AD 550).
PN-11I-4-1	n/a	n/a	n/a	Backdirt	Backdirt	Context is backdirt from 1930s excavations. No date assigned.
PN-11I-4-2	Chacalhaaz	n/a	AD 810 - ?	Court 3/J-19	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11I-4-3	Yaxche	n/a	AD 630 - 810	Court 3	Fill	Stratigraphy allows for the assignment of a Late Classic date.
PN-11I-5-1	n/a	n/a	n/a	Backdirt	Backdirt	Context is backdirt from 1930s excavations. No date assigned.
PN-11I-5-2	Chacalhaaz/Yaxche	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11I-5-3	Yaxche	n/a	AD 630 - 810	Court 3	Fill	Stratigraphy allows for the assignment of a Late Classic date.
PN-11I-5-4	n/a	n/a	AD 630 - 730	Court 3/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11I-6-1	n/a	n/a	n/a	Backdirt	Backdirt	Context is backdirt from 1930s excavations. No date assigned.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11I-6-2	Chacalhaaz/ Yaxche	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11I-6-3	Yaxche	n/a	AD 630 - 810	Court 3	Fill	Stratigraphy allows for the assignment of a Late Classic date.
PN-11I-6-4	Naba	n/a	AD 550 - 730 (?)	Court 3/1st Patio Floor	Subfloor fill	Ceramics are clearly Naba Phase, but stratigraphy allows for the possibility that fill was deposited later than ceramics would indicate.
PN-11I-6-5	Naba	n/a	AD 450 - 550	J-18-sub-2	Platform/Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11I-6-6	Naba/Abal	n/a	300 BC - AD 550	Court 3/Bedrock	Fill	Ceramics within cracks in the bedrock, include one Late Preclassic Sherd.
PN-11I-7-1	Chacalhaaz	n/a	AD 810 - ?	J-19	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11I-8-1	n/a	n/a	n/a	Backdirt	Backdirt	Context is backdirt from 1930s excavations. No date assigned.
PN-11I-8-2	Chacalhaaz (?)	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11I-8-3	Chacalhaaz (?)	n/a	AD 730 - 810	Court 3	Fill	Ceramics consistent with stratigraphy to provide date.
PN-11I-8-4	Yaxche	n/a	AD 630 - 730	Court 3/1st Pat. Floor/J-18-sub-2	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11I-9-1	Chacalhaaz	n/a	n/a	Backdirt	Backdirt	Context is backdirt from 1930s excavations. No date assigned.
PN-11I-9-2	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11I-9-3	n/a	n/a	AD 630 - 810	Court 3	Fill	Impossible to assign a ceramic phase, stratigraphy allows for the assignment of a Late Classic date.
PN-11I-9-4	n/a	n/a	AD 630 - 730	Court 3/1st Patio Floor	Subfloor fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11I-10-1	n/a	n/a	n/a	Backdirt	Backdirt	Context is backdirt from 1930s excavations. No date assigned.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11H-10-2	n/a	n/a	AD 810 - ?	Court 3	Humus	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11H-10-3	n/a	n/a	AD 630 - 810	Court 3	Fill	Impossible to assign a ceramic phase, stratigraphy allows for the assignment of a Late Classic date.
PN-11H-10-4	Yaxche	n/a	AD 630 - 730	Court 3/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11H-11-1	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11H-11-2	Yaxche	n/a	AD 630 - 810	Court 3	Fill	Stratigraphy allows for the assignment of a Late Classic date.
PN-11H-11-3	Yaxche	n/a	AD 630 - 730	Court 3/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11H-11-4	Naba	n/a	AD 450 - 550	Court 3/J-18-sub-2	Fill	Rubble fill covering J-18-sub-2 indicates a date closer to AD 550.
PN-11H-11-5	Naba	n/a	AD 450 - 550	J-18-sub-2	Fill	Soil and Rubble fill covering J-18-sub-2 indicates a date closer to AD 550.
PN-11H-12-1	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus	Ceramics consistent with stratigraphy to provide date.
PN-11H-12-2	n/a	n/a	AD 730 - 810	Court 3	Fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11H-12-3	Yaxche	n/a	AD 630 - 730	Court 3/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11H-12-4	n/d	n/a	AD 450 - 550	Court 3/J-18-sub-2	Fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11H-12-5	Naba	n/a	AD 450 - 550	J-18-sub-2	Fill	Soil and Rubble fill covering J-18-sub-2 indicates a date closer to AD 550.
PN-11H-12-6	n/d	n/a	AD 450 - 550	J-18-sub-2	Fill	Soil and Rubble fill covering J-18-sub-2 indicates a date closer to AD 550.
PN-11H-12-7	Naba	n/a	AD 450 - 550	J-18-sub-2	Fill	Fill similar to 11I-12-5 and 11I-12-6 seem to indicate contemporaneity with those strata.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11J-12-8	Naba	n/a	AD 450 - 550	J-18-sub-2	Fill	Ceramics consistent with stratigraphy to provide date.
PN-11J-13-1	Chacalhaaz/ Yaxche	n/a	AD 810 - ?	J-18	Humus/Collapse	Many sherds covered in façade stucco fallen from J-18.
PN-11J-13-2	Chacalhaaz/ Yaxche	n/a	AD 810 - ?	J-18	Collapse	Many sherds covered in façade stucco fallen from J-18.
PN-11J-1-1	n/a	n/a	AD 810 - ?	J-18	Humus/Collapse	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11J-1-2	Chacalhaaz	n/a	AD 810 - ?	J-18	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-11J-1-3	Yaxche	n/a	AD 630 - 730	J-18	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-11J-1-4	Yaxche	n/a	AD 630 - 730	J-18-1st/J-18-2nd	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-11J-1-5	Yaxche	n/a	AD 630 - 730	J-18-1st/J-18-3rd	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-11J-2-1	n/a	n/a	AD 810 - ?	J-18/Court 3	Humus/Collapse	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11J-2-2	Chacalhaaz/ Yaxche	n/a	AD 810 - ?	J-18/Court 3	Collapse	Many sherds covered in façade stucco fallen from J-18.
PN-11J-2-3	n/a	n/a	AD 630 - 730	Court 3/1st Patio Floor	Subfloor fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11J-3-1	n/a	n/a	AD 810 - ?	J-18/Court 3	Humus/Collapse	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11J-3-2	Chacalhaaz/ Yaxche	n/a	AD 810 - ?	J-18/Court 3	Collapse	Many sherds covered in façade stucco fallen from J-18.
PN-11J-3-3	n/a	n/a	AD 630 - 730	J-19-sub-1-1st, -2nd/J-18-sub-1	Subfloor fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11J-4-1	n/a	n/a	AD 810 - ?	J-18/Court 3	Humus/Collapse	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11J-4-2	Chacalhaaz Yaxche	n/a	AD 810 - ?	J-18/Court 3	Collapse	Many sherds covered in façade stucco fallen from J-18.
PN-11J-4-3	n/a	n/a	AD 630 - 730	J-19-sub-1-1st, -2nd/J-18-sub-1	Subfloor fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11J-5-1	n/a	n/a	AD 810 - ?	J-18/Court 3	Humus/Collapse	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11J-5-2	Chacalhaaz/ Yaxche	n/a	AD 810 - ?	J-18/Court 3	Collapse	Many sherds covered in façade stucco fallen from J-18.
PN-11J-5-3	n/a	n/a	AD 630 - 730	J-19-sub-1-1st, -2nd/J-18-sub-1	Subfloor fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11J-6-1	n/a	n/a	AD 810 - ?	J-18/Court 3	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-11J-6-2	Yaxche	n/a	AD 810 - ?	J-18-sub-1	Collapse	Many sherds covered in façade stucco fallen from J-18.
PN-11J-6-3	Yaxche	n/a	AD 630 - 730	Court 3	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11J-7-1	n/a	n/a	AD 810 - ?	J-18/Court 3	Humus/Collapse	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11J-7-2	Yaxche	n/a	AD 810 - ?	J-18/Court 3	Collapse	Many sherds covered in façade stucco fallen from J-18.
PN-11J-7-3	Yaxche/Naba	n/a	AD 630 - 730	Court 3	Fill	A few Naba Phase Sherds, otherwise ceramics are consistent with stratigraphy to provide date.
PN-11J-8-1	n/a	n/a	AD 810 - ?	J-18/Court 3	Humus/Collapse	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11J-8-2	n/a	n/a	AD 810 - ?	J-18/Court 3	Collapse	Many sherds covered in façade stucco fallen from J-18.
PN-11J-8-3	Yaxche	n/a	AD 630 - 730	J-19-sub-1-1st, -2nd	Subfloor fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11J-9-1	n/a	n/a	AD 810 - ?	J-18	Humus/Collapse	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11J-10-1	Chacalhaaz/ Yaxche	n/a	AD 810 - ?	J-19	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-11J-10-2	Chacalhaaz	n/a	AD 810 - ?	J-19	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-11J-11-1	Chacalhaaz	n/a	AD 810 - ?	Court 3	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-11J-11-2	n/a	n/a	AD 630 - 810	Court 3	Fill	Impossible to assign a ceramic phase, stratigraphy allows for the assignment of a Late Classic date.
PN-11K-1-1	n/a	n/a	AD 810 - ?	Court 3	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-11K-1-2	Chacalhaaz/ Yaxche	n/a	AD 810 - ?	Court 3	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-11K-1-3	n/a	n/a	AD 630 - 810	Court 3/1st Patio Floor	Subfloor fill	Impossible to assign a ceramic phase, stratigraphy allows for the assignment of a Late Classic date.
PN-11K-1-4	Yaxche	n/a	AD 630 - 730	Court 3/2nd Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11K-1-5	n/a	n/a	AD 630 - 730	Court 3/J-18-sub-2	Fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11K-1-6	Yaxche	Early	AD 630 - 730	Court 3/J-18-sub-2	Fill	Ceramics consistent with stratigraphy to provide date.
PN-11K-1-7	Naba	n/a	AD 450 - 550	J-18-sub-2	Fill	Ceramics consistent with stratigraphy to provide date.
PN-11K-1-8	Naba	n/a	AD 450 - 550	J-18-sub-2	Fill	Ceramics consistent with stratigraphy to provide date.
PN-11L-1-1	Chacalhaaz	n/a	AD 810 - ?	Court 3/J-18/J-21	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-11L-1-2	n/a	n/a	AD 810 - ?	Court 3/J-18/J-21	Collapse	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11L-1-3	Yaxche	n/a	AD 630 - 810	Court 3/1st Patio Floor	Subfloor fill	Yaxche Phase sherds, stratigraphy indicates possibility of a date later than that indicated by ceramics.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-11L-1-4	n/a	n/a	AD 630 - 730	Court 3/2nd Patio Floor	Subfloor fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11L-1-5	Yaxche	n/a	AD 630 - 730	Court 3/3rd Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-11L-1-6	n/a	n/a	AD 630 - 730	Court 3/4rd Patio Floor	Subfloor fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy.
PN-11L-1-7	n/a	n/a	AD 630 - 730 (?)	Court 3	Fill	Impossible to assign a ceramic phase, date assigned on the basis of stratigraphy. May have an earlier date, but associations unclear.
PN-46-Trench	Chacalhaaz/ Yaxche	n/a	AD 630 - 730	J-24	Backdirt/Platform fill	Context is disturbed; consists of backdirt from 1930s excavations, and re-excavated trench.
