10-19-2018

Landscapes of Persistence and Ritual Architecture at the Cosma Complex, Upper Nepeña Valley, Peru.

Kimberly Elizabeth Munro
Louisiana State University and Agricultural and Mechanical College, kemunro@gmail.com

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_dissertations

Part of the Archaeological Anthropology Commons

Recommended Citation
https://digitalcommons.lsu.edu/gradschool_dissertations/4746

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Doctoral Dissertations by an authorized graduate school editor of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.
LANDSCAPES OF PERSISTENCE AND RITUAL ARCHITECTURE AT THE COSMA COMPLEX, UPPER NEPEÑA VALLEY, PERU.

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Geography & Anthropology

by
Kimberly Elizabeth Munro
B.A. Florida State University, 2007
M.S. Florida State University, 2010
December 2018
To the People of Cosma, and Phoenix
ACKNOWLEDGEMENTS

I had this great urge... I had it the day I was born. Some may call it destiny. My parents and friends called it dismaying.
—Dian Fossey

This dissertation would not have been possible without the support and encouragement of a number of friends, family, and colleagues. I would first like to thank my committee members, Dr. Dr. Chicoine, Dr. Kent Mathewson, Dr. Ginnesi Listi, and Dr. Margherita Zanasi for their support, helpful comments, and guidance. To Dr. David Chicoine, my advisor, who took a chance on me as a student and gave me the free reigns to explore the upper valley.

This research was funded in part by the National Science Foundation Dissertation Improvement Grant (Grant # 1547315), National Geographic Waitt Grant (#W386-15), American Philosophical Foundation Lewis & Clark Field Research Grant, and Louisiana State University’s West-Russell Field Research Grant, which supported different portions of this dissertation research, including survey, pilot-research, field excavations, and analysis. Additionally, thank you to Louisiana State University’s Huel D. Perkins and Writing Year Fellowships.

To Rebecca Bria, for providing me an amazing crew-chief experience, my first chance to fall in love with the highlands of Ancash, and for being an inspiration to so many. To Jeisen Navarro Vega, my friend and project director, for all your hard work, amazing drawing and plan map capabilities, and friendship. To Hugo Ikehara, for sharing your passionate conversations about the prehistory of the valley and for providing me my first “boots on the ground” experience in Nepeña helping out on your survey work in 2012.

To Dr. Richard Daggett and Cheryl Daggett, for all your kindness and insights into the upper valley. If it wasn’t for your prior work in Jimbe, this dissertation could not have happened. Thank you for providing the foundation for this research to take place and for sharing your personal survey notes and photos with me.
To David Chicoine and Steve “el Guapo” Treleor, for your help during the 2013 survey, without which a fateful series of events would never have sprung into motion for this work to have occurred.

To Chero, a good friend and guide. I am forever indebted to your kindness and help. To all the field school students, volunteers, and project members who got their hands dirty in Cosma. Special thanks especially to Shaina Molano, Rachel Witt, Matthew Helmer, Jacob Foreman, William Feltz and Samuel Queveralu. You all were the force and backbone of this work, and a major part of the Cosma project.

To my friends in Baton Rouge; Dee, Annemarie, Audrey, Val, and Beverly for the friendship and camaraderie during this process, and for always being available for a beer and ear to vent and share laughs with. A special thank you to my friends from the field; Rebecca Bria, Beth Gravalos, and the rest of the PIARA sisters who were always available to share support, words of encouragement and advice.

A special thank you to Dr. Jonathan Kent, and my first Peruvian field experience at the Santa Rita B site, and for you and Stacy—always happy and willing to grab coffee and catch-up throughout the years. Don Benito and the girls in Samanco for making us feel like family during lab work on the coast (but especially to Pillar and Milly for the delicious food and baked goods. To my friend Lizzbet, and to the Cosma drivers Erick “Gringo” Vasquez and Don Mario for your reliability and for always getting us where we needed to go. And to Consuelo, Dominicano and the entire Cosma community to whom I will always be indebted to for your love, shared knowledge, and acceptance. The Community of Rayan and Canchas, Salitre, and Jimbe, and the district Municipality (Juana) for your help in finding guides, informants, and reliable combis.

To my mother and father, for your support and faith in me and this project, and Ed and Linda Dengel for your interest in my work, constant love, prayers, and support. To Ignacio, Sonqu,
Toby, Nero, Scruff, Lobo, Ukuku, and all the field dogs (and a couple of cats) I have loved and lost and those who are still around.

And to Phoenix, Bogie, The Casman, Pacha, Bop, Bing, and Honey for the welcome distractions of walks and belly rubs during the writing process. And finally, to my husband, Craig Dengel. The best “field assistant,” survey partner, crew chief, total station master, GIS boss, and editor a palta could ask for. Without your love, support and sacrifices none of this would exist.

Unless otherwise indicated, all figures, maps and photographs are products and copyrights of Kimberly Munro
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS ............................................................................................................ iii

GLOSSARY OF TERMS ............................................................................................................. xiii

ABSTRACT ............................................................................................................................... xxiv

CHAPTER 1: INTRODUCTION .................................................................................................. 1
  1.1 The Cosma Complex: An Introduction ........................................................................... 1
  1.2 Research Questions ......................................................................................................... 11
  1.3 Organization of Chapters ............................................................................................... 18

CHAPTER 2: PERSISTENCE, PILGRIMAGE & CRAFTING PLACE ........................................ 21
  2.1 Persistent Place ............................................................................................................... 21
  2.2 Persistence and Pilgrimage ............................................................................................ 24

CHAPTER 3: A HISTORY OF ARCHITECTURE & PREHISTORIC LANDSCAPES IN
  NORTH-CENTRAL PERU ..................................................................................................... 36
  3.1 The Preceramic & the Rise of Social Complexity ............................................................ 36
  3.2 The Initial Period ........................................................................................................... 46
  3.3 Cupisnique, Chavin & the Early Horizon ....................................................................... 54
  3.4 Summary of Early Monumentality in the Central Andes .............................................. 75
  3.5 The Early Intermediate Period ...................................................................................... 76
  3.6 Middle Horizon Developments ..................................................................................... 80
  3.7 Late Intermediate Period: The Casma & Chimú Polities ............................................... 82
  3.8 The Inka & the Late Horizon ......................................................................................... 85
  3.9 Summary ....................................................................................................................... 90

CHAPTER 4 THE NEPEÑA VALLEY: GEOGRAPHY & HISTORY OF RESEARCH .............. 91
  4.1 Verticality & Andean Exchange Systems ..................................................................... 97
  4.2 Geography & Climate of the Region .............................................................................. 105
  4.3 A History of Research in the Valley ............................................................................. 115
  4.4 Summary ....................................................................................................................... 120

CHAPTER 5: SURVEY IN THE UPPER VALLEY: THE CÁCERES DISTRICT .................. 121
  5.1 Survey Methodology ..................................................................................................... 121
  5.2 Documentation of the Cosma Basin ............................................................................. 130
  5.3 Survey Summary & Interpretation ............................................................................... 136
  5.4 Excavations within the Cosma Basin (2014-2016) ...................................................... 137
  5.5 Acshipucoto Excavations ............................................................................................. 140
  5.6 Kareycoto Excavations ................................................................................................. 193
  5.7 Kunka Excavations ....................................................................................................... 260

CHAPTER 6: MATERIAL DESCRIPTIONS AND CHRONOLOGY/CERAMIC TYPES .... 281
  6.1 Methodology ................................................................................................................ 282
  6.2 Ceramics: The Early Horizon Occupation .................................................................. 285
  6.2 The Early Intermediate Period & Middle Horizon ....................................................... 292
6.3 Ceramics – Non-vessels................................................................. 299
6.4 Lithics .......................................................................................... 302
6.5 Faunal Remains ........................................................................... 307
6.6 Human Remains .......................................................................... 311
6.7 Chronology and Carbon Measurements ......................................... 313
6.8 Summation of Human Occupation in the Cosma Basin ................... 321
6.9 Summary of Human Occupation at Cosma: Persistence & Pilgrimage in the Basin .. 351

CHAPTER 7: REVISITING THE LATE PRECERAMIC: MITO, KOTOSH AND COASTAL HEARTHS ......................................................... 356
  7.1 Kotosh or Mito? What’s the Difference? ........................................ 357
  7.2 Coastal Preclassic Traditions, Ventilated Hearths & Square Room Units ........ 360
  7.3 Cosma’s Place within Late Preclassic Ritual Architectural Traditions ........ 367

CHAPTER 8: CONCLUSIONS ............................................................... 373
  8.1 The Cosma Basin, a Summary of Occupation .................................. 374
  8.2 Cosma and the Kotosh-Mito Tradition .......................................... 377
  8.3 Persistence, Pilgrimage and the Cosma Landscape .......................... 379
  8.4 Implications of the Study ............................................................. 392
  8.5 Future Research and Goals ......................................................... 394

REFERENCES ..................................................................................... 396

APPENDIX A: DATA FROM SALITRE & JIMBE SURFACE SURVEYS .......................................................... 426
  Salitre Area ...................................................................................... 426
  Jimbe Area Sites ............................................................................. 437
  The Colcap Ridge ............................................................................ 451
  Rayán Sites ..................................................................................... 460

APPENDIX B: SITES & FEATURES IN THE COSMA BASIN ..................................................... 472
  Huanca and Worked Stones in the Basin ........................................... 472
  Documented Sites in Cosma ............................................................ 481

APPENDIX C: VESSEL FORMS FROM EXCAVATIONS .......................................................... 500
  Early horizon vessel forms from cosma excavations ........................... 500
  Jar Form Varieties, Early Horizon .................................................... 506
  Middle Horizon & Late Intermediate Period Varieties ......................... 510

VITA ................................................................................................. 512
LIST OF TABLES

5.1: Excavation units by year, size, volume and square meters........................................... 148
6.1: Carbon date curves of dates on the occupation periods..................................................... 289
6.2: Excavations organized by year, size, surface area and volume........................................ 292
6.3: Counts for ceramic forms, kareycoto excavations.............................................................. 294
6.4 Vessel counts and forms separated by rim shape and angle...............................................295
6.5: Table of kareycoto style designs........................................................................................295
6.6: Kareycoto external colors..................................................................................................296
6.7: Counts for ceramic forms, acshipucoto excavations..........................................................299
6.8: Acshipucoto and kunka ceramic forms and rim angles......................................................301
6.9: Table of acshipucoto sherd decoration categories............................................................301
6.10: Acshipucoto external colors.............................................................................................302
6.11: Counts for ceramic forms, kunka excavations..................................................................304
6.12: Counts for ceramic decorations, kunka excavations.........................................................305
6.13: Counts for external sherd colors, kunka excavations.......................................................304
6.14: Total number of ceramic disks and instruments..............................................................306
6.15: Panpipes and ceramic disks from kareycoto.....................................................................307
6.16: Faunal remain bag counts by sector................................................................................313
6.17: Shells recovered from cosma excavations......................................................................317
6.18: Age of death profile table of juveniles found in kareycoto............................................318
6.19: Chronological chart with cosma’s absolute dates corresponding to the general Andean sequences for the region.................................................................326
6.20: All carbon dates from cosma excavations.....................................................................323
6.21: Cosma basin relative chronology....................................................................................336
6.22: Preceramic architecture and associated features, artifacts, and floors from the kareycoto and acshipucoto excavations………………………………………………………………………………………………… 342
LIST OF FIGURES

Figure 1.1: Location of Cosma and the Nepeña River Valley..........................................................1