PN-46A-1-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus/Collapse	Ceramics consistent with stratigraphy to provide date
PN-46A-1-2	Yaxche/Balche/ Naba	n/a	AD 630 - 730	Court 4	Fill	Predominantly Yaxche Phase materials, with some Balche and Naba materials. Stratigraphy indicates a Late Classic date.
PN-46A-1-3	Yaxche	n/a	AD 630 - 730	Court 4	Fill	Ceramics consistent with stratigraphy to provide date
PN-46B-1-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46B-1-2	Chacalhaaz	n/a	AD 810 - 830	J-33	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46B-1-3	Chacalhaaz/ Yaxche	n/a	AD 810 - 830	J-33	Platform fill	Ceramics include Chacalhaaz and Yaxche types, with stratigraphy indicating the given date.
PN-46B-1-4	Yaxche	n/a	AD 630 - 730	Court 4/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy, association of floor with Late Facet Yaxche ceramics elsewhere suggests date c. AD 730.
PN-46B-1-5	Balche	n/a	AD 550 - 630	Court 4	Fill/Unusual Deposit?	Ceramics include Balche Phase types, as well as some Naba and early Yaxche. Suggests date closer to AD 630.
PN-46B-1-6	Balche/Naba	n/a	AD 550 - 630	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46B-2-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46B-2-2	Chacalhaaz/ Yaxche	n/a	AD 810 - 830	J-33	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46B-2-3	Yaxche	n/a	AD 810 - 830	J-33	Platform fill	Ceramics are Yaxche Phase types, however stratigraphy indicates a later date for the J-33 platform.
PN-46B-2-4	Yaxche	n/a	AD 630 - 730	Court 4/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy, association of floor with Late Facet Yaxche ceramics elsewhere suggests date c. AD 730.
PN-46B-2-5	Yaxche/Balche	n/a	AD 550 - 630	Court 4	Fill/Unusual Deposit?	Ceramics include Balche Phase types, as well as some Naba and early Yaxche. Suggests date closer to AD 630.
PN-46B-2-6	Balche or Naba	n/a	AD 450 - 630	Court 4	Fill/Unusual Deposit?	A single partial vessel (Pucate Brown) was included in otherwise sterile white/yellow fill, apparently placed as an offering.
PN-46B-2-7	Naba	n/a	AD 450 - 550	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.
PN-46B-2-8	Naba	n/a	AD 450 - 550	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.
PN-46B-2-9	Naba	n/a	AD 450 - 550	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.
PN-46B-3-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46B-3-2	Chacalhaaz/ Yaxche	n/a	AD 810 - 830	J-33	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46B-3-3	Yaxche	n/a	AD 810 - 830	J-33	Platform fill	Ceramics are Yaxche Phase types, however stratigraphy indicates a later date for the J-33 platform.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46B-3-4	Yaxche	n/a	AD 630 - 730	Court 4/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy, association of floor with Late Facet Yaxche ceramics elsewhere suggests date c. AD 730.
PN-46B-3-5	Yaxche/Balche/ Naba	n/a	AD 550 - 630	Court 4	Fill/Unusual Deposit?	Ceramics include Balche Phase types, as well as some Naba and early Yaxche. Suggests date closer to AD 630.
PN-46B-3-6	n/a	n/a	AD 450 - 630	Court 4	Fill	No ceramics. Date provided by stratigraphic association with PN-46B-2-6
PN-46B-4-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46B-4-2	Yaxche	n/a	AD 810 - 830	J-33	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46B-4-3	n/a	n/a	AD 810 - 830	J-33	Platform fill	Ceramics are Yaxche Phase types, however stratigraphy indicates a later date for the J-33 platform.
PN-46B-4-4	Yaxche	n/a	AD 630 - 730	Court 4/1st Patio Floor	Subfloor fill	Ceramics consistent with stratigraphy, association of floor with Late Facet Yaxche ceramics elsewhere suggests date c. AD 730.
PN-46B-4-5	Yaxche/Balche/ Naba	n/a	AD 550 - 630	Court 4	Fill/Unusual Deposit?	Ceramics include Balche Phase types, as well as some Naba and early Yaxche. Suggests date closer to AD 630.
PN-46B-5-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46B-5-2	Chacalhaaz/ Yaxche	n/a	AD 810 - 830	J-33	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46B-5-3	Yaxche	n/a	AD 810 - 830	J-33	Platform fill	Includes human remains, possible from Burial 63 or Burial 104.
PN-46B-5-4	Yaxch/Naba	n/a	AD 630 - 730	Court 4	Fill	Floor not preserved in this lot, mixing of strata possible. Date indicated by later ceramics and stratigraphy.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46B-5-5	Yaxche/Naba	n/a	AD 550 - 730 (?)	Court 4	Fill	Disturbance of strata probable.
PN-46B-5-6	n/a	n/a	AD 450 - 630	Court 4	Fill	No ceramics. Date provided by stratigraphic association with PN-46B-2-6
PN-46B-6-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46B-6-2	Chacalhaaz	n/a	AD 810 - 830	J-33	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46B-6-3	n/a	n/a	AD 550 - 730 (?)	J-33/Court 4	Fill/Burial 63	Disturbed Burial 63 accounts for probable mixing of strata. Original burial probably AD 550 - 630.
PN-46B-6-4	Yaxche	n/a	AD 550 - 730 (?)	Court 4	Fill	Disturbance of strata probable.
PN-46B-6-5	Yaxche	Early (?)	AD 550 - 680 (?)	Court 4	Fill	Balche or Early facet Yaxche ceramics with date provided by context and stratigraphy.
PN-46C-1-1	Chacalhaaz	n/a	AD 810 - ?	J-24/Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46C-1-2	Chacalhaaz/ Yaxche	n/a	AD 810 - 830	J-24/Court 4	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46C-1-3	Yaxche	n/a	AD 630 - 730	J-24/Court 4	Fill	Ceramics consistent with stratigraphy to provide date.
PN-46D-1-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46D-1-2	Chacalhaaz/ Yaxche	n/a	AD 730 - 830	Court 4	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46D-1-3	Yaxche/Balche	n/a	AD 630 - 730	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.
PN-46D-1-4	Balche	n/a	AD 550 - 630	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.
PN-46D-2-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46D-2-2	Yaxche	n/a	AD 730 - 830	Court 4	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46D-2-3	Yaxche	n/a	AD 630 - 730	Court 4	Yaxche	Ceramics consistent with stratigraphy to provide date.
PN-46D-2-4	n/a	n/a	n/a	Court 4	Fill	No ceramics. Date provided by stratigraphic association with PN-46D-3-4.
PN-46D-3-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46D-3-2	Yaxche	n/a	AD 730 - 830	Court 4	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46D-3-3	Yaxche	n/a	AD 630 - 730	Court 4	Yaxche	Ceramics consistent with stratigraphy to provide date.
PN-46D-3-4	Yaxche	n/a	AD 630 - 730	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.
PN-46E-1-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46E-1-2	Chacalhaaz	n/a	AD 810 - 830	Court 4	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46E-1-3	n/a	n/a	AD 630 - 810	Court 4	Fill	No ceramics. Late Classic date is consistent with stratigraphy.
PN-46F-1-1	Chacalhaaz	Late (?)	AD 810 - ?	J-33/Court 4	Humus/Collapse	Direct rim Bolonchac sherds perhaps indicative of Late facet Chacalhaaz ceramics, consistent with stratigraphy.
PN-46F-1-2	Chacalhaaz	n/a	AD 810 - 830	J-33/Court 4	Collapse/Midden	Probably closer to AD 810 based on stratigraphy.
PN-46F-2-1	Chacalhaaz	n/a	AD 810 - ?	J-33/Court 4	Humus/Collapse	Probably closer to AD 810 based on stratigraphy.
PN-46F-2-2	Chacalhaaz	n/a	AD 810 - 830	J-33/Court 4	Collapse/Midden	Probably closer to AD 810 based on stratigraphy. MNI of 28 vessels.
PN-46F-2-3	Chacalhaaz	n/a	AD 810 - 830	J-33/Court 4	Metate/Midden	Probably closer to AD 810 based on stratigraphy.
PN-46F-3-1	Chacalhaaz	n/a	AD 810 - ?	J-33/Court 4	Humus/Collapse	Probably closer to AD 810 based on stratigraphy.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET DEPOSIT	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46F-3-2	Chacalhaaz	n/a	AD 810 - 830	J-33/Court 4	Collapse/Midden	Probably closer to AD 810 based on stratigraphy. Includes two small fragments of Fine Gray ceramics.
PN-46F-4-1	Chacalhaaz	n/a	AD 810 - ?	J-24/Court 4	Humus/Collapse	Probably closer to AD 810 based on stratigraphy.
PN-46F-4-2	Chacalhaaz	n/a	AD 810 - 830	J-24/Court 4	Collapse/Midden	Probably closer to AD 810 based on stratigraphy.
PN-46F-4-3	Chacalhaaz	n/a	AD 810 - 830	J-24/Court 4	Within Metate/Midden	Probably closer to AD 810 based on stratigraphy.
PN-46F-4-4	Chacalhaaz	n/a	AD 810 - 830	J-24/Court 4	Within Metate/Midden	Probably closer to AD 810 based on stratigraphy.
PN-46F-4-5	Chacalhaaz	n/a	AD 810 - 830	J-24/Court 4	Metate/Midden	Probably closer to AD 810 based on stratigraphy. Rim forms suggest a late facet Chacalhaaz Phase assignment for ceramics, consistent with stratigraphy.
PN-46F-5-1	Chacalhaaz	Late (?)	AD 810 - ?	J-24/Court 4	Humus/Collapse	Appears a mixture of early and late facet Chacalhaaz ceramics, consistent with stratigraphy.
PN-46F-5-2	Chacalhaaz	Late (?)	AD 810 - 830	J-24/Court 4	Collapse/Midden	Probably closer to AD 810 based on stratigraphy.
PN-46F-6-1	Chacalhaaz	n/a	AD 810 - 830	J-24/Court 4	Humus/Collapse	Broad range of vessel form and size, with an MNI of 80 vessels, some partial to nearly complete.
PN-46F-6-2	Chacalhaaz	n/a	AD 810 - 830	J-24/Court 4	Collapse/Midden	Probably closer to AD 810 based on stratigraphy.
PN-46F-7-1	Chacalhaaz	n/a	AD 810 - ?	J-33/Court 4	Humus/Collapse	Probably closer to AD 810 based on stratigraphy.
PN-46F-7-2	Chacalhaaz	n/a	AD 810 - 830	J-33	Collapse	Probably closer to AD 810 based on stratigraphy.
PN-46F-7-3	Chacalhaaz	n/a	AD 810 - 830	Court 4	Collapse/Midden	Probably closer to AD 810 based on stratigraphy.
PN-46F-8-1	Chacalhaaz	n/a	AD 810 - ?	J-33/Court 4	Humus/Collapse	Probably closer to AD 810 based on stratigraphy. Interior room space shows evidence of use related primary context. Complete, broken, vessel recovered.
PN-46F-8-2	Chacalhaaz	n/a	AD 810 - 830	J-33/Court 4	Collapse/Midden	Probably closer to AD 810 based on stratigraphy.
PN-46F-9-1	Chacalhaaz	n/a	AD 810 - ?	J-34/Court 4	Humus/Collapse	Probably closer to AD 810 based on stratigraphy.
PN-46F-9-2	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden	No facet is possible to assign, but includes Fine Gray sherds, and predate AD 810 on the basis of stratigraphy.
PN-46F-9-3	Chacalhaaz	n/a	AD 730 - 830	Court 4	Midden	

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46F-10-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus/Collapse	Probably closer to AD 810 based on stratigraphy.
PN-46F-10-2	Chacalhaaz	n/a	AD 810 - 830	J-33	Collapse	Probably closer to AD 810 based on stratigraphy.
PN-46F-11-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus/Collapse	Probably closer to AD 810 based on stratigraphy.
PN-46F-11-2	Chacalhaaz	n/a	AD 810 - 830	J-33	Collapse	Probably closer to AD 810 based on stratigraphy.
PN-46F-11-3	Chacalhaaz	n/a	AD 810 - 830	J-33	Collapse	Probably closer to AD 810 based on stratigraphy.
PN-46F-12-1	Chacalhaaz	n/a	AD 810 - ?	J-34/Court 4	Humus/Collapse	Ceramics consistent with stratigraphy to provide date. One sherd of Fine Gray ceramic was identified in this lot.
PN-46F-12-2	Chacalhaaz	n/a	AD 810 - 830	Court 4	Collapse/Midden	Probably closer to AD 810 based on stratigraphy.
PN-46F-12-3	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden/Stucco Feature	Ceramics consistent with stratigraphy to provide date.
PN-46F-12-4	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden/Burial 81	Individual interred within midden, date based on correlation of ceramics and stratigraphy.
PN-46F-12-5	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden	Ceramics consistent with stratigraphy to provide date.
PN-46F-13-1	Chacalhaaz	n/a	AD 810 - ?	J-34	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-14-1	Chacalhaaz	n/a	AD 810 - 830	J-33	Humus/Collapse	Some ceramics appear burned. Probably closer to AD 810 based on stratigraphy.
PN-46F-15-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus/Collapse	Probably closer to AD 810 based on stratigraphy. MNI of 7 vessels.
PN-46F-16-1	Chacalhaaz	n/a	AD 810 - ?	J-33/Court 4	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-16-2	n/a	n/a	n/a	n/a	n/a	Lot does not exist to note keeping error.
PN-46F-16-3	Chacalhaaz/ Yaxche	n/a	AD 810 - 830	Court 4	Assoc. Burial 94. 95, 101	Mixed Chacalhaaz and Yaxche ceramics, with date provided by context and stratigraphy.
PN-46F-16-4	Chacalhaaz/ Yaxche	n/a	AD 810 - 830	Court 4	Assoc. Burial 94. 95, 101	Mixed Chacalhaaz and Yaxche ceramics, with date provided by context and stratigraphy.
PN-46F-17-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET DEPOSIT	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46F-17-2	Chacalhaaz	n/a	AD 810 - 830	Court 4	Collapse/Midden	Ceramics consistent with stratigraphy to provide date.
PN-46F-17-3	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden	Ceramics consistent with stratigraphy to provide date.
PN-46F-17-4	Chacalhaaz/ Yaxche	n/a	AD 810 - 830	Court 4	Midden	Mixed Chacalhaaz and Yaxche ceramics, with date provided by context and stratigraphy.
PN-46F-17-5	Yaxche	n/a	AD 630 - 730	Court 4	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-17-6	Yaxche/Balche	n/a	AD 630 - 730	Court 4	Subfloor fill	Mixed Yaxche and Balche ceramics, with date provided by context and stratigraphy.
PN-46F-17-7	Yaxche	Early	AD 630 - 680	Court 4	Subfloor fill	Mixed early facet Yaxche and Balche ceramics, with date provided by context and stratigraphy.
PN-46F-17-8	Yaxche	Early	AD 630 - 680	Court 4	Subfloor fill	Early facet Yaxche ceramics with date provided by context and stratigraphy.
PN-46F-17-9	Yaxche	Early	AD 630 - 680	Court 4	Subfloor fill	Early facet Yaxche ceramics with date provided by context and stratigraphy.
PN-46F-18-1	Chacalhaaz	n/a	AD 810 - ?	J-33/Court 4	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-18-2	Chacalhaaz	n/a	AD 810 - 830	J-33/Court 4	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-18-3	Chacalhaaz	n/a	AD 810 - 830	Court 4	Assoc. with Burial 101	Ceramics consistent with stratigraphy to provide date.
PN-46F-18-4	Chacalhaaz	n/a	AD 810 - 830	Court 4	Assoc. with Burial 101	Ceramics consistent with stratigraphy to provide date.
PN-46F-18-5	Chacalhaaz/ Yaxche	n/a	AD 810 - 830	Court 4	Assoc. with Burial 101	Mixed Chacalhaaz and Yaxche ceramics, with date provided by context and stratigraphy.
PN-46F-19-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-19-2	Chacalhaaz	n/a	AD 810 - 830	J-33	Collapse	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46F-19-3	Chacalhaaz	n/a	AD 810 - 830	J-33	Fill within bench	Ceramics consistent with stratigraphy to provide date.
PN-46F-19-4	Chacalhaaz/Yaxche	n/a	AD 810 - 830	J-33	Fill within platform	Mixed Chacalhaaz and Yaxche ceramics, with date provided by context and stratigraphy.
PN-46F-19-5	Chacalhaaz/Yaxche	n/a	AD 810 - 830	J-33	Fill within platform	Mixed Chacalhaaz and Yaxche ceramics, with date provided by context and stratigraphy.
PN-46F-19-6	Chacalhaaz	n/a	AD 810 - 830	J-33	Fill within platform	Ceramics consistent with stratigraphy to provide date.
PN-46F-20-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-20-2	Chacalhaaz	n/a	AD 810 - 830	J-33	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-20-3	Chacalhaaz	n/a	AD 810 - 830	J-33	Fill over Burial 104	Intrusive burial into Structure J-33 provides date.
PN-46F-20-4	Chacalhaaz/Yaxche	n/a	AD 810 - 830	J-33	Materials around Bur. 104	Mixed Chacalhaaz and Yaxche ceramics, with date provided by context and stratigraphy.
PN-46F-21-1	Chacalhaaz	n/a	AD 810 - ?	J-33	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-21-2	Chacalhaaz	n/a	AD 810 - 830	Court 4	Collapse/Midden	Includes some late facet Chacalhaaz forms.
PN-46F-21-3	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden	Ceramics consistent with stratigraphy to provide date.
PN-46F-21-4	Chacalhaaz/Yaxche	n/a	AD 810 - 830	J-33(?) / Court 4	Collapse/Midden	Mixed Chacalhaaz and Yaxche ceramics, with date provided by context and stratigraphy.
PN-46F-21-5	Chac/Yax/Balche	n/a	AD 810 - 830	J-33(?) / Court 4	Midden	Mixed Chacalhaaz, Yaxche and Balche ceramics, with date provided by context and stratigraphy.
PN-46F-21-6	Chacalhaaz	n/a	AD 810 - 830	J-33	Collapse	Some ceramics appear burned. Probably closer to AD 810 based on stratigraphy.
PN-46F-22-1	Chacalhaaz	n/a	AD 810 - ?	J-33 / Court 4	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-23-1	Chacalhaaz	n/a	AD 810 - ?	J-34 / Court 4	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46F-23-2	Chacalhaaz	n/a	AD 810 - 830	Court 4	Collapse/Midden	Ceramics consistent with stratigraphy to provide date.
PN-46F-23-3	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden	Ceramics consistent with stratigraphy to provide date.
PN-46F-23-4	Chacalhaaz	Late	AD 810 - 830	Court 4	Midden/Burial 81	Mixed Chacalhaaz and Yaxche ceramics, with date provided by context and stratigraphy. Includes late Chacalhaaz forms.
PN-46F-23-5	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden/Burial 81	Ceramics consistent with stratigraphy to provide date.
PN-46F-23-6	Yaxche	Late	AD 680 - 730	Court 4	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-23-7	Balche	n/a	AD 630 - 730	Court 4	Subfloor fill	Balche ceramics, with date provided by context and stratigraphy.
PN-46F-23-8	Yaxche	Early	AD 630 - 680	Court 4	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-23-9	Yaxche	Early	AD 630 - 680	Court 4	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-23-10	n/a	n/a	AD 630 - 680	Court 4	Sascab	No ceramics in this lot. Date provided by stratigraphy.
PN-46F-23-11	Balche	n/a	AD 550 - 630	J-24-sub-1	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-24-1	Chacalhaaz	n/a	AD 810 - ?	J-24/J-34/Court 4	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-24-2	Chacalhaaz	n/a	AD 810 - 830	J-24	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-24-3	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden	Ceramics consistent with stratigraphy to provide date.
PN-46F-24-4	Chacalhaaz	n/a	AD 730 - 830	Court 4	Midden	Ceramics consistent with stratigraphy to provide date.
PN-46F-24-5	Yaxche	Late	AD 680 - 730	Court 4	Subfloor fill	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46F-24-6	Yaxche	n/a	AD 630 - 730	Court 4	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-25-1	Chacalhaaz	Late (?)	AD 810 - ?	J-34	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-25-2	Chacalhaaz	Late (?)	AD 810 - 830	J-34	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-25-3	Chacalhaaz	n/a	AD 810 - 830	J-34	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-26-1	Chacalhaaz	n/a	AD 810 - 830	J-34	Humus/Collapse	Single diagnostic is a whole vessel, consistent with stratigraphy to provide date.
PN-46F-27-1	Chacalhaaz	Late	AD 810 - 830	J-34	Humus/Collapse	Late facet assigned on the basis of basin rim and base form, consistent with stratigraphy to provide date.
PN-46F-27-2	Chacalhaaz	Late	AD 810 - 830	J-34	Collapse	Fine Gray ceramics found only pressed against interior floor, ceramics consistent with stratigraphy to provide date.
PN-46F-28-1	Chacalhaaz	n/a	AD 810 - 830	J-34	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-28-2	Chacalhaaz	n/a	AD 730 - 830	J-34	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-28-3	Yaxche	n/a	AD 680 - 730	J-34	Subfloor fill	Impossible to assign a facet, but date assignable on the basis of stratigraphy.
PN-46F-28-4	Yaxche	Late (?)	AD 680 - 730	J-34	Platform fill	Late facet assigned on the basis of vessel form, consistent with stratigraphy to provide date.
PN-46F-28-5	Yaxche	n/a	AD 630 - 730	J-34	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-28-6	Yaxche	n/a	AD 630 - 730	J-34	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-29-1	Chacalhaaz	n/a	AD 810 - 830	J-24/J-34	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-29-2	Chacalhaaz	Late (?)	AD 810 - 830	J-24/J-34	Collapse/Burial 96	Apparently late facet Chacalhaaz rim forms, and shallow burial, indicate a late date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46F-29-3	Yaxche	n/a	AD 630 - 730	J-24	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-29-4	Yaxche	n/a	AD 630 - 730	J-24	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-29-5	Yaxche	n/a	AD 630 - 730	J-24	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-29-6	Yaxche	Early	AD 630 - 680	J-24	Platform fill	Vessel form and typological assemblage consistent with Early Facet of Yaxche Phase, consistent with stratigraphy to provide date.
PN-46F-29-7	Yaxche	n/a	AD 630 - 680	J-24	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-30-1	Chacalhaaz	Late	AD 810 - 830	J-34/Court 4	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-30-2	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-31-1	Chacalhaaz	n/a	AD 810 - 830	J-34/Court 4	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-31-2	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-31-3	Chacalhaaz	n/a	AD 810 - 830	Court 4	Midden	Ceramics consistent with stratigraphy to provide date.
PN-46F-32-1	Chacalhaaz	Late	AD 810 - 830	J-34/Court 4	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-32-2	Chacalhaaz	n/a	AD 810 - 830	J-34/Court 4	Midden/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-33-1	Chacalhaaz	n/a	AD 730 - 830	J-24	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-33-2	Chacalhaaz	n/a	AD 730 - 830	J-24	Collapse/Subfloor fill	Some mixture with stratum below as a result of intrusive burial and poor preservation. Ceramics and stratigraphy provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46F-33-3	Chacalhaaz/Yaxche	n/a	AD 730 - 830	J-24	Subfloor fill/Burial 83	Intrusive burial into Structure J-24 indicates a date closer to AD 810, but ceramics are inconclusive.
PN-46F-33-4	Chacalhaaz/Yaxche	n/a	AD 630 - 830	J-24	Platform fill/Burial 83	Intrusive Burial 83 resulted in mixture of construction fill and later materials, yielding the range in date for this stratum.
PN-46F-33-5	Yaxche	n/a	AD 630 - 730	J-24	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-33-6	Yaxche	n/a	AD 630 - 730	J-24-2nd	Subfloor fill	Ceramics consistent with stratigraphy to provide date.