Figure 1.2: Photograph of the Cosma looking eastward taken from the western Iglesia Hirca ridge..............................................................3

Figure 1.3: Least Cost Path and Slope Modeling run in ArcGIS with the prehistoric road systems documented for the Nepeña River Valley overlain in red..........................................................4

Figure 1.4: Cosma basin plan map, including location of mounds, terraces, and footpath through the community. .................................................................5

Figure 1.5: Map (constructed from Gabai 1996, and Zuloaga Rada 2012) documenting the Huaylas reducción with Tocas guaranga boundary in 1593..............................................................6

Figure 1.7: Santo Toribio's written descriptions of the Jimbe/Canchas area from 1605.................9

Figure 3.1: Preceramic centers discussed in this chapter. ................................................................37

Figure 3.2: Initial Period centers discussed in this chapter. ................................................................47

Figure 3.3: Chavin and Cupisnique related centers discussed in this chapter..........................54

Figure 3.4: (Left) From Kembel 2001, illustrating early chambers at Chavin de Huantar............59

Figure 3.5: Early Horizon Nepeña Valley centers discussed in this chapter..............................68

Figure 4.1: Location of the Cáceres District and Cosma in the Nepeña River Valley..................91

Figure 4.2: Chart showing location and order of ecological life zones in the Central Andes (looking south). .................................................................................................93

Figure 4.3: Image of crops growing in the yunga life zone, taken in the Salitre area .................94

Figure 4.4: Quinoa field in the Cosma basin (quechua ecozone). ..................................................95

Figure 4.5 Map redrawn and edited from Proulx, illustrating prehistoric roadways....................100

Figure 4.6 Map of important mountain peaks within the Caceres District, Nepeña Valley. .......................................................................................................................106

Figure 4.7: Photograph of one of the natural springs above the Cosma basin in the Cordillera Negra Mountains. ................................................................. 108

Figure 4.8: Map of Cáceres District/Upper Valley. The yellow arrows indicate three historic routes/footpaths from Jimbe through mountain passes into the highlands.........................109

Figure 4.9: Map illustrating the 1605 route Santo Toribio most likely took. ..............................114
Figure 4.10: Jimbe-Cosma route to the highlands through Pamparomás. ................................................................. 115

Figure 4.11: Facing southeast from the Rocro ridge towards the Cosma basin. ................................................. 116

Figure 4.12: Facing northeast from the Cajarumi ridge down towards the Cosma basin. ......................... 116

Figure 5.1: Purple stars indicate sites originally documented by Daggett and Proulx during their survey work in the 1960s and 1980s. ........................................................................................................ 122

Figure 5.2: Map produced by combining the previous survey maps from Gambini, Daggett, and sites documented by Ed Pax.................................................................................................................. 124

Figure 5.3: Sites visited during the 2013 and 2016 surveys.............................................................................. 125

Figure 5.4: The Cosma basin and outline of different lots for surface survey........................................... 127

Figure 5.5: Image of lots surveyed (in green) verse those not surveyed (white).................................. 128

Figure 5.6: Archaeological elements in the Cosma basin............................................................................ 129

Figure 5.7: “Cuevitas” documented in Cosma ............................................................................................... 130

Figure 5.8: Example of machays documented within the Cosma basin................................................ 131

Figure 5.9 Example of ceramic forms recovered from inside machays in the basin. ....................... 131

Figure 5.10: Map of the Cosma basin, with location of sites and activity clusters recorded between 2013-2016. .......................................................................................................................... 133

Figure 5.11: Map of the basin illustrating the main mound components and site sectors............... 134

Figure 5.12: 2013 photo taken inside the gallery in the Kareycoto mound............................................ 134

Figure 5.13: Map of Sector A, red dot indicates location of lintel stone with carving. ...................... 135

Figure 5.14: Photo of the prehistoric terracing activity in Sector A and its association to the Kareycoto mound ......................................................................................................................... 136

Figure 5.15: Main sectors and sites which were excavated in 2014-2016. ......................................................... 138

Figure 5.16: The Acshipucoto mound as seen from the west (facing southeast)................................ 141

Figure 5.17: Acshipucoto from the Kunka ridgeline, facing north. ...................................................... 142

Figure 5.18: Acshipucoto from the eastern ridge, facing southwest. .................................................. 142

Figure 5.19: 3D representation of the Acshipucoto mound ........................................................................ 142

Figure 5.20: Location of excavation units at Acshipucoto. ........................................................................ 143
Figure 5.21: Location of the looter's holes and trench on the Acshipucoto mound top.............. 145

Figure 5.22: Example of looter’s holes found in Acshipucoto after clearing of vegetation off the mounds. ................................................................................................................................. 146

Figure 5.24: PH 2 after clearing. ........................................................................................................... 147

Figure 5.25: Stone mortar fragment (highlighted in Figure 5.24 in yellow circle) recovered from inside PH 2.................................................................................................................................................. 147

5.26: Looter's pit #3 during cleaning........................................................................................................ 148

Figure 5.27: Wall documented within PH 3............................................................................................. 149

Figure 5.28: The large looter's trench (labeled looter’s hole 4).............................................................. 150

Figure 5.29: Image facing north, yellow line indicating the depth of Stratum 1 on the eastern profile of the AC-1 structure........................................................................................................................................ 151

Figure 5.30: Profile map of the northern profile, showing stratum’s 1 and 2................................. 152

Figure 5.31: Photograph facing east profile, end of stratum 2 fill highlighted with red line......... 152

Figure 5.32: Example of stratum 2 sterile clay fill, which covered architecture associated with the AC-1 room. ........................................................................................................................................ 153

Figure 5.33: Photo taken from the 2014 test pit, showing rock fill stratum within AC-1........... 154

Figure 5.34: Photo taken from 2015 Unit 8 excavations, midway through excavating stratum 3. 154

Figure 5.35: Blue circle and arrow indicating top of Stratum 4-I inside AC-1. .............................. 155

Figure 5.36: During excavation of Stratum 4-I rock fill................................................................. 156

Figure 5.37: Stratum 5-I, or the upper floor. Blue arrows indicate rock imprints left from the fill in the floor........................................................................................................................................ 156

Figure 5.38: Blue circle indicates sunken floor, yellow arrow points to location of central hearth.............................................................................................................................................. 157

Figure 5.39: Sunken floor (stratum 6-I) after excavation............................................................. 158

Figure 5.40: Location of sondage in relationship to the central hearth.......................................... 159

Figure 5.41: Photo of sondage and stratum 7-I inside of AC-1 structure................................. 159

Figure 5.42: Section drawing of the eastern profile for the entirety of AC-1 structure at the
end of excavation.......................................................................................................................... 160

Figure 5.43: Photo facing southeast, with AC-1 stairway in the foreground................................. 161

Figure 5.44: Oblique view facing the east and southern profile during excavation...................... 162

Figure 5.45: This photo, facing towards the northern profile was taken from inside the unit.
Blue arrows indicate Kotosh-Mito walls. .................................................................................. 162

Figure 5.46: Photo of patch of broken floor documented in AC-2 prior to digging of sondage. ................................................................................................................................. 163

Figure 5.47: Room 6 was documented within a sondage at the bottom of Unit 11...................... 164

Figure 5.48: Black arrow in photo points out location of Stratum 7-I in southern sondage profile. Yellow arrow points out location of hearth on the remaining section of floor in AC-2.......................................................................................................................................................... 165

Figure 5.49: Oblique view of the AC-1 room, facing southeast. .................................................. 166

Figure 5.50: (top) view of the AC-1 stairway, facing east. (Bottom) overhead view of the pony walls which flank the entryway and steps leading into the AC-1 structure. ................................................................. 167

Figure 5.51: Oblique view of the entryway, pony walls, and stairs from AC-1. ......................... 168

Figure 5.52: Red line indicates the depth and shape of the central hearth located at the bottom of AC-1.............................................................................................................................................. 169

Figure 5.53: Blue line points out the “banqueta” while black arrows show the broken western side of the AC-1 .............................................................................................................................................. 169

Figure 5.54: Photograph of the spondylus shell in the AC-1 sondage during excavation........... 170

Figure 5.55: Clearing of AC-1 in 2015. This photo illustrates the fill which covered the “sunken floor” once the upper floor was exposed. ................................................................................................. 171

Figure 5.56: Charcoal and ash deposits highlighted in pale blue polygons. Red circle indicates central hearth, while yellow line points to the hearth on the upper floor level. ..................... 172

Figure 5.57: Central hearth with red burnt clay exterior. ......................................................... 173

Figure 5.58: Photo of the outer portion of the AC-1 retention wall which was exposed in 2016......................................................................................................................................................... 174

Figure 5.59: Close-up of retaining wall stones, the outside of AC-1......................................... 175

Figure 5.60: Facing west towards the AC-1 structure and retaining wall. The broken part of the outer wall is marked by blue arrows. .................................................................................. 176
Figure 5.61: This oblique image, taken facing towards the east profile shows the different strata uncovered at Acshipucoto. ................................................................. 177

Figure 5.62: AC-5 in relationship to AC-3 structure below, and the AC-1 retention wall on the right hand side of the photo. ................................................................. 177

Figure 5.63: AC-5 and floor exposed in structure........................................................................ 178

Figure 5.64: AC-3 structure in relationship to the AC-5 room.................................................. 179

Figure 5.65: AC-3 room with clay floor. Retaining wall of AC-1 is on the left side of the photo......................................................................................................................... 179

Figure 5.66: Blue arrows pointing out the AC-2 linear wall ..................................................... 180

Figure 5.67: Collection of stones which make-up the AC-2 linear wall................................. 180

Figure 5.68: The AC-2 wall with the rough floor and pristine section of floor marked by scale bar.................................................................................................................. 181

Figure 5.69: Figure of the AC-2 hearth in the profile................................................................. 182

Figure 5.70: Black arrow points to the hearth located in the east and south profiles. Floor of AC-2 can be seen in the foreground............................................................................. 182

Figure 5.71: Outline illustrating the bottom of the AC-2 hearth............................................. 183

Figure 5.72: (Left) close-up of the AC-4 isolated wall. (Right) Wall in context with the retainment wall and AC-3 structure................................................................. 184

Figure 5.73: Overhead view of the sondage and AC-2 structure, facing east........................ 184

Figure 5.74: The AC-6 structure within the sondage, facing northeast................................. 185

Figure 5.75: The rooms/architecture uncovered between 2014-2016 field seasons............... 186

Figure 5.76: Architecture and Preceramic walls at Acshipucoto............................................. 186

Figure 5.77: This image shows the eastern and southern profiles of the 2016 Unit 11. .......... 187

Figure 5.78: Plan reconstruction of the architectural features documented at Acshipucoto after all excavations................................................................. 187

Figure 5.79: (Left) Isometric reconstructions of “Mito” structures excavated at the La Galgada site.................................................................................................................. 190

Figure 5.80: Isometric drawing of the AC-1 structure (by Jeisen Navarro Vega). ................. 191

Figure 5.81: The Kareycoto mound (facing northeast). Photo taken from the Acshipucoto
Figure 5.82: The Kareycoto mound, photo taken from the eastern ridge overlooking the mound. ................................. 194

Figure 5.83: Kareycoto mound top (and lower apron) showing the location of all 2014-2015 excavation units, trenches, and test pits ................................................................. 195

Figure 5.84: The Early Horizon activity documented on the Kareycoto mound top ................. 202

Figure 5.85: 2015 excavation of Unit 6. This photo shows a line of rock and fill which was associated with Early Horizon materials. ............................................................ 203

Figure 5.86: Black dotted line shows extent of Looter’s Hole #1, which ran into the first two strata of the test pit. ................................................................. 204

Figure 5.87: The burnt clay layer exposed after excavation of feature #3. .................. 205

Figure 5.88: Facing north, exposed segment of floor exposed underneath Feature #3. ....... 205

Figure 5.89: Facing north in Unit 6, green dotted line roughly illustrates the differentiation between Stratum 2A and 2B. ................................................................. 206

Figure 5.91: Exposed floor (Floor #1) in the 2014 test pit. .................................................. 207

Figure 5.92: Floor exposed in 2014 test pit with broken segment. .................................................. 207

Figure 5.93: Excavations in Unit 6, 2015 in the Early Horizon cultural context. .............. 208

Figure 5.94: Portion of Floor #1 segment with white paint still present. ......................... 208

Figure 5.95: Broken floor with Burial #1 exposed. ................................................................. 209

Figure 5.96: Broken floor with Burial #1 (left) and Burial #4 exposed. ......................... 209

Figure 5.97: Facing east towards the profile, Burial #3 in stone lined crypt. ..................... 210

Figure 5.98: Relationship between Burials #1, #3 and #4 in the 2014 test pit. ............. 210

Figure 5.99: Close-up of the location of the burials on the mound top ......................... 212

Figure 5.100: Location of entierros #5,8,10 and their relationship between themselves and the large vessel and ash lens. ................................................................. 213

Figure 5.101: Burial #11 inside the large stones which made its crypt during excavation. .......... 213

Figure 5.102: Burial #11 after removal of the outer crypt stones. ..................................... 214

Figure 5.103: Rock fill stratum (Facing west) in Unit 6. .......................................................... 214
Figure 5.104: Facing north showing the exposed Early Horizon floor in context with burial #11 and the ceramic vessels. .................................................................................................................. 215

Figure 5.105: After the removal of the large ceramic vessel and subsequent mortar beneath it a rock level and small rock platform was found. ................................................................................................................................. 215

Figure 5.106: Showing the removal of the first vessel in context with the second vessel. ............ 216

Figure 5.107: After removal of Vessel #1 a layer of mud mortar/plaster was documented beneath the vessel. .............................................................................................................................................. 216

Figure 5.108: Feature #4 during excavation, surrounded by stratum 2C rockfill to the west and east. .......................................................................................................................................................................................... 217

Figure 5.109: Location of Burial #6 inside the large vessel (feature 4). ........................................ 218

Figure 5.110: Feature 4 vessel with stratum 7C rock fill. ................................................................................................................. 218

Figure 5.111: Black arrows indicate location of two infant burials in Feature #4. ......................... 219

Figure 5.112: Burial #8, located towards the bottom of the vessel. .................................................. 219

Figure 5.113: Burial #9 in the southern half of the vessel. ................................................................. 220

Figure 5.114: Bone bead found at the bottom of Feature #4 vessel after removal of the sub adult burials. .............................................................................................................................................................................. 220

Figure 5.115 Large ceramic vessel, level 1, facing west. ................................................................. 221

Figure 5.116: The two large vessels and their association with the Early Horizon Floor (listed as Floor 1). ................................................................................................................................. 222

Figure 5.117: Feature #5 with small rock fill layer. ........................................................................ 222

Figure 5.118: Towards the end of excavation, feature #5 vessel. .................................................... 223

Figure 5.119: Both vessels in context and relationship to each other. ............................................. 223

Figure 5.120: Ceramic vessel shape reconstruction in profile ......................................................... 224

Figure 5.121: Unit 6 map of the western unit profile illustrating depth of second vessel. ............... 224

Figure 5.122: 3D image created in ArcScene representing the large vessels (orange) and their placement in context with the documented floors. ........................................................................................................... 225

Figure 5.123: Stratum 3 in both the 2014 test pit (top) and 2014 Unit 1 excavations. ...................... 225

Figure 5.124: Stratum 3B (outlined in black) in Unit 1 ................................................................. 226
Figure 5.125: Curved wall of Context 5, note ash lens against the inside of wall. .............................. 226
Figure 5.126: Broken Floor #4 (outlined in black.) .................................................................................. 227
Figure 5.127: Chipped stone projectile point and black bead preform found in Stratum 4B ash lens during excavation. ........................................................................................................... 228
Figure 5.128: From 2015 excavation. Curved wall (from figure above) from Unit 1 after Unit 6 excavations ........................................................................................................................................... 229
Figure 5.129: Close up of the circular feature in Unit 6-1. ........................................................................... 229
Figure 5.130: Plan map of circular room ........................................................................................................ 230
Figure 5.131: Black arrows pointing to floors #1 and #2. ............................................................................ 230
Figure 5.132: False floor and Floor #3 in context during excavation. .......................................................... 231
Figure 5.133: Floor #3 in the 2014 test pit. Broken preceramic wall and ash protruding out of the east profile. ............................................................................................................................................. 232
Figure 5.134: 2014 test pit western profile .................................................................................................... 232
Figure 5.135: Floors (and Preceramic structure) in Unit 1 and 6................................................................. 233
Figure 5.136: Facing east in Unit 1-6, stratum 7 false floor can be seen between the two walls ....................................................................................................................................................... 233
Figure 5.137: Overhead view of stratum 7... .............................................................................................. 234
Figure 5.138: Inside 2014 Test Pit, level 8 with hearth feature just to the east of the north arrow ....................................................................................................................................................... 235
Figure 5.139: Photo of 2014 test pit. A broken wall can be seen in the SW corner of the test pit associated with white ash deposits........................................................................................................... 235
Figure 5.140: The bottom of the test pit (level 12) after excavation of feature 3. ............................ 236
Figure 5.141: Unit 7 trench before excavation. ............................................................................................ 237
5.142: Unit 7B, facing north during excavation of level 1 and cleaning of rock collapse. ......................... 238
Figure 5.143: Unit 7B, top of level 2, after the clearing of the rock collapse ............................................. 239
Figure 5.144: Unit 2, facing north with burial in context with the rest of the unit..................................... 239
Figure 5.145: Unit 2, south side of mound apron, location of burial #2. .................................................... 240
Figure 5.146: Overhead views of burial #2 in Unit 2.................................................................................. 240
Figure 5.147: Location of burial #7 in the apron trench, located between walls/small stone crypt. .......................................................... 241

Figure 5.148: Location of burial #7 on the eastern end of the 7B trench .......................................................... 242

Figure 5.149: Unit 2, level 3 at the end of excavation (2014). .......................................................... 242

Figure 5.150: (Left) Close up of the retainment wall will the ash lens associated with strata 3 false floor documented during excavation. .......................................................... 243

Figure 5.151: Sherds recovered from the highly burnished blackware ceramic vessel in ash pit located in Stratum 3B against the retainment wall. .......................................................... 243

Figure 5.152: Full extent of 7B trench, showing the retainment wall, lower terrace wall and an East-West wall which cut through the unit. .......................................................... 244

Figure 5.153: Unit 7B trench facing southwest. .................................................................................. 245

Figure 5.154: Oblique view, facing towards the north, collection of stone walls, associated fill, and room with floor of paving stones in the unit 7B trench. .......................................................... 245

Level 5.155: 7B trench taken from the top of the retainment wall, facing north. ........................... 246

Figure 5.156: Collection of Early Horizon walls (from photo above) in Unit 7B, trench, on lower apron (stratum 4). .......................................................... 246

Figure 5.157: Sondage dug into Unit 7B. .................................................................................. 247

Figure 5.158: Aerial imagery of the 7B trench. .................................................................................. 248

Figure 5.159: Profile drawing of southern profile, Unit 7B trench. .......................................................... 248

Figure 5.160: Profile drawing (on western profile) of the retainment wall in Unit 7B after the sondage was dug. .......................................................... 249

Figure 5.161: Photo of the north side of the mound, taken facing south. .......................................................... 250

Figure 5.162: Unit 3 prior to excavation (facing north.) .................................................................................. 250

Figure 5.163: Bone artifact with drill hole found in Strata 1, Unit 3. .......................................................... 251

Figure 5.164: Excavation of Unit 4, showing the circular platform wall during excavation. .......................................................... 252

Figure 5.165: Terrace wall exposed in Unit 7A trench. Photo taken facing west. .......................................................... 252

Figure 5.166: Excavation of Unit 4, the start of the rock fill level. .......................................................... 253

Figure 5.167: Excavation Unit 4, fill stratum plan map. .......................................................... 254
Figure 5.168: Excavation unit 4 northern profile............................................................................................................ 254

Figure 5.169: From Grieder and Bueno Mendoza 1988. Representing the change in construction pattern at La Galgada by the Initial Period.................................................................................................................. 257

Figure 5.170: (Top) La Galgada north mound. Yellow line indicates “dip” in the mound, originally interpreted as a colonial looter’s trench.................................................................................................................. 258

Figure 5.171: Kareycoto mound facing south during excavation................................................................. 258

Figure 5.172: The Kunka ridge-line (photograph taken facing south from Acshipucoto mound). ................................................................................................................................................. 260

Figure 5.173: Exposed rock collapse and overgrown vegetation on Kunka................................................. 261

Figure 5.174: Kunka excavation unit locations, 2016...................................................................................... 262

Figure 5.175: Unit 9, facing north, prior to excavation...................................................................................... 262

Figure 5.176: Exposed segment of wall in Unit 9 prior to excavation.......................................................... 263

Figure 5.177: Unit 10 prior to excavation, facing NE...................................................................................... 264

Figure 5.178: Unit 12 prior to excavation, facing north.................................................................................... 265

Figure 5.179: Unit 13 prior to excavation, facing west..................................................................................... 266

Figure 5.180: Unit 13, prior to excavation, facing east down the hill slope.................................................... 266

Figure 5.181: Unit 12 during excavation of level stratum 1............................................................................ 267

Figure 5.182: Unit 10 after excavation of top stratum, stratum 1................................................................. 268

Figure 5.183: Photo of Unit 13 trench during excavation illustrating the purposeful terracing/shaping of the Kunka knoll......................................................................................................................................... 269

Figure 5.184: The curved wall exposed in the lower half of Unit 13, Kunka............................................. 269

Figure 5.185: The same wall from Figure x. above, facing south................................................................. 270

Figure 5.186: Overhead view of the same curved wall with associated ash lens........................................... 270

Figure 5.187: Broken segment of floor documented in the northeast corner of Unit 9B excavations. Left shows floor in context with the corner, right is a zoomed in picture of same floor.................................................................................................................. 271