PN-46F-34-1	Chacalhaaz	n/a	AD 730 - 830	J-24	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-34-2	Chacalhaaz	n/a	AD 730 - 830	J-24	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-35-1	Chacalhaaz	Late (?)	AD 810 - 830	J-24	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46F-35-2	Chacalhaaz/Yaxche	n/a	AD 630 - 830	J-24	Collapse	Interior floor surface, eroded and exhibiting mixture of Yaxche and Chacalhaaz Phase ceramics. Date suggested by stratigraphy.
PN-46F-35-3	Chacalhaaz/Yaxche	n/a	AD 630 - 830	J-24	Collapse	Exterior floor surface, eroded and exhibiting mixture of Yaxche and Chacalhaaz Phase ceramics. Date suggested by stratigraphy.
PN-46G-1-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46G-2-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46G-3-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46G-4-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46G-5-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46G-6-1	Chacalhaaz	n/a	AD 810 - ?	J-36	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46G-6-2	Chacalhaaz	n/a	AD 730 - 810	J-36	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46G-6-3	Chacalhaaz/ Yaxche	n/a	AD 730 - 810	J-36	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46G-6-4	n/a	n/a	AD 630 - 810	J-36	Platform fill	Not possible to assign a phase to the ceramics, a Late Classic date assigned on the basis of stratigraphy.
PN-46G-6-5	Yaxche	n/a	AD 630 - 730	J-36	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46G-6-6	n/a	n/a	AD 630 - 730 (?)	J-36	Platform fill	Not possible to assign a phase to the ceramics, a Late Classic date assigned on the basis of stratigraphy.
PN-46G-7-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46G-8-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46G-9-1	Chacalhaaz	n/a	AD 810 - ?	Court 4/J-36	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46G-10-1	Chacalhaaz	n/a	AD 810 - ?	Court 4/J-36	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46G-10-2	Chacalhaaz	n/a	AD 730 - 810	J-36	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46G-11-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46G-12-1	Chacalhaaz	n/a	AD 810 - ?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46G-12-2	Yaxche	n/a	AD 630 - 730	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.
PN-46G-12-3	Yaxche	n/a	AD 630 - 730	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46G-12-4	Yaxche/Balche/ Naba	n/a	AD 630 - 730	Court 4	Fill	Ceramics consistent with stratigraphy to provide date. Presence of Balche types may indicate a date closer to AD 630.
PN-46G-12-5	Balche/Naba	n/a	AD 450 - 630	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.
PN-46G-12-6	Balche/Naba	n/a	AD 450 - 630	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.
PN-46G-12-7	Naba	n/a	AD 450 - 550	Court 4	Fill	Ceramics consistent with stratigraphy to provide date.
PN-46H-1-1	Chacalhaaz	n/a	AD 810 - 830	J-25/Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46H-1-2	Chacalhaaz/ Yaxche	n/a	AD 810 - 830	J-25/Court 4	Collapse	Mixture of Late Facet Chacalhaaz Phase and Yaxche Phase ceramics immediately above patio surface, dated by stratigraphy.
PN-46H-2-1	Chacalhaaz	n/a	AD 810 - 830	J-25	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46H-2-2	Chacalhaaz	n/a	AD 810 - 830	J-25	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46H-2-3	Chacalhaaz/ Kumche	Late	AD 830 -?	J-25	Collapse	Ceramics include Kumche Phase types (Trapiche Incised), upper limits of phase are poorly defined, probably post-AD 830.
PN-46H-3-1	Chacalhaaz/ Kumche	Late	AD 830 -?	J-25	Humus	Ceramics include Kumche Phase types (Trapiche Incised), upper limits of phase are poorly defined, probably post-AD 830.
PN-46H-4-1	Chacalhaaz	Late	AD 830 -?	J-25	Midden?Term. Deposit?	Ceramics consistent with stratigraphy to provide date.
PN-46H-4-2	Chacalhaaz	Late	AD 830 -?	J-25	Midden?Term. Deposit?	Ceramics consistent with stratigraphy to provide date.
PN-46H-5-1	Chacalhaaz	n/a	AD 830 -?	J-25	Humus	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46H-5-2	Chacalhaaz/ Kumche	Late	AD 830 -?	J-25	Midden?Term. Deposit?	Ceramics consistent with stratigraphy to provide date.
PN-46H-6-1	Chacalhaaz	Late	AD 830 -?	J-25	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46H-6-2	Chacalhaaz/ Kumche	Late	AD 830 -?	J-25	Midden?Term. Deposit?	Ceramics consistent with stratigraphy to provide date.
PN-46H-7-1	Chacalhaaz	Late	AD 830 -?	J-25	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46H-7-2	Chacalhaaz/ Kumche	Late	AD 830 -?	J-25	Midden?Term. Deposit?	Minimum of three reconstructible vessels. Probable termination deposit consistent with stratigraphy to provide date.
PN-46I-1-1	Chacalhaaz	n/a	AD 830 -?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46I-1-2	Chacalhaaz/ Kumche	n/a	AD 830 -?	Court 4	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46I-1-3	Chacalhaaz/ Yaxche	n/a	AD 810 -?	Court 4	Collapse/Fill	Collapse and fill above Burials 94 and 95.
PN-46I-1-4	Chacalhaaz	n/a	AD 810 -?	Court 4	Fill/Burials 94 and 95	Fill above and around Burials 94 and 95.
PN-46I-2-1	Chacalhaaz	n/a	AD 810 -?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46I-2-2	Chacalhaaz	n/a	AD 810 -?	Court 4/I-34	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46I-2-3	Chacalhaaz	n/a	AD 810 -?	Court 4/I-34	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46I-3-1	Chacalhaaz	n/a	AD 810 -?	Court 4	Humus	Ceramics consistent with stratigraphy to provide date.
PN-46I-3-2	Chacalhaaz	n/a	AD 810 -?	Court 4/I-25	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46I-3-3	Chacalhaaz	n/a	AD 810 -?	Court 4/I-25	Collapse	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-46I-3-4	Chacalhaaz	n/a	AD 810 - ?	Court 4/J-25	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46I-4-1	Chacalhaaz	Late	AD 810 - ?	Court 4/J-34	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-46I-4-2	Chacalhaaz	n/a	AD 810 - ?	J-34	Collaps	Ceramics consistent with stratigraphy to provide date.
PN-46I-4-3	Chacalhaaz	n/a	AD 730 - 810	J-34	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46I-4-4	Chacalhaaz	n/a	AD 730 - 810	J-34	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46I-4-5	Yaxche	n/a	AD 630 - 730	J-34	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46I-4-6	Yaxche	n/a	AD 630 - 730	J-34	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-46I-4-7	Yaxche	n/a	AD 630 - 730	J-34	Platform fill	Ceramics consistent with stratigraphy to provide date.
PN-50A-1-1	Chacalhaaz	n/a	AD 810 - ?	J-3/J-8	Humus	Ceramics consistent with stratigraphy to provide date.
PN-50A-1-2	Chacalhaaz	n/a	AD 730 - 830	J-3/J-8	Fill	Ceramics consistent with stratigraphy to provide date.
PN-50A-1-3	Yaxche	n/a	AD 630 - 730	J-3/J-8	Fill/Unidentified Deposit	Ceramics consistent with stratigraphy to provide date.
PN-50A-1-4	Yaxche	n/a	AD 630 - 730	J-3/J-8	Fill	Ceramics consistent with stratigraphy to provide date.
PN-50A-1-5	Yaxche	n/a	AD 630 - 730	J-3/J-8	Fill	Ceramics consistent with stratigraphy to provide date.
PN-50A-1-6	Yaxche	n/a	AD 630 - 730	J-3/J-8	Fill	Ceramics consistent with stratigraphy to provide date.
PN-50B-1-1	Chacalhaaz	n/a	AD 730 - 810	J-18	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-50B-1-2	Chacalhaaz	n/a	AD 730 - 810	J-18	Collapse	Ceramics consistent with stratigraphy to provide date.
PN-50B-1-3	Chacalhaaz/ Yaxche	n/a	AD 730 - 810	J-18	Fill	Ceramics consistent with stratigraphy to provide date.
PN-54A-1-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus	Ceramics consistent with stratigraphy to provide date.
PN-54A-1-2	Chacalhaaz/ Yaxche	n/a	AD 630 - 830	J-27	Collapse	Collapse from Court 4 and J-27 makes date assignment difficult, although certainly Late Classic.
PN-54A-1-3	Chacalhaaz/ Yaxche	n/a	AD 630 - 830	J-27	Collapse/Fill	No preserved floor, with probable mixture of strata.
PN-54A-1-4	Yaxche/Naba	n/a	AD 630 - 730 (?)	J-27	Fill/Burial 79	Late Classic fill with date determined by ceramics. Stratigraphy difficult to interpret with no preserved surfaces.
PN-54A-1-5	Naba	n/a	AD 450 - 550	J-27	Fill	Ceramics consistent with stratigraphy to provide date.
PN-54A-2-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus	Ceramics consistent with stratigraphy to provide date.
PN-54A-2-2	Chacalhaaz/ Yaxche	n/a	AD 630 - 830	J-27	Collapse	Collapse from Court 4 and J-27 makes date assignment difficult, although certainly Late Classic.
PN-54A-2-3	Chacalhaaz/ Yaxche	n/a	AD 630 - 830	J-27	Collapse/Fill	No preserved floor, with probable mixture of strata.
PN-54A-2-4	Yaxche/Naba	n/a	AD 630 - 730 (?)	J-27	Fill/Burial 79	Late Classic fill with date determined by ceramics. Stratigraphy difficult to interpret with no preserved surfaces.
PN-54A-2-5	Yaxche	n/a	AD 630 - 730 (?)	J-27	Fill	Fill immediately below and surrounding Burial 79.
PN-54A-3-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-3-2	Chacalhaaz/ Yaxche	n/a	AD 630 - 830 (?)	J-27	Collapse/Fill	Lack of a preserved surface probably resulted in mixing of strata. Late Classic in date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-54A-3-3	Kumche/Chac/ Yaxche	n/a	AD 830 - ?	J-27	Fill/Collapse	Strata heavily disturbed. One Fine Orange (Pabellon) sherd found within bench feature, providing late date of AD 830 - ?.
PN-54A-3-4	Yaxche	n/a	AD 630 - 730 (?)	J-27	Fill/Burial (?)	Contains human bone and other materials perhaps in secondary context, disturbed from Burial 79 or 80.
PN-54A-3-5	Yaxche	n/a	AD 630 - 730 (?)	J-27	Fill/Burial (?)	Contains human bone and other materials perhaps in secondary context, disturbed from Burial 79 or 80.
PN-54A-3-6	n/a	n/a	n/a	J-27	Fill	No artifacts. Disturbance of strata makes assignment of date impossible.
PN-54A-3-7	Naba	n/a	AD 450 - 550	J-27	Fill	Ceramics consistent with stratigraphy to provide date.
PN-54A-3-8	Naba	n/a	AD 450 - 550	J-27	Fill	Ceramics consistent with stratigraphy to provide date.
PN-54A-4-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date. Fill overlying Burial 80.
PN-54A-4-2	Chacalhaaz/ Yaxche	n/a	AD 730 - ?	J-27	Fill	Fill surrounding Burial 80. Probably closer to AD 810, though disturbance of strata makes a date difficult to assign.
PN-54A-4-3	Yaxche	n/a	AD 630 - 730 (?)	J-27	Fill	Late Classic fill with date determined by ceramics. Stratigraphy difficult to interpret with no preserved surfaces.
PN-54A-5-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-5-2	Chacalhaaz	n/a	AD 730 - ?	J-27	Collapse/Fill	Late Classic fill with date determined by ceramics. Stratigraphy difficult to interpret with no preserved surfaces.
PN-54A-5-3	Yaxche	n/a	AD 630 - 730 (?)	J-27	Fill	Late Classic fill with date determined by ceramics. Stratigraphy difficult to interpret with no preserved surfaces.
PN-54A-6-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-54A-6-2	Chacalhaaz	n/a	AD 730 - ?	J-27	Collapse/Fill	Late Classic fill with date determined by ceramics. Stratigraphy difficult to interpret with no preserved surfaces.
PN-54A-6-3	Yaxche	n/a	AD 630 - 730 (?)	J-27	Fill	Late Classic fill with date determined by ceramics. Stratigraphy difficult to interpret with no preserved surfaces.
PN-54A-7-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-7-2	Chacalhaaz/ Yaxche	n/a	AD 730 - ?	J-27	Collapse/Fill	Late Classic fill with date determined by ceramics. Stratigraphy difficult to interpret with no preserved surfaces.
PN-54A-8-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-9-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-10-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-11-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-12-1	Chacalhaaz/Naba	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-13-1	Yaxche	n/a	AD 810 - ?	J-27	Humus/Collapse	Date determined by stratigraphy.
PN-54A-14-1	Chacalhaaz/ Yaxche	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-15-1	Yaxche	n/a	AD 810 - ?	J-27	Humus/Collapse	Date determined by stratigraphy.
PN-54A-16-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-17-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-18-1	Chacalhaaz	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.