Figure 5.188: Unit 9 during excavation, prior to the start of strata 2. Top photo taken facing south, showing unit 9A. Bottom photo taken facing north, showing unit 9B (background) and 9C (foreground). ................................. 271
Figure 6.14: Stone mortar fragment found in Late Preceramic context within AC-1 niche........... 305
Figure 6.15: Stone mortar fragment found in Late Intermediate Period context/looted
tomb in the Acshipucoto mound top...................................................... 305
Figure 6.16: (top) Collection of lithics recovered from Kunka, including manos, a stone
piruru with white paint, and a river cobblesmoothing stone........................ 306
Figure 6.17: Selection of worked bone artifacts from Kareycoto................................. 308
Figure 6.18: Crab claw recovered from Kareycoto excavation on the mound top............. 308
Figure 6.19: Shells recovered from the bottom of Unit 6, in an ash lens........................... 310
Figure 6.20: Spondylus shell excavated at the base of the AC-1 room in Acshipucoto......... 311
6.21: Close-up of Spondylus fragment still exhibiting original reddish color on shell .......... 311
Figure 6.22: Plate includes sampling of Early Horizon styles recovered at Kareycoto........ 317
Figure 6.23: Bowl and jar rim angles (left), as well as well drawings of designs on Early
Horizon sherds.......................................................................................... 318
Figure 6.24 Early Horizon decorative styles, including incising, punctations, zone
punctate, stamping, and cross hatching........................................................ 319
Figure 6.25: Incised and polished ceramic face found in Stratum 2, Unit 7B. ..................... 319
Figure 6.26: Burnished and incised rim fragment recovered from Stratum 2, Unit 7B ........ 319
Figure 6.27 (left): Highly polished Early Horizon styles from Kareycoto ....................... 320
Figure 6.28: Examples of Casma-applique serpentine styles......................................... 321
Figure 6.29: Example of blackware and “goose-pimple” sherds found in the basin......... 321
Figure 6.30: Preceramic circular room features in the Kareycoto mound......................... 324
Figure 6.31: Facing South in unit 6. Image shows the multi-layered Preceramic floor
where the carbon sample was taken................................................................ 325
Figure 6.32: Gallery inside the Kareycoto mound......................................................... 326
Figure 6.33: Profile map of the gallery inside the Kareycoto mound............................... 326
Figure 6.34: Location and outline of Preceramic walls.................................................. 328
Figure 6.35: Later restructuring of the La Galgada North mound during the Initial
Period phases............................................................................................. 328
Figure 6.36: Kotosh-Mito structure from Chavin de Huantar................................................................. 330

Figure 6.37: Examples of other large Early Horizon vessels in Nepeña ............................................ 341

Figure 6.38: From Gambini 1975, large ceramic vessel resting against a home in Cochapeti ................................................................. 341

Figure 6.39: Large ceramic vessel from Pisco Valley........................................................................... 342

Figure 6.40: Plan map of Unit 6 during excavations of infant burials and large vessels. ............... 343

Figure 6.41: Ceramic sherds recovered from Unit 2, strata 2 in association with Burial #2 on the mound’s apron .................................................................................................................. 344

Figure 6.42: Example of kaolin sherd collected from stratum 1 during excavations.................. 346

Figure 6.43: Chimú style ceramic vessel and other artifacts including a ceramic llama whistle, copper/silver artifacts, and a wooden scepter head.............................................................. 348

Figure 6.44: Example of large grinding stone recorded on Kunka ridge........................................ 348

Figure 6.45: Stone mortar owned by community member in Cosma. This bowl was recovered from the surface of the Watsi site ......................................................................................... 350

Figure 6.46: Kaolin vessel shown to team by a Cosma local who helped construct the road in the 1970s when the ceramic cache was found .................................................................................. 351

Figure 7.1: (Top left) Aerial View of the Chupacoto mound, Huaylas. (Bottom left) Aerial view of Kareycoto mound, Cosma ................................................................................................................. 368

Figure 7.2: Coastal ventilated hearth variations .................................................................................. 371

Figure 8.1: Aerial view of the Kareycoto mound, Cosma ........................................................................ 381
GLOSSARY OF TERMS

Apu – In the Andes, Apu or apus are considered mountain spirits. Typically referring to mountain peaks, Apus also refer to unique rock or land formations, caves, or glacial peaks.

Ayllu – Refers to Andean kin and communal social networks.

Chullpa – Specific type of Andean tomb, typically above ground Stone chambers consisting of multiple rooms and could reach several stories in height.

Encomienda – Small indigenous communities during the Colonial era. Politically organized by the Spanish in efforts to control taxation and labor.

Estancia- Considered similar to a ranch in the United States, estancias were a system of “independent smallholders” or “hemmed in hamlets,” which included their own elected mayor (alcalde) and authority figures. Were separated out of the hacienda and encomienda system and were in charge of their own crops, land and management.

Hacienda – Land estates during the Colonial and Republican eras, utilized indigenous labor who were bound to the land. Haciendas were typically owned by a private landowner or company, often located outside of Peru. The Hacienda system existed in Peru until the 1969 Agrarian Reform.

Huaca – In this dissertation huaca specifically refers to prehistoric mounds or pyramids that were man made. Huacas were imbued with power and were venerated in the Andean past as a living entity with the power to influence the daily lives of communities.

Huanca – Large Stone, usually erected and standing upright. Huancas were used as territorial markers, for spiritual purposes and could be used to mark a place where an important event happened, where an ancestor was born or died, and other events which took place in a specific communities’ mythology. Literally stone representatives of the ancestors and spirits.

Malquis – Mummy bundles of revered ancestors

Machay – Tombs built into or incorporating caves

W’aka – Andean representations of the sacred, can take the form of a mound, pyramid, mountain lagoon, rock outcropping, mummy bundle, etc.
ABSTRACT

This dissertation focuses on the Cosma Complex, a multi-component archaeological site located at the headwaters of the Nepeña River, on the western slopes of the Cordillera Negra in the modern Department of Ancash, Peru. The overarching goal of this study is to understand not only Cosma’s influence as a religious center within the Nepeña Valley and the surrounding region, but its recurring occupation over a 5000-year time span and its role in religious networks within the valley through its function as a cultural landscape resource or persistent place.

The Cosma complex extends over 250 hectares and includes two multi-storied temple mounds, a megalithic hilltop fortress, domestic areas, agricultural terraces, above ground tombs, and carved stonework. The center is geographically located in a propitious locale, 2650 meters above sea level (masl) in a flat mountain basin at the start of the Cosma branch of the Nepeña River. Cosma’s construction in a geographically isolated basin at the headwaters of the valley may have added weight to its status as a ceremonial center, allowing it to function as a pilgrimage center.

Through field survey and archaeological excavations as well as the analysis of material remains, this dissertation; (1) reconstructs the site’s occupational sequence, (2) explores its spatial organization and architectural forms through time, and (3) documents associated material remains in order to reconstruct cultural and religious affiliations. These lines of evidence are used to discuss Late Preceramic religious developments, in particular a significant Kotosh-Mito presence.

Located in a transitional zone, between the highlands and the coast, the Cosma complex has been interpreted as an important center for studying Late Preceramic architectural styles. Utilizing Cosma as a case-study, this dissertation re-evaluates the criteria previously established for Mito and “pre-Mito” structures, paying attention to localized variations of the tradition, as opposed to chronological markers. Following the Late Preceramic use at the Cosma complex, the mounds again
functioned as a stage for ceremonial practice during the Early Horizon Period and Middle Horizon for burial purposes. This dissertation presents this data under the auspice of persistent place and ritual gathering within the basin.
CHAPTER 1: INTRODUCTION

What causes certain perceptions of landscape to endure over time? Why are some places repurposed, built-over, or abandoned all together while others hold onto their original value and resolve? This dissertation explores these questions on persistent landscape through archaeological survey and excavations at the Cosma Archaeological Complex (Figure 1.1). The Cosma center, located at the headwaters of the Nepeña River in the Cordillera Negra Mountains dates to the Late Preceramic (2892-2207 BCE), when it was founded as a Kotosh-Mito ritual center. Since that time, the Cosma complex has been consistently re-imagined as a ceremonial landscape, during the Early Horizon (731-391 BCE), the Middle Horizon (594-764 CE), and finally, Inka-Colonial (1560-1794 CE). This dissertation utilizes research conducted at the Cosma complex to explain persistent landscapes and ancillary pilgrimage centers as mediating spaces for ritual practice.

Figure 1.1: Location of Cosma and the Nepeña River Valley.

The development of “persistent places” has been a concern for archaeologists, anthropologists, and geographers alike (Barreto, Fernandes, and Pereira 2016; di Lernia and Tafuri
2013; Moore and Thompson 2012). Geographic and historical ties that develop in a given location may influence how people perceive that place. Archaeologically speaking, monumental architecture can be a marker of these locales, best described as persistent places (Schlanger 1992). In this dissertation, I look at one such place as a longitudinal case study of the role of regional pilgrimage centers as mediating places for disparate communities. The study theorizes that the founding of Cosma as a center of importance (geographically off the main prehistoric trading routes) had spiritual and religious significance. Much of the trade, exchanges, and interactions with people outside of the community on a regional scale took place during religious events associated with the construction and utilization of the monumental architecture, which reinforced the ceremonial elements of a center, enhancing Cosma’s role as a “persistent place” (Schlanger 1992; Thompson and Pluckhahn 2010; Rodning 2009).

The study builds on Rodning’s (2009) concept of “emplacement,” or the practices by which a community attaches itself to a particular place through formal settlement plans, architecture, burials, and other material additions built into the landscape. Emplacement ties into Schlanger’s (1992) theoretical framework of “persistent place,” which was originally developed during her work on the Anasazi of the Southwestern United States. Cosma’s founding and consistent occupational sequence help to develop our understanding of why and how certain places become persistent throughout millennia, while others fall out of use or influence.

1.1 The Cosma Complex: An Introduction

Located at the headwaters of the Nepeña River Valley in North-Central Peru, Cosma sits at an altitude of 2650 meters above sea level (masl). It is situated at in a key ecological zone known as the quechua (2,300-3,500 masl), where field research to date has been scarce. This is especially the case for the department of Ancash, where scholars have traditionally focused on lower coastal valleys and
highland inter-mountain basins, neglecting these mid-elevation zones. Quechua zones are some of the most active and efficient for vertical network interactions (Topic and Topic 1983), making it imperative for researchers to deploy more sustained and systematic efforts to understand the role of subsidiary sites in interaction networks. As noted by Topic and Topic (1983: 242), routes linking coastal and highland areas are usually organized along ridges and/or rivers. In the case of Cosma, it is located in between two such major trading routes between the coast and the highland basin known as the Callejón de Huaylas. Least Cost Path and slope modeling in ArcGIS, as well as evidence from the documented pre-historic trade routes (Herrera 2005; Proulx 1968; Von Hagen 1955) suggest that Cosma is in a secluded and hard-to-reach area. It is tucked away in an isolated box canyon, among three steep ridges of the Cordillera Negra Mountains located between two highland passes (Figure 1.2-1.3).

Figure 1.2: Photograph of the Cosma looking eastward taken from the western Iglesia Hirca ridge.
This dissertation explores the role of quechua-based communities in the expansion of religious networks and their contribution to the development of complex societies. Data obtained through this research sheds light on the plurality of identity in zones of dynamic cultural interactions (Herrera 2007). Specifically, the potential presence of highland groups in zones readily accessible from coastal areas has the potential to help Andeanists reassess the conventional categories of *sierra* and *costa*.

Based on survey and archaeological excavations, we now know that the earliest occupation at Cosma dates to the Late Preceramic Period, and habitation appears to have multiple occupational peaks throughout a 5000 year time span. The complex itself is composed of two early platform mounds. Prehistoric terraces and domestic areas are situated near the modern community, with
ancient walls, agricultural terraces, and canals interspersed between the modern farmlands. In addition, the hillsides are home to later domestic structures and Inka carved stonework (Figure 1.4).

Figure 1.4: Cosma basin plan map, including location of mounds, terraces, and footpath through the community.

1.1.1 Cosma: An Historic Timeline. While today the people of Cosma have easier access to the coast due to the road which connects the town to the district capital of Jimbe—where people can catch public transportation to Chimbote or Casma—historically, Cosma and the Jimbe region were affiliated with the highland district of Huaylas (previously spelled Gualas, or Huailas). By the time of Spanish arrival, the province had already been politically divided into two halves known as Ananhuaylas in the south, and Atunhuaylas in the north (Figure 1.5). Both northern and southern halves were divided into six subgroups, known as guarangas, which included thousands of tributaries.
each. These divisions reportedly had social, economic and ecological importance before the conquest, and were utilized by the Spanish in the first half century following the conquest (Varón Gabai 1996: 37-38.) The modern day District of Cáceres, and the Jimbe-Cosma area would have been included in the Ananguaylas half of the province (Figure 1.5, drawn from Gabai 1996 and Zuloaga Rada 2012).

Figure 1.5: Map (constructed from Gabai 1996, and Zuloaga Rada 2012) documenting the Huaylas reducción with Tocas guaranga boundary in 1593. Distinctions between the Ananguaylas and Atunguaylas halves of the province are highlighted in hatched rectangles.

Following Espinoza Soriano’s 2014 analysis of the Huylas ethnic group, historical accounts demonstrate that the “corregimiento of Huylas” was classified by the Spanish in the year 1565. By 1572, the reducciones were founded in six towns—most likely corresponding to the original six guarangas including San Pedro de Carhuaz, Santo Domingo de Yungay, San Pablo de Mato, San

---

1 A guaranga was part of the Inka classification/organization system of tribute, and generally in charge of 1000 people (Villamarin and Villamarin 1999: 645).
Ildefonso de Caraz and San Luis de Macati, repartimiento de Recuay de la encomienda de Juan de Aliaga, and Gonzalo de Cáceres. Following the accounts of Santo Toribio and other historical documents, by at least 1593, the area was lumped under the “reducción de Huaylas” under the guaranga (also spelled huaranga) of Tocas (Benito 2006; Espinoza Soriano 2013; Zuloaga Rada 2012). Estimates done by Zuloaga Rada (2012: 84) illustrate that in 1593, between 4000 and 5000 people were in the Tocas guaranga. By 1714, Cosma was established as an estancia, when the lands making up the basin were purchased by a group of indígenos. The legal petitions and paperwork had to be filed in the town of Mata, which is now known as Villa Sucre. Mata is located in the Callejón de Huaylas on the eastern flank of the Cordillera Negra Mountains, 23 km as the crow flies over the mountains from Cosma.

By 1792, 14 towns or reducciónes were registered—both old and newly created— which included Cosma (spelled Cosmo in the document). At this point, Cosma is listed as an “annex” of Moro along with the towns of Jimbe and Pampas (Espinoza Soriano 2013). The geographic and political area which included Cosma would continue as part of the Huaylas/Tocas classifications until 1830 when “the district Jimbe-Cosma-Pamparomás” would be classified with Pamparomás and the estancias of Pichuy, Chunya, Chaclancayon and Huarcapampa (Espinoza Soriano 2013: 189). While other towns in the district would continue to be controlled by the Jimbe Hacienda lower down the valley, the people of Cosma were able to possess their own lands and regulate their own public works and community through kinship bonds. To this day, small town leadership centers on faena, or communal labor, led by elected “pedestrian mayors” to run small civic projects, such as painting the school, repairing the bridge, or digging irrigation canals. The members of the community participate in these reciprocal labor exchanges and faena labor.

The Cáceres District was created in 1886 following a reorganization of the districts in the
Huaylas region. Cosma was now part of the Cáceres District, with the district capital located in the town of Jimbe. Today the area that makes up the Cosma basin is as an agro-pastoral landscape utilized by about a hundred permanent residents (Figure 1.6).

As mentioned above, the earliest references to Cosma can be found in the work of Santo Toribio de Mogrovejo, the Archbishop of Lima. In his visits across the country in 1603, he counts the number of *indios* in the Canchas area (Figure 1.7). The town of Jimbe is also referenced; however, it is spelled *Suibe* and is comprised mainly of an orchard. In his account of the area, Toribio described a temperate climate and a count of 485 animas (or souls) in the Canchas area. The historical records from 1715 describe the 15 fanegadas purchased (each fanegada = 6425 square meters or 1.6 acres) for the price of 225 pesos. In this land description, some of the same landmarks on the landscape can be recognized today. For example, he references “Cosma-coto and Cajarumi,” both landmarks on the landscape, as well as prominent archaeological sites. Maps from the 1800s
show that the Cosma basin served to farm wheat, alfalfa, and papas (potatoes), while the lands owned by haciendas in the lower valley were mostly planted with sugar cane. The Cosma lands are farmed with some of the same crops today and are still possessed by community members and extended families, while the haciendas have been replaced by the San Jacinto sugar company.

Figure 1.7: Santo Toribio's written descriptions of the Jimbe/Canchas area from 1605.

By the 1850s, the area which made up the majority of the Cáceres District was under control of the Jimbe Hacienda system, one of the most productive Haciendas in the Cordillera Negra (Thurner 1997). The Jimbe Hacienda expanded from Ráyan, down to near Moro, at about 1000 masl, covering a large portion of the Jimbe watershed (Thurner 1997: 86). After several land disputes regarding communal lands and the hacienda leased lands, the “Jimbe Pueblo” was finally able to permanently establish legal claims to their communal lands—establishing the “Distrito del Cáceres” in 1886. Meanwhile the Jimbe Hacienda owner, Mr. Cartright, continued to own the hacienda lands from Salitre down to the Moro pocket (Thurner 1997: 88). Cosma was included in the District of Cáceres boundaries at this time (in the Santa province), and it is during this period that the modern day political boundary was established between Pamparomás, and the associated separation from the Huaylas province, and Cosma.

While historic maps and archaeological sites illustrate that other centers existed at the time the Spanish arrived in Ancash, historic documents show that Cosma was the first town established
in and around the Jimbe area during the Colonial Period (Gambini 1975). The relatively early emancipation of Cosma from the established hacienda systems might have contributed to a sense of pride associated with the local topography, allowing for native inhabitants of the area to take advantage of their own agency during the Colonial era. According to the historical documents, during the 1700s, 16 indigenous men from 12 separate family groups petitioned the crown and purchased the Cosma lands for themselves. Records indicate that in 1714, Cosma was purchased by local inhabitants of the basin as an estancia while the rest of the district lands would fall under the control of the Jimbe Hacienda. While other towns in the region were still controlled by the Jimbe, Motocachy, and San Juan Haciendas, the people of Cosma (which is composed of five smaller communities; Cosma, Collique, Guadalupe, Canchas, Miraflores and San Pablo) were able to possess their own lands, and regulate their own public works and community through kinship bonds and elected “pedestrian mayors.” This system of “independent smallholders” was referred to as “estancias” or “hemmed in hamlets,” which included elected mayor (alcalde) authority figures for each estancia (Thurner 1997: 91). These communities participate in reciprocital labor exchanges through kinship bonds, especially when it comes time for house building or repairs and harvesting. Each of these small communities is located on or near the prehistoric monuments which comprise the Cosma Archaeological Complex, and people from these hamlets identify and engage with the prehistoric landmarks in different manners.

Along with this early founding and relative early independence from the hacienda system, the annual patron saint’s festival is the largest for the district². This festival, in honor of Cosma’s patron saint of San Lorenzo, or Saint Lawrence, takes place August 8th-11, each year. People come in from

---

² This was determined by speaking to spectators/outsiders who came to Cosma for the annual festival, as well as local people from neighboring communities that host their own saints’ festivals. Even in the district capital of Jimbe, there is talk of the “Cosma festival” throughout the year being one of the biggest and most entertaining for the district.
all over the region, and family members who now live in Chimbote, Lima, the United States, and Europe will often fly in for the week of festivities. The week-long party includes castillo fireworks, nightly dances, daily (and nightly) drinking circles, a live brass band, soccer matches, bull runs, indigenous dancers (danzantes), and a popup market which forms in the town’s central plaza. In addition to this market, food vendors come in from Jimbe, Chimbote, and Pamparomás, and numerous local houses open up menus to feed the number of non-locals who come in for the event. It is during this time that the small village of about 100 people expands to a bustling community of hundreds of people. The houses that sit empty throughout the year are re-inhabited by distant family members, former owners who now live elsewhere, or are rented out as hospedajes to visitors. This description of the festival showcases the importance of the Cosma community, despite its small size and isolation.

1.2 Research Questions

Nepeña is a small valley located in north central Peru that took part in major cultural developments during the late Initial Period (1800-900 BCE) and Early Horizon (900-200 BCE). Since the original work of Julio C. Tello (1933, 1934) at the temple complexes of Punkurí and Cerro Blanco, has occupied a special place in the study of interregional interactions. Within the last two decades, archaeological research has brought significant new data to help reassess the sociopolitical climate after the decline of Chavín and Cupisnique’s religio-political influence (Chicoine 2006; Ikehara 2016; Shibata 2011). While research had traditionally focused on the Early Horizon, earlier, Preceramic elements within Nepeña are still poorly understood. The valley was originally surveyed by Donald Proulx in 1967 and 1971, with a follow-up survey conducted with his doctoral student Richard Daggett between 1979 and 1981. Daggett returned to pursue survey work of the middle-upper valley as part of his PhD dissertation (Daggett 1984). More recently, Hugo Ikehara (2016) conducted a full-coverage survey of the Moro pocket, located in the middle Nepeña Valley. Additional survey work
was directed by Alexander Herrera and Kevin Lane within the Salitre and Loco branches of the upper valley, leaving much of the Jimbe branch unexplored. Proulx and Daggett’s research ended within the town of Jimbe, a marker they considered part of the upper valley zone. Today however, the town of Jimbe is classified as the start of the upper valley by current researchers. This area drastically increases in elevation shortly after leaving Jimbe to the north, east, and south. For the whole of the Nepeña Valley, research conducted in the past has focused on Early Horizon developments. With the exception of Pañamarca (Trever 2017), a Moche site located in the lower valley, and the current excavations taking place at the Late Intermediate Periods mounds of Pan de Azúcar, a current gap exists in our understanding of the Preceramic in Nepeña. My dissertation study focuses on questions to help alleviate some of these research gaps and explores ritual landscapes, persistent places, and the religious networks that influenced their developments. The major empirical questions addressed in the remainder of this dissertation can be broken up as follows:

1. What is the chronological and spatial sequence at the Cosma Complex? During which chronological phases were people actively using the basin? What were the use activities during these phases? Daily utilitarian use, funerary, or ceremonial?

2. What is the sociopolitical role that second tier/ancillary centers play on a regional scale in terms of inter-regional religious interactions?

3. How do persistent places form, and how are they maintained through time? Does Cosma meet the criteria for a “persistent place,” and how were the people of Cosma able to continually maintain Cosma’s position of influence as surrounding, more powerful groups came in and out of power?

4. Can Cosma be included in pilgrimage models? Specifically, pilgrimage as costly signaling and regional cults?
5. How was Cosma integrated into Kotosh-Mito religious networks during the Late Preceramic? What does Cosma’s location contribute to our understanding of Late Preceramic religious developments?

In order to answer these broad questions, a series of more specific questions can be developed with the following associated material expectations:

1. How does Cosma relate to cultural developments in Nepeña, and the broader coastal and highland traditions in Ancash from the Preceramic through Early Horizon? How was communal identity materialized at Cosma? Did ancient Cosmeños see themselves more in line with highland groups, coastal communities, or as more independent from regional developments? Did their identity change through time as interaction networks shifted with the development of regional movements, traditions, and/or polities?