Table 2, Appendix I: Synthesis of Lot, Ceramic Phase, Estimated Lot Date, and Context

LOT	CERAMIC PHASE(S)	FACET	ESTIMATED DATE OF DEPOSIT	STRUCTURE	CONTEXT	COMMENTS
PN-54A-19-1	Chacalhaaz/ Yaxche	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-20-1	Chacalhaaz/ Yaxche	n/a	AD 810 - ?	J-27	Humus/Collapse	Ceramics consistent with stratigraphy to provide date.
PN-54A-21-1	Yaxche	n/a	AD 810 - ?	J-27	Humus/Collapse	Date determined by stratigraphy.

Table 3, Appendix I: Preliminary Artifact Count, PN-46F through PN-46I

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER
PN-46F-1-1	Chacalhaaz	17.52				1											
PN-46F-1-2	Chacalhaaz	12.07				1				1							
PN-46F-2-1	Chacalhaaz	8.39															
PN-46F-2-2	Chacalhaaz	35.71											1			MNI of 28 vessels	
PN-46F-2-3	Chacalhaaz	0.45															
PN-46F-3-1	Chacalhaaz	2.35															
PN-46F-3-2	Chacalhaaz	67.40															
PN-46F-4-1	Chacalhaaz	13.01											1				
PN-46F-4-2	Chacalhaaz	16.36	1			8		7					2				
PN-46F-4-3	Chacalhaaz	3.57	2												2	Soil Sample	
PN-46F-4-4	Chacalhaaz	8.70	4	3				1	2							chert is 1 biface, 1 point	Soil Sample
PN-46F-4-5	Chacalhaaz	0.26	2								3					Soil Sample	
PN-46F-5-1	Chacalhaaz	11.93															
PN-46F-5-2	Chacalhaaz	40.11	9	5				1					1				
PN-46F-6-1	Chacalhaaz	8.33		5					1								
PN-46F-6-2	Chacalhaaz	7.57	15	2	1								1			Pumice, 1 piece	MNI of 80 vessels
PN-46F-7-1	Chacalhaaz	2.69	4														
PN-46F-7-2	Chacalhaaz	0.06	2														
PN-46F-7-3	Chacalhaaz	1.93	5	2					1							chert is 1 point	
PN-46F-8-1	Chacalhaaz	10.32	3	3				1									
PN-46F-8-2	Chacalhaaz	18.23	5					7	3								

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gry, Fine Or(a)ng(e), W(orked) Bone.

Table 3, Appendix I: Preliminary Artifact Count, PN-46F through PN-46I

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER	OTHER
PN-46F-9-1	Chacalhaaz	n/a	1	3				3	1							chert is 1 biface		
PN-46F-9-2	Chacalhaaz	11.03	10	1			1	3	2									
PN-46F-9-3	Chacalhaaz	31.97	5	20				4					1			1 speleothem		
PN-46F-10-1	Chacalhaaz	n/a	3															
PN-46F-10-2	Chacalhaaz	n/a	2															
PN-46F-11-1	Chacalhaaz	n/a	8	3				1	1							1 hammerstone		
PN-46F-11-2	Chacalhaaz	n/a	20+	1				1	20+									
PN-46F-12-1	Chacalhaaz	7.85	14	20				2	5							2 pieces unid. Unworked stone	2 pieces quartz	1 gray crystal
PN-46F-12-2	Chacalhaaz	17.49	8	5				2	3				1					
PN-46F-12-3	Chacalhaaz	5.19	2								1	2						
PN-46F-12-4	Chacalhaaz	n/a				1										BURIAL 81		
PN-46F-12-5	Chacalhaaz	12.30	2	1				2	2									
PN-46F-13-1	Chacalhaaz	7.62	12					4	1									
PN-46F-14-1	Chacalhaaz	11.08	6													2 pebbles		
PN-46F-15-1	Chacalhaaz	n/a	4					2								MNI of 7 vessels		
PN-46F-16-1	Chacalhaaz	5.02						1				1						
PN-46F-16-2	Chacalhaaz	0.45																
PN-46F-16-3	Chacalhaaz	3.83	13					2	1							2 burned bone fragments		

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gr(a)y, Fine Or(a)ng(e), W(orked) Bone.

Table 3, Appendix I: Preliminary Artifact Count, PN-46F through PN-46I

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER	OTHER
PN-46F-16-4	Chacalhaaz	n/a	13					4				1				3 burned bone fragments		
PN-46F-17-1	Chacalhaaz	5.41	7	7				2	3									
PN-46F-17-2	Chacalhaaz	7.26	8	2				6	2									
PN-46F-17-3	Chacalhaaz	35.12	30+	5				11	4			3	1					
PN-46F-17-4	Chacalhaaz	73.27	5	10	3			4	6				1					
PN-46F-17-5	Yaxche	0.68	32	2	3			1	1			2				5 frags. of human bone		
PN-46F-17-6	Yaxche	4.37																
PN-46F-17-7	Yaxche	1.30	23	1	1			4	2							1 human distal phalanx	1 shell plaque	
PN-46F-17-8	Yaxche	n/a	50+		1		1	8	1			1				1 bone needle	1 ceramic earspool	
PN-46F-17-9	Yaxche	n/a							3									
PN-46F-17-10	Yaxche	n/a	1	1					1									
PN-46F-18-1	Chacalhaaz	1.13			1			2	1							1 piece of quartz	chert is broken point	
PN-46F-18-2	Chacalhaaz	10.43	1	1			1									chert is broken point		
PN-46F-18-3	Chacalhaaz	2.55	3									3						
PN-46F-18-4	Chacalhaaz	n/a	1	1					2									
PN-46F-18-5	Chacalhaaz	0.88						4								Spondylus plaque		
PN-46F-19-1	Chacalhaaz	n/a	20+	5					1									

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gr(a)y, Fine Or(a)ng(e), W(orked) Bone.

Table 3, Appendix I: Preliminary Artifact Count, PN-46F through PN-46I

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER	OTHER
PN-46F-19-2	Chacalhaaz	8.50						1								1 human premolar		
PN-46F-19-3	Chacalhaaz	1.13																
PN-46F-19-4	No Ceramics	n/a																
PN-46F-19-5	Chacalhaaz	1.13																
PN-46F-19-6	Chacalhaaz	n/a	1															
PN-46F-20-1	Chacalhaaz	n/a	1	2				1	4									
PN-46F-20-2	Chacalhaaz	15.59																
PN-46F-20-3	Chacalhaaz	n/a																
PN-46F-20-4	Chacalhaaz/ Yaxche	n/a														BURIAL 104		
PN-46F-21-1	Chacalhaaz	3.77							3							1 Deer Horn		
PN-46F-21-2	Chacalhaaz	n/a	2															
PN-46F-21-3	Chacalhaaz	n/a																
PN-46F-21-4	Chacalhaaz/ Yaxche	3.49	1						1									
PN-46F-21-5	Chacalhaaz/ Yaxche	12.47			1													
PN-46F-21-6	Chacalhaaz	n/a	25	2					4				1					
PN-46F-22-1	Chacalhaaz	1.76	4	2				2	2				1					
PN-46F-23-1	Chacalhaaz	6.75	2	4			4		8				1			Unident. Stone	River pebbles	Blue Paint?
PN-46F-23-2	Chacalhaaz	8.67	10	2				4	2				1			1 human incisor		
PN-46F-23-3	Chacalhaaz	24.86	20+	12				4	6				2					
PN-46F-23-4	Chacalhaaz	6.41	3									2				BURIAL 81		

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gr(a)y, Fine Or(a)ng(e), W(orked) Bone.

Table 3, Appendix I: Preliminary Artifact Count, PN-46F through PN-46I

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER	OTHER
PN-46F-23-5	Chacalhaaz/ Yaxche	12.36																
PN-46F-23-6	Yaxche	2.92	15		3											Human mandible	2 worked bone	
PN-46F-23-7	Balche	1.56						1										
PN-46F-23-8	Yaxche	2.35	13					2										
PN-46F-23-9	Yaxche	0.57																
PN-46F-23-10	No																	
PN-46F-23-11	Ceramics	n/a																
PN-46F-24-1	Balche	n/a	1															
PN-46F-24-2	Chacalhaaz	2.83	1					2										
PN-46F-24-3	Chacalhaaz	2.72	3															
PN-46F-24-4	Chacalhaaz	2.92	1	1										1				
PN-46F-24-5	Chacalhaaz	5.07		1					1									
PN-46F-24-6	Yaxche	n/a																
PN-46F-25-1	Yaxche	n/a																
PN-46F-25-2	Chacalhaaz	7.48	1					1	1									
PN-46F-25-3	Chacalhaaz	40.36	6	3				1	5							Bone Rasp	2 Polished Stone	
PN-46F-26-1	Chacalhaaz	2.61	17	3					1				2			1 whole vessel		
PN-46F-26-2	Chacalhaaz	2.21	2		1													
PN-46F-26-3	Chacalhaaz	n/a																
PN-46F-27-1	Chacalhaaz	4.85																
PN-46F-27-2	Chacalhaaz	0.94																
PN-46F-27-2	Chacalhaaz	13.49	6	1				2	6				4			1 prob. Whole vessel	5 pc. Deer horn (2 hrns)	

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gry(a), Fine Or(a)ng(e), W(orked) Bone.

Table 3, Appendix I: Preliminary Artifact Count, PN-46F through PN-46I

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER	OTHER
PN-46F-28-1	Chacalhaaz	0.54														1 peccary tusk		
PN-46F-28-2	Chacalhaaz	22.34	15	1				6	4	1			7					
PN-46F-28-3	Chacalhaaz/ Yaxche	9.98	14	2	1			4	1									
PN-46F-28-4	Yaxche	1.79	32					2										
PN-46F-28-5	Yaxche	n/a																
PN-46F-28-6	Yaxche	n/a																
PN-46F-29-1	Chacalhaaz	0.79																
PN-46F-29-2	Chacalhaaz	22.25	20	7				6	11				1			2 teeth/1 skull frag	is Burial 96	1 obs. Core
PN-46F-29-3	Yaxche	0.82							3									
PN-46F-29-4	Yaxche	n/a																
PN-46F-29-5	Yaxche	n/a																
PN-46F-29-6	Yaxche	6.97	33	1				6				1						
PN-46F-29-7	Yaxche	0.28	3	1					1									
PN-46F-30-1	Chacalhaaz	6.21	3	1					1									
PN-46F-30-2	Chacalhaaz	19.10	50+	10	1			9				7				1 shell easpool	2 worked bone	2 brazier frag
PN-46F-31-1	Chacalhaaz	8.00	5	10				1	1									
PN-46F-31-2	Chacalhaaz	3.00		1	3													
PN-46F-31-3	Chacalhaaz	23.41	50+	7	4				5	7		2				1 shell	1 plaque	1 mold
PN-46F-32-1	Chacalhaaz	9.75	1	3				2										
PN-46F-32-2	Chacalhaaz	11.59	6					3	2									
PN-46F-33-1	Chacalhaaz	2.52																
PN-46F-33-2	Chacalhaaz	7.94	1	1	1			1	3									

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gr(a)y, Fine Or(a)ng(e), W(orked) Bone.

Table 3, Appendix I: Preliminary Artifact Count, PN-46F through PN-46I

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER	OTHER
PN-46F-33-3	Chacalhaaz	0.40	2							1	1					BURIAL 83	Moth. Of Pearl Flower	
PN-46F-33-4	Chacalhaaz/ Yaxche	1.76						2										
PN-46F-33-5	Yaxche	n/a									1					Stucco Painted Red		
PN-46F-33-6	Yaxche	n/a																
PN-46F-34-1	Chacalhaaz	0.45						2	1									
PN-46F-34-2	Chacalhaaz	2.21	5						4									
PN-46F-35-1	Chacalhaaz/ Kumche	1.45	1					1	1					1				
PN-46F-35-2	Chacalhaaz/ Yaxche	1.16	5					6	3									
PN-46F-35-3	Chacalhaaz	1.13	2															
PN-46G-1-1	Chacalhaaz	0.99																
PN-46G-2-1	Chacalhaaz	4.59	3	1														
PN-46G-3-1	Chacalhaaz	n/a			2													
PN-46G-4-1	Chacalhaaz	n/a																
PN-46G-5-1	Chacalhaaz	n/a																
PN-46G-6-1	Chacalhaaz	n/a																
PN-46G-6-2	Chacalhaaz	2.21		3				3										
PN-46G-6-3	Chacalhaaz/ Yaxche	2.72																
PN-46G-6-4	n/a	n/a																
PN-46G-6-5	Yaxche	n/a																
PN-46G-6-6	n/a	n/a																

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gry(a), Fine Or(a)ng(e), W(orked) Bone.

Table 3, Appendix I: Preliminary Artifact Count, PN-46F through PN-46I

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER
PN-46G-7-1	Chacalhaaz	n/a															
PN-46G-8-1	Chacalhaaz	0.60		1	4			1									
PN-46G-9-1	Chacalhaaz	n/a															
PN-46G-10-1	Chacalhaaz	n/a															
PN-46G-10-2	Chacalhaaz	2.27	2	2				3									
PN-46G-11-1	Chacalhaaz	n/a															
PN-46G-12-1	Chacalhaaz	3.80															
PN-46G-12-2	Yaxche	1.33		4													
PN-46G-12-3	Yaxche	0.23		1											2		
PN-46G-12-4	Yaxche/ Balche/Naba	0.09	1					2				1					
PN-46G-12-5	Balche/Naba	n/a		1								1					
PN-46G-12-6	Naba/Balche	0.74	4	1													
PN-46G-12-7	Naba	n/a	n/a														
PN-46H-1-1	Chacalhaaz	0.74	2	2	1			1									
PN-46H-1-2	Chacalhaaz	14.43	12	7	5			9	3							Dog Tooth Pendant	
PN-46H-2-1	Chacalhaaz/ Kumche	1.81	1											1			
PN-46H-2-2	Chacalhaaz	1.30	2					1	3								
PN-46H-2-3	Chacalhaaz/ Kumche	4.34	2	1				2						1			
PN-46H-3-1	Chacalhaaz/ Kumche	7.99	4	3					2					7			
PN-46H-4-1	Chacalhaaz	5.87	2	4				6									
PN-46H-4-2	Chacalhaaz	6.60	4	2				1	1								
PN-46H-5-1	Chacalhaaz	n/a															

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gry(a), Fine Or(a)ng(e), W(orked) Bone.

Table 3, Appendix I: Preliminary Artifact Count, PN-46F through PN-46I

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER	OTHER
PN-46H-5-2	Chacalhaaz/ Kumche	37.64	4	1				3	3						2		1 schist metate	1 hammerst one
PN-46H-6-1	Chacalhaaz	3.37																
PN-46H-6-2	Chacalhaaz	3.85	1		1			1	1									
PN-46H-7-1	Chacalhaaz	5.58																
PN-46H-7-2	Chacalhaaz/ Kumche	41.58	2	1											2		at least 3 whole vessels	
PN-46I-1-1	Chacalhaaz	n/a																
PN-46I-1-2	Chacalhaaz	11.08	44					9								3 pieces of charcoal	1 ceramic copal mold	
PN-46I-1-3	Yaxche/ Chacalhaaz	1.59	5	2				3	1									
PN-46I-1-4	Chacalhaaz	1.33	13	1				4	3								3 human teeth (Burs. 94 & 95?)	
PN-46I-2-1	Chacalhaaz	0.60	4	1				1	1									
PN-46I-2-2	Chacalhaaz	8.62	12	3				4	1									
PN-46I-2-3	Chacalhaaz	1.45	2					2									2 pieces of charcoal	
PN-46I-3-1	Chacalhaaz	3.29																
PN-46I-3-2	Chacalhaaz	3.80	10							1								
PN-46I-3-3	Chacalhaaz	1.39	13	1				1										

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gr(a)y, Fine Or(a)ng(e), W(orked) Bone.

Table 3, Appendix I: Preliminary Artifact Count, PN-46F through PN-46I

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER
PN-46I-3-4	Chacalhaaz	n/a	1					3	3							1 burned animal bone	9 human bones
PN-46I-4-1	Chacalhaaz	10.88	7					1									
PN-46I-4-2	Chacalhaaz	4.20	5	1				2								2 burned animal bone	
PN-46I-4-3	Chacalhaaz	1.25	7														
PN-46I-4-4	Chacalhaaz	6.66	24		1			2							1	1 burned animal bone	2 pieces charcoal
PN-46I-4-5	Yaxche	3.00	35	1	2				1							1 ceramic copal mold	1 piece of charcoal
PN-46I-4-6	Yaxche	3.74	58													1 fragment charcoal	
PN-46I-4-7	Yaxche	n/a	5						2								

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gr(a)y, Fine Or(a)ng(e), W(orked) Bone.