For the lower valley and Moro pocket, work conducted by Chicoine (2006, 2010) and Ikehara (2010a, 2010b, 2015) indicate a much more complex scenario than Proulx originally predicted. Here, polities of different levels of sociopolitical integration and complexity interacted with each other at least by late Early Horizon times (Ikehara and Chicoine 2011). Although recent work has elaborated on the interactions and complexity taking place in the lower valley and Moro area, little is still known for the area beyond Moro into the Jimbe and Salitre branches. The current insights of our understanding of upper and lower valley territorial boundaries stem from the Early Intermediate Period (200 BCE-600 CE) and Donald Proulx’s early survey work (Proulx 1982). His study distinguished architectural and ceramic markers between the highland Recuay culture and coastal Moche. Meanwhile, Proulx’s observations have yet to be tested through excavation work in the upper valley.
Shibata’s (2010, 2011) refined ceramic sequence for the lower Nepeña Valley has helped to better orient the original survey work and settlement patterns of Proulx (1968, 1973, 1982, 1985) and Daggett (1984, 1987) for the Initial Period and Early Horizon, specifically the period between 1500 and 150 cal BCE. Unfortunately, there is no ceramic sequence for the Upper Valley zone east (higher up valley) past the town of Jimbe. Fieldwork in the Cosma basin as part of this dissertation helps establish a ceramic seriation and chronology for the upper valley zone, while comparing it to the sequences occurring in the lower Nepeña and adjacent Casma and Santa Valleys. By establishing a sequence in Cosma, we can determine the degree to which Cosma people were integrated into the overall Nepeña Valley system, as well as the levels of stylistic similarities with the neighboring Casma, Santa and/or Callejón de Huaylas areas.

Recent work at the sites of Caylán (Chicoine and Ikehara 2014), Huambacho (Chicoine 2006), Samanco (Helmer 2015), Huaca Partida (Shibata 2011) Cerro Blanco (Shibata 2010), Kushipampa (Ikehara 2010b) and the Moro Pocket (Ikehara 2016) over the last two decades point to the existence of multiple cultural traditions and spheres of interaction during the first millennium BCE. Following the demise of Chavín and Cupisnique influences and the associated abandonment of the ceremonial complexes of Cerro Blanco and Huaca Partida, at least two different cultural trajectories can be distinguished in the middle and lower valley, respectively. Lower valley settlements at this time focused on densely packed urban centers focused around the sites of Caylan, Samanco, and Huambacho. Middle Valley complexes however were defined by the nucleated hilltop settlements which were found throughout the Moro pocket (Chicoine and Ikehara 2010b; 2014). These differing traditions are illustrated by distinct settlement patterns, spatial distributions of sites, and different architectural traditions and ceramic styles. Little however
is currently known from the area beyond the Moro Pocket, especially the Upper Jimbe area located in the Quechua ecozone. This research builds on the work of previous Nepeña Valley researchers and is the first to excavate a site in the upper Jimbe valley to establish a chronology for the area. Additionally, work in Cosma sheds light on Preceramic interaction networks, through the lens of one large Preceramic center. Work in Cosma will help integrate our understanding of periods other than the Early Horizon in Nepeña Valley research.

Through mapping, excavation, and surface collections, the Cosma project compares styles in architectural and ceramic remains and establishes a chronological framework for the upper valley needed to understand the culture history and function of the different archaeological components at the site. Ceramics, fancy wares, and forms of ritual buildings are also examined to determine Cosma’s role in regional interaction networks and how that role may have changed through time.

This dissertation looks at technical as well as decorative ceramic styles (see Ramón 2008) in order to distinguish potters’ practices and preferences through time. It is possible that the Nepeña Valley and corresponding sierra zone can be a case of “extended verticality” (Brush 1976: 13), in which “the size and gradients of the valley allowed for communities to disperse themselves over the entirety of the landscape.” Through analysis of ceramic wares and architectural styles, “identities” are teased out in differing degrees in order to understand the economic, social, and religious practices materialized at Cosma from the Preceramic Period through the Early Horizon.

Additionally, social interactions are investigated through comparative and spatial analyses. A spatial analysis study allows researchers to compare sites with similar ceramic
wares, burial traditions, and ritual architecture. This study examines different scales of interactions including local, inter-community, regional, and inter-regional networks. I hope to explore the extent to which Cosma tapped into a large-scale, regional phenomena and the role of religion and pilgrimage in such processes (Topic and Topic 1983).

2. Construction, use and perception of the Cosma landscape: Why was a large center constructed in an isolated basin? What was the original purpose of building a large Pre-ceramic center in a geographically isolated location?

The persistent place model may explain Cosma’s initial founding in the basin, on a flat expanse of fertile land at the headwaters of the river. As Schlanger explains (1992), persistent places do not only function due to landscape and resource quality, but are typically established due to the remnants of previous human activities, which contribute to attracting reuse and reoccupation and structuring the activities associated with the subsequent occupations. Later referred to as “emplacement” by Rodning (2009), these acts of community attachment through landscape modification, architecture, formal planning and burial practices can be seen throughout the history of this region. The Andes have long standing tradition of ancestor veneration (Lau 2011). As such, the cemeteries, and tombs associated with special, ancestralized sites can add to their strength and persistence.

For Cosma, I postulate that the landscape quality came in the form of the flat, expansive basin combined with access to the headwaters of the river, an annual water flow, and a warm temperate climate. Secondary elements of landscape quality may have come in the form of protection by the three ridges/mountains that surround the valley and the location of the basin in a zone between the highlands and coast. Originally a center of local importance, Cosma could have become a
secondary node with ties to a primary highland center through ties to the Kotosh-Mito tradition during the Late Preceramic.

Along with persistence, periods of hiatus, and re-occupations, the project will examine constructs of social memory and perception and how future generations may have perceived of these ritual structures by the way they organized themselves across the landscape (Stanton and Magnoni 2008). Testing for persistent place, abandonment, acts of emplacement, and social memory were conducted through field excavations, mapping, and surface survey. These methods allow for establishing a site chronology and understanding the use period of the Cosma basin. Surface survey was especially important for establishing the full chronological sequence of the basin, as well as the time periods each of the mounds and architectural features were used.

3. How was Cosma integrated into Kotosh-Mito religious networks during the Late Preceramic? What does the location of the Cosma complex outside of the traditional highland Mito territory contribute to our understanding of Late Preceramic religious developments?

Excavations at Cosma shed light on inter-regional interaction networks, but also on early highland Preceramic religious developments, specifically those of the Kotosh-Mito tradition and the transition of private ritualized structures to the more public and spectacular Chavín cult. This study has brought to light a large, Late Preceramic ritual center with ties to the Kotosh-Mito tradition of the central highlands. Prior to work in the Cosma basin, only seven centers associated with Kotosh-Mito rooms have been explored in detail. Of these, all but two (La Galgada, el Silencio) were located within the highland valleys, Callejón de Huaylas and Conchucos. Adding Cosma to the database of Kotosh-Mito centers expands on our
understanding of the architectural traditions, ritual, and sequence of this poorly understood tradition.

4. Does Cosma fit into the “pilgrimage as costly signal model?” What does this say for peripheral religious centers?

Building on Kantner and Vaughn’s (2012) paradigm on pilgrimage as costly signal, this dissertation explores the place and role of Cosma as a ritual religious center. The model of costly signaling has so far been applied to large primary centers, such as Cahuachi (Silverman 1988), a pilgrimage site for the Nasca of Southern Peru, and Chaco Canyon for the pre-historic Pueblos of the American Southwest. Research at Cosma expands on our knowledge and understanding of secondary, or smaller scale pilgrimage centers tied into larger networks.

Excavations at the mounds have established the kind and function of ritual architecture present in the Cosma basin. Exotic trade items, ritual paraphernalia, and any fineware vessels would speak to the extent of Cosma’s influence in existing religious networks during the Early Horizon. The examination and mapping of architectural components and the study of ceramic design along with the application of GIS to the spatial alignment of the archaeological elements within the Cosma basin provide an empirical framework with which to assess more abstract concepts such as pilgrimage and inter-regional interaction.

1.3 Organization of Chapters

The remainder of this dissertation presents and discusses the results of fieldwork at the Cosma complex, followed by the analysis and interpretation of various lines of evidence to examine and address the research questions mentioned above. Chapter 2 explains the theoretical approaches of
persistent place and pilgrimage as costly signaling. It delves into observed patterns of regional pilgrimage cults and known pilgrimage centers in the Andes. The Cosma Complex is then discussed to showcase the findings which align with definitions and models of pilgrimage patterns. Chapter 3 begins by describing the unique geography and climate of the central Andes. Following this, it presents on the specific geography and ecology of the Nepeña Valley as a broader system before focusing in on the climate, historic founding, and topography of the upper valley and Cáceres District, where Cosma is located. Additionally, the history of research and excavation in the Nepeña Valley are reviewed.

Chapter 4 presents models of social complexity and the earliest centers exhibiting monumental architecture. This chapter then discusses the different architectural trends in ritual structures through time and region. These sites are presented both chronologically and through architectural patterning so that the ritual sequence at Cosma can be understood on a comparable level.

Chapter 5 describes the different sites documented in the initial pedestrian survey of the Cáceres District. This chapter provides detailed accounts and locations of each site visited during the broader survey. The remainder of the chapter focuses specifically on the documentation of the Cosma basin and the different sites and isolated features documented throughout the Cosma complex.

Chapter 6 follows with an in depth account of the 2014-2016 excavations. Excavations took place within three site sectors, and surface survey was conducted throughout the basin. First covering methodology and archaeological permitting, Chapter 6 breaks down the excavations by site sector and occupational periods by focusing on excavation areas. Three major areas were sampled through excavations: (1) Acshipucoto, (2) Kareycoto, and (3) Kunka. The first two display evidence
for Late Preceramic temple constructions and mortuary reuses during the Early Horizon and later in prehistory. The Kunka sector, meanwhile, appears to have witnessed a more intense occupation during the Middle Horizon and Late Intermediate Period.

Chapter 7 describes the material remains associated with the different excavation contexts and structures documented at Cosma. The chapter presents photographs, figures, drawings, and tables of carbon dates and archaeological materials, specifically ceramics, lithics, and fauna, as well as the osteological remains. Following the material descriptions, the occupational sequences and functions of each sector are summarized and discussed based on the results from the excavation and survey.

Chapter 8 revisits the Kotosh-Mito tradition and the Late Preceramic Period in light of the Cosma project. A discussion of the implications of a Kotosh-Mito center outside of the traditional arena for this highland tradition is discoursed—specifically how Cosma ties into coastal and highland variants. It presents and debates the nomenclatures and classifications of these ritual structures and what the Cosma complex adds to the existing debate.

Finally Chapter 9 synthesizes the occupational sequence, site function, and theoretical framework into a conclusive argument. Future research, goals, and contributions of the study round out this final chapter.
CHAPTER 2: PERSISTENCE, PILGRIMAGE & CRAFTING PLACE

This chapter examines the geographic setting of the Cosma Complex and the theoretical implications associated with the concept of “place.” I am especially interested in the way that place may influence or structure both visitors and residents to interact with each other and the surrounding landscape during pilgrimage and other religious encounters. While some Andean archaeologists have focused on social and communal memory (Hastorf 2003; Hurtado 2015; Marcone and Lopez 2015; Warner 2010) this chapter explores persistent place models. Social archaeologists have examined the power imbued in social memory as reflected in the material record; however more landscape based approaches have focused on the inherent qualities of specific places over the longue durée.