Table 4, Appendix I: Preliminary Artifact Count from PN-54A

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER	OTHER
PN-54A-1-1	Chacalhaaz	4.54				2												
PN-54A-1-2	Yaxche/ Chacalhaaz	9.95	1	2				2								1 Spindle Whorl	1 human tooth	
PN-54A-1-3	Yaxche/ Chacalhaaz	5.90		6				3										
PN-54A-1-4	Naba/ Yaxche	2.32		2														
PN-54A-1-5	Naba	1.11		2												1 fragment burned fauna	1 fragment human bone	
PN-54A-2-1	Chacalhaaz	6.09	1	9														
PN-54A-2-2	Chacalhaaz	1.45		1				1										
PN-54A-2-3	Chacalhaaz/ Yaxche	5.07	5	1				1										
PN-54A-2-4	Yaxche/ Chacalhaaz	13.18	2	8					1							8 fragments human bone	1 human tooth	3 pieces of charcoal
PN-54A-2-5	Yaxche/ Chacalhaaz	13.21	15	1				14	2							1 shell bead	1 human tooth	1 piece of charcoal
PN-54A-3-1	Chacalhaaz/ Yaxche	10.03		3				2										
PN-54A-3-2	Chacalhaaz	11.00	16	3				11	7							1 obsidian eccentric	1 pseudoglyph shell	1 1 incised bone plaque
PN-54A-3-3	Kumche/ Chacalhaaz/ Yaxche	3.71	5	2				5						1				
PN-54A-3-4	n/a	1.08	8					3	3									
PN-54A-3-5	Yaxche	0.34	20(?)	2												human bone fragments	1 spindylus bead	1 shell flower

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gr(a)y, Fine Or(a)ng(e), W(orked) Bone.

Table 4, Appendix I: Preliminary Artifact Count from PN-54A

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER	OTHER
PN-54A-3-6	n/a	n/a																
PN-54A-3-7	Naba	n/a	1						2									
PN-54A-4-1	Chacalhaaz	7.51	2	2		2		3							1			
PN-54A-4-2	Chacalhaaz/ Yaxche	5.22	1	1				3	2									
PN-54A-4-3		1.22	5					4	1							1 fragment nacre		
PN-54A-4-4	Yaxche	1.11																
PN-54A-5-1	Chacalhaaz	9.18	2	6				3	1							1 fragment of censer applique		
PN-54A-5-2	Chacalhaaz	18.54	7	4		1		2								1 human tooth		
PN-54A-5-3	Yaxche	9.84	3				1	1										
PN-54A-6-1	Chacalhaaz	13.58	1	3			8	2										
PN-54A-6-2	Chacalhaaz	4.17	4	5				7										
PN-54A-6-3	Yaxche	n/a		5				4							7			
PN-54A-7-1	Chacalhaaz	5.92	3	5				4								1 unidentified lithic artifact		
PN-54A-7-2	Chacalhaaz/ Yaxche	7.91	8	2				6	1									
PN-54A-8-1	Chacalhaaz	14.97	1	10				5								1 piece of charcoal		
PN-54A-9-1	Chacalhaaz	3.34						2										
PN-54A-10-1	Chacalhaaz	1.53	1	1				3										
PN-54A-11-1	Chacalhaaz	n/a																
PN-54A-12-1	Chacalhaaz	6.63																
PN-54A-13-1	Yaxche	6.46	1	6				2								1 modeled	1 stone	

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gr(a)y, Fine Or(a)ng(e), W(orked) Bone.

Table 4, Appendix I: Preliminary Artifact Count from PN-54A

LOT	Ceramic Phase(s)	Ceramic Weight (kg)	Faun	Fig	Baja	Met	Man	Obs	Che	Jade	Stu	Char	Fin Gry	Fine Orng	W. Bone	OTHER	OTHER
																censer fragment	spindle whorl
PN-54A-14-1	Chacalhaaz/ Yaxche	4.48		1													
PN-54A-15-1	Chacalhaaz	4.54		3		1		1									
PN-54A-16-1	Yaxche	8.16	1	1				5									
PN-54A-17-1	Chacalhaaz	n/a															
PN-54A-18-1	Chacalhaaz	4.25		1				1	1								
PN-54A-19-1	Yaxche/ Chacalhaaz	1.96															
PN-54A-20-1	Yaxche/ Chacalhaaz	NA	1	1				3								1 stone pendant	3 pieces of charcoal
PN-54A-21-1	Yaxche		2	4					1							1 stone bead	

Abbreviations: Faun(a), Fig(urine), Baja(reque), Met(ate), Man(o), Obs(idian), Che(rt), Stu(cco), Char(coal), Fin(e) Gr(a)y, Fine Or(a)ng(e), W(orked) Bone.

Table 1, Appendix II: Summary of PN-11A, PN-11D, PN-11F,
and PN-11H

516

Activity	Components	Figures	Other
Pre Occupation	Ancient humus level	5.20	
Construction	J-20-sub-1 Masonry staircase to chasm	5.19, 5.20, 5.21	
Fill	Burial of J-20-sub-1 platform and staircase with rubble	5.20	
Construction	Small staircase placed on rubble	5.20	
Demolition	Demolition of superstructure, J-20- sub-1	5.20	
Burning	Superstructure of J-20- sub-1 burned	5.20	
Fill	Artifacts and clay deposited over smoldering building	5.14, 5.15, 5.16, 5.17, 5.18, 5.19, 5.20	¹⁴ Cdate, 11F-1-7: 1503 +/- 52BP (399-499 AD)
Abandonment	Str. J-20, Court 3		
Fill	Rubble deposited over clay to create level surface	5.20	
Construction	6 th Patio Floor	5.20	
Construction	5 th Patio Floor	5.20	
Construction	Str. J-20-3 rd (?)		Hypothetical based on development of Patio Floors.
Fill	Ballast	5.20	
Construction	4 th Patio Floor	5.20	
Fill	Ballast	5.20	
Construction	3 rd Patio Floor	5.20	
Fill	Ballast	5.20	
Construction	2 nd Patio Floor	5.20	
Fill	Ballast	5.20	
Construction	1 st Patio Floor	5.20	
Construction	Str. J-20-2 nd	5.20	
Construction	Str. J-20-1 st	5.20	
Abandonment	Court 3	5.20	


 Indicates association with termination events surrounding AD 554.

Table 2, Appendix II: Summary of PN-11G

517

Activity	Components	Figures	Other
Construction	J-23-2 nd	5.24	
Construction	J-20-2 nd	5.24	
Construction**	J-23-1 st	5.24	
Construction	J-20-1 st J-21-2 nd *	5.24	
Cache **	Stucco and stone disks placed within the walls of J-21-1 st .	5.24, 5.26	
Construction	J-21-1 st	5.24	
Abandonment ***	Court 3	5.24	

* J-21-2nd may predate J-20-1st, as the ceramics from the former appear to be from the late Yaxche phase, while the latter is associated with Chacalhaaz phase ceramics. However, the two structures do not intersect and so there is no definitive evidence to support this possibility.

**The deposition of the large stucco disk and the small stone disk within the construction fill of J-21-1st appears to represent some type of caching activity, but I am unaware of similar caches at Piedras Negras or other sites.

*** The activity sequence developed in Court 3 does not disagree with the results of excavations conducted by Ernesto Arredondo Leiva (2000) in the superstructure of J-21 and J-23. However, there is no secure way to correlate the sequence of platform construction outlined above with that of the superstructures. At least one room of Str. J-21 was walled off and filled in by the Maya prior to the abandonment of that building. Excavations in the J-23 superstructure revealed evidence of only a single phase of construction.

Table 3, Appendix II: Summary of PN-11L

518

Activity	Components	Figures	Other
Fill	Rubble Fill	5.38	
Abandonment (?)	Calcification	5.38	
Fill	Rubble Fill	5.38	
Construction	4 th Patio Floor	5.38	
Fill	Ballast, 3 rd Patio Floor	5.38	
Construction	3 rd Patio Floor	5.38	
Fill	Ballast, 2 nd Patio Floor	5.38	
Construction	2 nd Patio Floor	5.38	
Fill	Ballast, 1 st Patio Floor	5.38	
Construction	1 st Patio Floor	5.38	
Construction	Staircase, entrance to Court 3 between J-21 and J-18.	5.38	
Abandonment	Court 3	5.38	

Table 4, Appendix II: Summary of PN-11B, PN-11I, PN-11J, and PN-11K

519

Activity	Components	Figures	Other
Pre-occupation	Bedrock	5.28, 5.31	
Construction	Str. J-18-sub-2-3 rd	5.28, 5.31	
Demolition	Staircase Str. J-18-sub-2-3 rd	5.28, 5.31	
Construction	Str. J-18-sub-2-2 nd	5.28, 5.31	
Construction	Str. J-18-sub-2-1 st	5.19, 5.28, 5.31	
Demolition	Str. J-18-sub-2-1 st	5.29, 5.30, 5.31, 5.37	
Abandonment	Str. J-18-sub-2, Court 3		
Fill	Ballast, 2 nd Patio Floor	5.37	
Construction	2nd Patio Floor	5.37	
Construction	Terrace, Patio 3	5.34, 5.36	
Construction	Str. J-18-sub-1 * Str. J-18-3 rd * Str. J-19-sub-1-2 nd	5.34, 5.35	
Construction	Str. J-19-sub-1-1 st	5.34, 5.35	
Demolition	Str. J-19-sub-1-1 st Str. J-18-sub-1 Str. J-18-3 rd	5.34, 5.35	
Construction	Str. J-18-2 nd	5.35	
Demolition	Str. J-18-2 nd	5.35	
Fill	Ballast, 1 st Patio Floor	5.29, 5.30, 5.31	
Construction	1 st Patio Floor	5.30, 5.31	
Construction	Str. J-18-1 st	5.29, 5.31	
Construction	Str. J-19-2 nd **	5.39	
Construction	Str. J-19-1 st	5.39	
Demolition	Stucco façade of Str. J-18***	5.32	
Abandonment	Court 3		

* The relationship between Str. J-18-sub-1 and the sequence directly beneath Str. J-18-1st is unclear, and for this reason the former was designated as –sub-1. However, it may have been contemporary with either Str. J-18-2nd or J-18-3rd. These relationships would require further excavations to clarify.

** The available data do not indicate whether Str. J-19-2nd postdated, or was a contemporary of Str. J-18-1st. I indicate that it is later than Str. J-18-1st because it lacks the monumentality of other architecture in Court 3 and it dramatically altered the arrangement of the patio.

*** There are no data to indicate when Str. J-18-1st was abandoned and its façade demolished, this placement is speculative.

 Indicates association with termination events surrounding AD 554

Table 5, Appendix II: Summary of PN-11E and PN-11J

520

Activity	Components	Figures	Other
Fill	Chasm filled with rubble	5.20	
Construction	Str. J-19-sub-1-2 nd	5.34, 5.35	
Construction	Str. J-19-sub-1-1st	5.34, 5.35	
Demolition	Str. J-19-sub-1-1st	5.34, 5.35	
Construction	Str. J-19-2nd	5.39	
Demolition	Str. J-19-2nd	5.39	
Construction	Str. J-19-1st	5.39	
Abandonment	Str. J-19-1st	5.39	

Table 6, Appendix II: Summary of PN-46A through PN-46D, PN-46F, PN-46H, and 521 PN46I

Activity	Components	Figures	Other
Pre-occupation	Unknown	6.5	
Fill	Unknown	6.5	
Fill	Unknown	6.5	
Fill	Unknown	6.5	
Fill/Cache	Half-vessel cache	6.5, 6.6	
Construction	Str. J-24-sub-1 Str. J-34-sub-1 Str. J-33-sub-1	6.5, 6.8, 6.15	
Demolition	Str. J-24-sub-1 Str. J-34-sub-1 Str. J-33-sub-1	6.5, 6.8, 6.15	
Burial	Burial 63	6.5, 6.7	
Fill	Sascab deposited over Strs. J-24-sub-1 and J- 34-sub-1	6.5	
Construction	Str. J-24-2 nd	6.21, 6.22	
Fill	Ballast, 3 rd Patio Floor	6.15	
Construction	3 rd Patio Floor	6.15	
Intrusion	Through Patio Floor, into Burial 63	6.5	
Construction	Str. J-34-2 nd	6.11, 6.24	
Construction	Str. J-24-1 st	6.3, 6.11, 6.21, 6.24	
Fill	Ballast, 2 nd Patio Floor	6.15	
Construction	2 nd Patio Floor	6.15	
Fill	Ballast, 1 st Patio Floor	6.5, 6.15	
Construction	1 st Patio Floor	6.5, 6.15	
Construction	Str. J-34-1 st	6.11, 6.24	
Construction	Addition to Bench, Str. J-24. Curtain walls in Str. J- 24.	6.11	
Intrusion	Burial 83	6.25, 6.26	
Construction	Extension of bench over Burial 83 in Str. J-24.	6.11	
Construction	Str. J-33-1 st Str. J-25-1 st	6.5, 6.11, 6.15, 6.17	
Collapse/ Demolition	Superstructure, Str. J-24	6.11, 6.21, 6.24	
Construction	Expansion of bench in Str. J-33.	6.11	
Intrusion	Burial 101, Burial 81*	6.13, 6.14	
Intrusion	Burial 94, Burial 95**	6.31, 6.32, 6.33	
Intrusion	Burial 104	6.18	
Abandonment	Str. J-33	6.11	

Table 6, Appendix II: Summary of PN-46A through PN-46D, PN-46F, PN-46H, and 522 PN46I

Construction	Curtain wall, Str. J-25	6.11	
Demolition	Str. J-25	6.11, 6.30	Associated with probable termination deposit.
Abandonment	Str. J-25	6.11	

* The data do not indicate whether the interment of Burial 101 and Burial 81 occurred prior to, contemporary with, or subsequent to the expansion of the bench in Str. J-33. They are listed here after the construction episode as a matter of speculation.

** The data do not indicate whether Burial 94 or 95 was the earlier interment.

Table 7, Appendix II: Summary of PN-46G

523

Activity	Components	Figures	Other
Fill	Unknown		
Fill	Unknown		
Fill	Unknown		
Fill	Unknown		
Fill	Unknown*		
Construction	Str. J-35-1 st	6.34	
Construction	Str. J-26-1 st , Str. J-36-1 st *	6.34	
Abandonment	Str. J-35-1 st Str. J-26-1 st **	6.34	

* It is likely that at least some of these fill episodes are associated with earlier versions of Strs. J-35 and J-36, but the boundaries of any such platforms were not revealed in excavation.

** The construction sequence of Str. J-26 was not determined through excavations of that structure. Its construction must post-date that of Str. J-35, as J-35 provides the basal platform upon which J-26 was built. The abandonment of J-26 is a matter of speculation.

Activity	Components	Figures	Other
Pre-occupation	Bedrock		
Fill	Unknown*		
Fill	Platform, Str. J-27-1 st		
Abandonment	Str. J-27-1 st		
Intrusion	Burial 79, Burial 80**	6.37, 6.39, 6.40	
Construction	Superstructure, J-27	6.36	
Abandonment	Str. J-27-1 st	6.36	

* This fill may pertain to Str. J-27-2nd, however no masonry associated with such a structure was encountered in excavations.

** It is unclear which burial was the earlier. The poorly preserved masonry of the J-27 superstructure also makes it difficult to determine if the burials were intrusive into the superstructure itself, or merely the platform. However, the association of Kumche phase ceramics (including Pabellon Modeled-carved) with the superstructure, and the lack of any such ceramics associated with the burials, suggests that the burials predated the superstructures.

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- Abal phase, 112
 Altar de Sacrificios, 10, 86, 348, 349, 381, 383, 409, 410, 411, 412, 413, 417, 418, 432, 435, 437, 440, 445
 Balche phase, 113, 153, 192, 238, 240, 241, 242, 243, 245, 246, 247, 258, 259, 287, 300, 302, 349, 352, 353, 354, 361, 365, 369
 Burials, 110, 111, 114, 244, 254, 255, 256, 257, 258, 259, 260, 261, 263, 268, 270, 271, 272, 276, 277, 278, 279, 289, 290, 291, 292, 293, 294, 295, 302, 303, 305, 307, 353, 382, 383, 389
 Calakmul, 349, 383, 386, 387, 388, 389, 390, 391, 397, 406, 408, 409, 413, 414, 416, 418, 438, 439
 Caracol, 359, 383, 387, 389, 391, 397, 406, 409, 417, 438, 531, 555
 Chacalhaaz phase, 114, 116, 117, 118, 119, 125, 128, 131, 132, 133, 135, 137, 139, 141, 142, 144, 145, 146, 147, 149, 150, 151, 152, 158, 159, 160, 161, 162, 163, 164, 165, 166, 168, 170, 177, 178, 180, 183, 184, 185, 186, 187, 192, 238, 239, 240, 242, 243, 244, 246, 247, 248, 255, 272, 273, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 303, 304
 characterization., 52
 Chronology, definition of, 16
 clock time, 42, 52, 53
 conquest, 40, 44, 69, 71, 73, 74, 75, 76, 97, 373
 Copan, 9, 78, 85, 90, 91, 348, 349, 359, 381, 386, 389, 392, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 411, 413, 414, 416, 417, 418, 432, 433, 434, 435, 436, 437, 439, 444, 445
 Court 1, 123, 352
 Court 2, 235, 353, 356
 Court 3, 104, 109, 110, 119, 120, 121, 122, 123, 124, 125, 132, 133, 149, 151, 159, 179, 182, 184, 187, 189, 192, 193, 234, 305, 352, 353, 354, 355, 359, 363
 Court 4, 104, 109, 121, 234, 235, 236, 237, 239, 240, 248, 252, 257, 263, 266, 267, 268, 273, 279, 280, 283, 288, 298, 300, 301, 303, 304, 306, 354, 360, 363, 369
 Cowgill, George, 16, 17, 23, 32, 38, 41, 42, 51, 52, 118, 388, 532
 cyclical time, 69, 70, 450
 dedication, 9, 78, 83, 84, 86, 92, 94, 95, 116, 302, 349, 364, 374, 384, 402, 403, 410, 411, 412, 433, 435, 436, 438, 440, 443
 Dos Pilas, 390
 El Peru, 386
 embodiment, 93
 hiatus, 86, 348, 349, 364, 384, 391, 411, 418, 438
 Hol phase, 112, 402, 405
 house society, 88
 Itza, 4, 38, 69, 71, 72, 73, 85, 396
 K'atun, 66, 67, 69, 71, 367, 370, 390, 394, 396, 451
 K'inich Yo'nal Ahk I, 95
kaloomte', 386, 397, 398, 404, 414, 415, 416, 430
 Kan Ek', 69, 71, 72, 73, 91, 396
 Kumche phase, 117, 273, 274, 276, 305
 laminated sign, 94
Long Count, 65, 66, 111, 368, 417
 moral authority, 390, 393, 395, 407, 418, 432, 434
 Naba phase, 106, 112, 113, 114, 127, 132, 133, 137, 140, 141, 143, 159, 162, 163, 166, 168, 175, 179, 183, 184, 188, 191, 238, 240, 241, 287, 289, 290, 293, 297, 300, 349, 351, 352, 353, 354, 361
ochk'in kaloomte', 386

- Palenque, 66, 77, 78, 87, 359, 364, 370, 379, 393, 416, 531, 532, 533, 547, 560
 Parmentier, 29, 61, 89, 90, 358
 phase time, 42, 43, 52, 117
 Piedras Negras Panel 12, 367, 414, 415, 438
 Piedras Negras Panel 2, 367, 415, 438
 Piedras Negras Stela 12, 358, 373, 410
 Pomona, 359, 364, 371, 372, 373, 381, 388, 414, 417
 Proskouriakoff, 5, 38, 95, 109, 115, 116, 120, 147, 148, 186, 348, 370, 385
 Quirigua, 77, 78, 102, 406, 408, 548, 550, 558, 560
 replication, 90
 Rio Azul, 386
 royal court, 88, 90, 98, 304, 306, 357, 371, 374, 382, 389, 398, 432, 437, 442, 443
 Ruler 1, 95, 115, 364, 365, 366, 367, 369, 371, 372, 402, 436, 440
 Ruler 2, 95, 115, 307, 366, 367, 368, 369, 370, 372, 389, 415
 Ruler 3, 114, 115, 307, 368, 370, 372
 Ruler 7, 303, 347, 373, 440
 Ruler C, 414
 Satterthwaite, 4, 5, 6, 37, 106, 107, 109, 111, 115, 116, 117, 123, 150, 181, 190, 234, 235, 353, 368, 391
 signs in history, 89
 signs of history, 89, 91, 372.
 social time, 52, 59
 South Group Court, 364, 365
 Spearthrower Owl, 386, 390, 397, 404, 421, 423, 439
 Str. J-23, 121, 147, 148, 149, 189, 355
 Teotihuacan, 37, 38, 39, 44, 45, 349, 350, 367, 381, 385, 386, 388, 390, 392, 393, 395, 397, 404, 405, 406, 407, 409, 412, 413, 414, 415, 416, 417, 418, 430, 432, 433, 439, 444, 449
 termination, 9, 82, 84, 85, 86, 130, 131, 137, 142, 188, 189, 275, 302, 358, 359, 360, 361, 362, 363, 373, 374, 400, 401, 443, 444
 Tikal, 9, 80, 81, 107, 348, 349, 359, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 395, 396, 397, 398, 399, 401, 403, 404, 406, 407, 409, 411, 413, 414, 415, 416, 417, 418, 432, 433, 434, 435, 437, 438, 439, 445
 Tollan, 397, 561
 tomb re-entry, 84, 368
 Turtle Tooth, 367, 415
 type-variety, 5, 42, 46, 49, 50, 51, 53, 56, 57, 125
 typology, 5, 17, 25, 27, 29, 36, 46, 50, 181
 Uaxactun, 4, 44, 53, 57, 79, 80, 112, 349, 526, 554, 559
 University Museum, 4, 5, 6, 7, 9, 110, 186, 193, 236
 warfare, 67, 77, 86, 365, 368, 417, 418, 419, 434, 437
 West Group Plaza, 105, 119, 121, 122, 159, 167, 180, 351, 352, 353, 363
 Yaxche phase, 113, 114, 115, 116, 118, 119, 128, 135, 139, 141, 152, 153, 158, 159, 160, 161, 162, 164, 165, 166, 167, 168, 169, 170, 171, 174, 175, 176, 177, 178, 179, 180, 183, 184, 185, 186, 187, 192, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 258, 259, 264, 267, 276, 280, 283, 284, 286, 287, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 306, 307, 352, 354, 355, 361, 366, 369
 Yaxchilan, 347, 371, 387, 416, 418
 Yo'nal Ahk II, 114, 115
 Zuyua, 397