2.1 Persistent Place

The concept of “Persistent Place,” was first developed by archaeologist Sarah Schlanger (1992) with her work in the Southwest United States. At the most basic level, persistent places are locations “repeatedly used during the long term occupation of a region” (Schlanger 1992: 92). This limited definition could refer to a number of archaeological sites. To better define the broad range of sites this definition encompasses, persistent places, more specifically, are formed in two parts:

1) Their landscape quality as ecological resource, like proximity to sources of water, fertile soils, etc. (Purtill 2012).

2) The socio-symbolic qualities that develop through ritual or ceremonial activities, which through time structure conceptual views of the landscape (Knapp and Ashmore 1999; Purtill 2012). This has been referred to by Christopher Rodning (2009) as “emplacement,” or the practices by which a community attaches itself to a particular place through formal settlement plans, architecture, burials, and other
material additions built into the landscape.

The theoretical framework of persistent place (Littleton and Allen 2007; Moore 2010; Purtill 2012; Schlanger 1992; Thompson 2010), offers a characterization for specific locations which encompass the totality of environmental, historical, and landscape qualities of a place and the means by which these elements influence the people who have lived there. While work in the last couple of decades in landscape archaeology has focused on collective and social memory, the persistent landscape model follows a different approach. It postulates that a place can continue to persist even though groups of people may not (either through periods of abandonment, replacement, or colonization). Landscapes, specifically those with monumental architecture are embedded with symbols which then attract similar but new stories of design (Littleton and Allen 2007; Rodning 2009; Schlanger 1992).

The significance of the landscape exists because these symbols encourage a shared model of how to occupy and react to each setting. Instead of specific knowledge passed down or stemming from social memory, a ritual praxis is created in response to the specific persistent place (Moore 2010).

To align with this consideration of the different non-human actors which can shape ritual and culture, I also incorporate what Kanter and Vaughn (2012) have described as “pilgrimage as costly signaling.” Drawing on these two interpretive templates may help to enlighten an understanding of Cosma’s isolated locale and its large size and persistence as a center of importance for the region. Often, pilgrimage destination centers are arenas for multiple cultural and ethnic groups to meet in a neutral setting (Kantner and Vaughn 2012). Through the results of excavation and historic research, this dissertation examines how the Cosma landscape served as a palimpsest and how the collection of past elements within the basin helped shape and reinforce the space for the promotion of successive ceremonial traditions.
Preliminary excavations in the Cosma basin have illustrated that monumental construction began at least by 2892-2636 cal BCE (2-sigma). Subsequent resettlement in the basin and on the ridge tops at times revisited and at times ignored the two large mounds that dominate the centerline of the basin. To understand the long use of the Cosma basin, a persistent landscape model can be applied. As Moore (2010) suggests, landscape symbols (made up of mounds, sacred mountain peaks, lagoons, w’akas, huanca stones, etc.) have the ability to attract similar types of interactions and stories, because a model is followed on how to occupy and act within their space. These monuments are large and permanent ways to express a group’s ideology, but they also anchor in a specific place in a regional and sacred landscape through permanence and transcendence. The meaning then is created not through social memory, but through praxis (Moore 2010). As Demarrais et al. (1996:19) propose, “Monuments are more permanent expressions of the ideology that links a group to its territory. Although the meaning expressed in a cultural landscape may change through time, the monuments nevertheless strengthen the association of a group and a place.”

Through the symbolic power present and history of rituals that took place in the Cosma basin, a sacred resource was tapped by the people who continued to remake and engage with the monuments and other landscape modifications in the basin, effectively becoming a persistent place (Thompson and Pluckhahn 2010). This pre-dispositioned, structured or conditioned the people within the basin to act, or respond to their environment in certain ways (Bourdieu 1977). These point towards what Yi Fu Tuan (1977) and other geographers have described, but with an added temporal dimension which allows for unconformities in social memory. From such a standpoint, Cosma can be seen as historically created through the coordinated acting of both residents and outsiders visiting the center for pilgrimage, trade, and more.

Tuan (1977) has suggested that differences are created between space and place by the extent
in which meaning is ascribed to a specific area. Meaning is derived in two different ways: in a direct or intimate way, or through an indirect route by using mediating symbols (Tuan 1977). At Cosma, these mediating symbols may have taken the form of the large, ever-present platform mounds in the basin, as well as the placement of chullpa, graves, and machays along footpaths leading into certain site sectors.

With this framework of praxis and persistent place, work in Cosma can illustrate how the landscape through structuring ritual practice, and not necessarily collective memory, may have helped shape long term landscape use in the basin. Through archaeology we can ground these practices in a real-world location, replete with landscape features, archaeological monuments and the modern community which form a place for these persistent places to occur. This provides a framework structured by a resource. In Cosma this could be access to the headwaters of the river and the fertile agricultural lands. The idea behind persistent place suggests that just because the earlier vestiges at Cosma had to do with a ritual life that is now lost, the subsequent demonstrations do not necessarily follow through acts of remembering, but they are informed and structured in ways by the earlier monuments on the landscape.

2.2 Persistence and Pilgrimage

Cosma’s persistence may in part be due to its functionality as a pilgrimage center during its peak periods of use, specifically the Late Preceramic, Early Horizon, and Late Intermediate-Inka Periods. This section examines theories devised by anthropologists and archaeologists with regard to the purpose of ritual pilgrimage and how pilgrimage centers develop. I highlight important pre-Hispanic pilgrimage centers in the Andes, utilizing them to create a model for identifying pilgrimage traits at the Cosma complex. The most famous of these pilgrimage centers include Chavín de Huántar, Cahuachi, Pachacamac, Yauta, and the Islands of the Sun and Moon. With these centers in mind, I
discuss models on how to determine if a site functioned as a pilgrimage center through archaeological data.

Pilgrimage as costly signaling evolved out of earlier costly signaling models in animal and behavioral sciences. It has been described as the way religious adherents “display” or “signal” to others their religious devotion or affiliation in order to continue to benefit from being a member of that social order (Bliege Bird and Smith 2005; Kantner and Vaughn 2012; Power 2016). In pilgrimage studies, costly signaling is a model, laid out by John Kantner and Kevin Vaughn, that looks at approaches to pilgrimage sites as these “arenas of contestation.” Their work focuses specifically on the sites of Chaco Canyon in the Southwest US and Cahuachi in southern Peru. Costly Signaling is utilized as a method to deter “cheaters” from deceiving others into thinking they are a member of a specific order so they can receive the benefits associated with membership of that group. If the cost of the signal is too high, only those members who truly adhere to a set of beliefs would take part in the signaling. It is an honest attempt/way to show devotion to a religion, cult, or organization. In short, this model suggests that the act of pilgrimage in itself is a costly signal, as it costs energy, time, and resources to reach a destination. Salomon (2017: 43) has referred to this as “costly communications,” and uses what he calls “loyalty examples” as such: self-flagellation, cutting off bits of the body, making exhausting pilgrimages, abstaining from sex, embracing poverty, giving expensive donations, and other seemingly irrational mortifications. Pilgrimage then can be seen as a commitment to the “collective virtual entity.” Pilgrimage may be seen as a socially positive act, but it can also be seen as a negative. These acts not only increase the trust between members (whether related or not), but the negative aspect can create an “imagined, transcendent, brotherly whole, [which] also heightens the distinction between ‘us’ and ‘them’” (Salomon 2017: 44).

Additionally, the pilgrimage center in itself is a costly signal, as it costs resources and labor to construct—and is an honest and costly signal to display power and wealth to followers and outsiders.
Typically these centers spring up in times of crisis, or conflict, when there is heterogeneity, or competition for followers, trade networks, and other resources (Kantner and Vaughn 2012: 69).

Pilgrimage itself is considered the ritual movement of people, typically outside of their home territory and towards a regional shrine which is mutually revered for the people who visit it (Poole 1991). Despite significant research on pilgrimage in the social sciences, its archaeological study has remained limited and focused mainly on the physical remains of pilgrimage centers on the landscape (Bauer and Stanish 2001; Kantner and Vaughn 2012; Silverman 1994; Wesler 2012). Pilgrimage can be broken down into two main parts. The first is the journey, or the ritual movement of individuals or groups outside their communities to a regional shrine or center. The second part takes place once at the destination point or center itself (Kantner and Vaughn 2012; Poole 1991; Sallnow 1987; Wesler 2012). A destination is perceived as part of a sacred landscape, but is not always associated with monumental architecture. For example it could take the form of a lake, a rock outcropping, and/or a glacial mountain peak. The archaeological remains of pilgrimage are more often seen within these destination centers; therefore, this section will mainly cover the second category of pilgrimage (destination centers).

Historically, the theoretical framework of pilgrimage has fallen under one of three main models. The first is the “integrationist paradigm,” which is based on Durkheim’s functionalist approach to pilgrimage (Kantner and Vaughn 2012: 67). Broadly, Durkheim’s approach to pilgrimage argues that it functions to serve as a collective or group identity. This model surmises that centers of pilgrimage developed and continued to exist because they functioned as a cohesive social mechanism, or the social glue, creating a sense of community and solidarity (Durkheim 1912).

A second model of the pilgrimage process is the Turnerian Model. In the book *Image and Pilgrimage in Christian Culture*, Turner and Turner (1978) apply the approach developed in *The Ritual
Process: Structure and Anti-Structure (Turner 1969) to the study of pilgrimage. Expanding on the work of van Gennep (1909[1960]), Turner examined pilgrimage as a rite of passage (an act specifically designed to be “outside” of daily life). During these rites, which Turner called anti-structure, participants leave behind the normal social structures, and form a state of communitas, or “a strong sense of unity among ritual participants that transcends the daily differences of their social life, a spontaneous and ‘sympathetic’ sensation of mutual ‘fellow-feeling’” (DiGiovone 2011: 247; Turner and Turner 1978: 127).

The third and most recent models are known as “Contestation models.” These formulate that pilgrimage is actually utilized to “reinforce social boundaries and distinctions,” contrasting the Turnerian approach of communitas and anti-structure. John Eade and Michael Sallnow (2000) were the first to synthesize the contestation argument by looking at Christian Pilgrimage, where they posited that instead of creating unity between different social groups, pilgrimage was based on, and constructed through, acts of contestation. Pilgrimage centers, then, serve as “arenas of contestation,” or places where different social, political, and religious discourses can be actively and publicly contested. As Sallnow (1987: 29) has previously written, pilgrimage to central shrines or their related local outposts brought together people from several different communities who may have been seeking “protection, deliverance, or oracular pronouncements of the deity.” These shrines or centers for pilgrimage, however, have the ability to grow and shrink in popularity through time.

It is pilgrimage which can provide direct access to the sacred/religious to anyone who chooses to participate despite their location. Pilgrimage is “person-bound” and supracultural and can transcend geographies and social frontiers. However, the sacred must be “tapped” or reached at a particular place in a landscape, which is typically a shrine, or another form of “anchored physical space (Sallnow 1987). Middle range cults and the pilgrimage centers they function around define
their own regions and forms of nodal organization (Werbner 2003). Regional cults then are organized around the ingathering of “elective groups” from specific towns, villages, or political/administrative communities. Because pilgrimage centers and their destinations are place bound, they create a unique cultural landscape and topography formed by history and a pattern of the groups of people that exist within it (Sallnow 1987). Werbner’s description on middle-range cults can be applied to Andean pilgrimage where it concerns place-bound religiosity and its “person-bound counterpart,” Sallnow claims.

Regional cults, as explained briefly above by Werbner, are cults that have a farther reach in influence than those of the “little community” but have not reached the status of a major or world religion (Werbner 1977: ix). While Turner postulated that the act of pilgrimages created “an anti-structure,” through the liminal element of the process, Werbner argues that pilgrimages and regional cults exist as “counter-structures” (Turner 1974; Turner and Turner 1978; Werbner 1977: 2003). Despite this difference in interpretation, Werbner agrees that religious pilgrimage produces sacred geographies. It is through pilgrimage and these regional cults that “central sacred places” are established, as a counter-balance to local political entities or units. Regional cult theory then is an attempt to conceptualize a “dynamic” and “spatially alternative focal organization” separate from centrally bounded units based on states (Werbner 2003). This thought is expanded on by Sallnow (1987), specifically in reference to Andean groups, where “focal shrines of pilgrimage are themselves peripheral, typically located apart from administrative and ecclesiastical centers and sometimes in the wild, away from human habitation altogether.” Therefore, the flow of people, goods, services, and ideas focused upon these central areas for pilgrimage are part of the internal movement of the cults, not administrative networks, which can cut across and override important political, economic, or ethnic boundaries (Werbner 1977). This may be the case for Cosma, a community located within an isolated basin away from the main administrative and trade routes connecting the Nepeña Valley
with the highlands.

The next section engages several prehistoric pilgrimage sites in the Andes, in order to further understand how Cosma fits into this costly signaling model. For the cases of Cahuachi and Pueblo Bonito in Chaco Canyon, these centers reached their peaks during times of political upheaval.

2.2.1 A History of Pilgrimage in the Andes. In the Andes, there is an enduring legacy of religious festivals, pilgrimage centers and other things ritual. Archaeological evidence, historic records, and modern ethnographies attest to uniquely Andean pilgrimage rites. For example, both Pachacamac and the Islands of the Sun and Moon not only have historic documentation of their use as pilgrimage destinations but also date back to pre-Inka times (Bauer and Stanish 2001; Eeckhout 2013). Spanish accounts describe fasting by pilgrims at both sites before they were able to access the ceremonial plazas and religious spaces. They were both established by earlier cultural groups and eventually incorporated into important Inka religious sites (Bauer and Stanish 2001; Eeckhout 2004; 2005; Marcone 2000; Stanish 2014). Pachacamac, located just south of the modern day city of Lima, was once home to a wooden oracle statue measuring over 2 meters. The Island of the Sun on the other hand was originally established due to the presence of a stone formation where it was believed “first man” first arose out of Lake Titicaca. Despite their different representation of the sacred, both sites were organized with wide plazas established for pilgrims and their offerings and a restricted access to the sacred. The oracle at Pachacamac could only be spoken to by holy priests of Pachacamac (Eeckhout 2013), and the sacred stone formation at the Island of the Sun, known as the Titikala, was protected by a stone wall and gate with access restricted solely for the priests of the Island (Bauer and Stanish 2001; Stanish 2014).

Offerings at both sites also included exotic goods. At Pachacamac, items from the Amazonian lowlands, including feathers, a monkey burial, and thousands of seeds were recovered.
Additionally, fine ceramics, gold and silver, and textiles were left as offerings by pilgrims. At the Islands of the Sun and Moon, gold and silver llama figurines, fine ceramics and textiles, as well as foodstuffs were left as offerings for the sacred stone. Remains of camelid and human sacrifices were also found at both sites. For pilgrims, the trip was costly in time, resources, and arduous travels through rugged mountainous terrain or the arid desert coast. The oracle and stone formations of Titikala also additionally required substance in the form of offerings which included food, coca, fabrics, and other gifts. Once at the site, pilgrims had to be ritually purified and take part in long fasts before entering any of the sacred courtyards (Bauer and Stanish 2001; Davidson and Gitlitz 2002; Eeckhout 2004; 2005; Marcone 2000; Mayell 2001; Stanish 2014). This falls in line with Kantner and Vaughn’s model of costly signaling, not only in the case of pilgrims making the journey, but for the resident populations at Pachacamac and the Islands of the Sun and Moon. On the other end, constructions of the pyramids, temples, and the large defensive wall around the Titikala, as well as housing for pilgrims while they were at the site are all costly signals for these pilgrimage centers. Additionally, in the case of Pachacamac, the mortuary population was “enormous,” and a necropolis for locals and outsiders was established near the temples. This speaks to the purpose of the site as a significant religious center, not only in life, but also in death, and the sites’ sacredness and functionality as a persistent place.

Sallnow uses the oracle center of Pachacamac as one of his main examples for a central shrine locale—specifically, the long standing use of Pachacamac and continued function through two separate empires, the succeeding Wari group, and then later the Inka. The shrine of Pachacamac, which was most likely never an administrative center of its own standing, thrived through two successive empires as one of the most sacred sites in all of Peru. Oracular shrines of certain ethnic groups, such as Wariwillka also survived successive bouts of state formation and decay (Sallnow 1987).
Cahuachi, located in the Southern Peruvian desert coast is a ceremonial site made up of over 40 mounds with associated plazas. Though the peak in ceremonial function at the center was during the Early Intermediate Period, the site had been continuously occupied since 400 BCE (Baca and Jacinto 2006; Kantner and Vaughn 2012). Archaeologists now believe that Cahuachi functioned as a major pilgrimage center for the Nasca culture (Silverman 1993; 311). Located on the South bank of the Nasca River, the site overlooks several of the large desert geoglyphs known as the Nasca lines. On top of the majority of mounds, platform structures or rooms were built. The site itself includes a “Great Temple,” the largest monument, which measured 150 x 100 m at its base and 20 m in height. In addition to the Great Temple, there is a monument known as the Great Pyramid as well as extensive ceremonial grounds and plazas associated with each of mounds at the site (Kantner 2014; Silverman 1993).

Much of our understanding of the ritual use and function of Cahuachi was taken from Helaine Silverman’s excavations in the 1980s and parallel ethnographic work of the festival town of Yauca, located in the Ica Valley just to the north of Cahuachi. Based on the results of excavation, Silverman (1993: 311) postulates that Cahuachi was a pilgrimage center comparable in pattern (not size) to Pachacamac. While each of the temples established at Pachacamac were provincial temples for specific ethnic groups or polities, the different mounds at Cahuachi served a similar purpose, specifically as huacas for different ayllu groups (Silverman 1993: 312). The unity in construction between the different mounds at Cahuachi is interpreted as a function of the different groups visiting the site participating in the same regional cultural tradition. Cahuachi would continue to be a

While “W’aka” and “huaca” are often utilized interchangeably in texts referring to Andean concepts of the sacred (ie. Shrines, mounds, sacred lagoons, mountain peaks (apus), idols, or ancestral places), I will be utilizing “huaca” to discuss man-made pyramidal forms which protrude from the landscape (either adobe, or stone and earth). “W’aka” will be used in this dissertation to refer to all other forms of the Andean sacred.
sacred landscape, even long after its peak pilgrimage use period people returned to leave offerings and burials. Close to the site of Cahuachi in the Ica valley is the sacred shrine of Yauca.

The church at Yauca was established during the Colonial Period, and the town now operates as a modern day pilgrimage center dedicated to the Cult of the Virgen Del Rosario. For the majority of the year, the town lays empty, until early October, when thousands of pilgrims flock in, erecting temporary structures and associated hearths. At the end of each festival, there is a ritual sweeping of the plazas, and the rest of the debris is usually blown away by the desert winds (Silverman 1993: 315). This pattern of rapid ritual use and abandonment led Silverman to propose similarities between Cahuachi and Yauca, including the open plaza spaces, temporary structures (which are illustrated by posthole remains without any true floors recovered), and evidence for lack of domestic debris associated with quick occupation and abandonment (Silverman 1991: 1993). Like Cahuachi, there were similarities in plaza use and configuration at Yauca (Silverman 1991: 223). In addition to this, Silverman has compared a “goblet” recovered from Cahuachi to drinking glasses broken within the plaza at Yauca.

The majority of ceramics recovered at Cahuachi were fine wares, not utilitarian, painted with Nasca supernatural beings, masked figures, and non-local animals of the Pacific Ocean and Amazon. As in Pachacamac, the site was also utilized as a sacred cemetery, as many of the mounds and surrounding hillsides were utilized for interments. Evidence for burials at Cahuachi continued well after its use as a pilgrimage center into later Nasca periods. These later burials illustrate Cahuachi’s persistence as a sacred center on the Andean landscape (Kantner 2014; Silverman 1991: 1993).

The center of Chavín de Huántar (discussed in further detail in Chapter 3) is located in the Peruvian central highlands and dates to the Initial and Early Horizon Periods, most likely between 1200 and 400 BCE (Burger 1992; Lumbreras 1974; Tello 1943; Rick 2005). The site is strategically
located on routes linking the Amazon and the Andean highlands. The people who constructed the center utilized religious themes and iconography from throughout Peru, borrowing architectural elements from earlier traditions on the coast, in what archaeologists believe was an attempt to attract followers. Archaeologists now appear to agree that Chavín peaked as a ritual center between 800-500 BCE, during what was referred to by Burger (1984) as the Janabarriu Phase. Janabarriu style ceramics were also found at centers throughout the Andes, corroborating what was seen at the primary center of Chavín (Burger and Matos 2002). While Burger’s work centered on the domestic sectors of Chavín, John Rick’s focus was on the monumental temple itself. Paired with improvements in radiocarbon dating and the analysis of architectural seams, the latest chronology places its height as a pilgrimage center from 1200 to 500 BCE.

Research has shown that Chavín de Huántar was built in several phases, broken up into what is known as the Old and New temple (Burger 1981, 1984, 1992, 1998; Rick 2005, Rick et al. 2009, Rick et al. 2011). The Old Temple housed the “God,” or Oracle of Chavín de Huántar who was represented by a 4.53 m tall granite sculpture. The deity itself is depicted as a fanged anthropomorphic figure and is found underneath the old temple in a labyrinth of tunnels and underground galleries (Burger 1992: 136). It is believed that those participating in rituals at Chavín would first enter a hallucinogenic state before entering the labyrinth of galleries, where jet mirrors were used to reflect and obscure light, and strombus shell horns created a confusing sensory experience (Rick and Lubman 2002; Rick 2006).

Artwork at Chavín points to processions, shamanic rituals of transformation linked to the use of hallucinogenic substances (most notably the San Pedro cactus), supernatural and anthropomorphic figures, felines, serpents, and exotic animals mainly stemming from the Amazon (Lumbreras 1970; Rick 2006). Like Pachacamac and the Islands of the Sun and Moon, excavations
revealed that as Chavín grew, additional plazas were constructed and ritual space became more restrictive. Additionally, ritual paraphernalia and exotic trade items have been found throughout the underground galleries.

As Chavín's popularity grew, most notably during the expansion and construction of the New Temple, other sites throughout Peru started to adopt Chavín style ceramics, iconography, and monumental constructions. Many sites throughout Peru took on Chavín characteristics, including imitating the sunken circular plaza, U-shaped mound constructions, and underground galleries (Burger 1992: 191). Despite its prominence as a religious center and proximity to trade routes, the complex itself is difficult to access off of tumultuous river and mountain passes. This fits into Kantner and Vaughn’s costly signaling model, as pilgrims would have had to first travel to a site located in a difficult and out of the way location. Again resource acquisition for oracle offerings are part of the signaling. Chavín was also consistently occupied in its use since the Preceramic, as evidence for a Kotosh religious temple has been excavated at the site. While a Kotosh-Mito structure has been uncovered at Chavín de Huántar, this structure dates later, to the Early Horizon, and not the Late Preceramic (Contreras 2010).

For Chavín de Huántar and the Early Horizon Period, the Chavín cult generated an extensive pilgrimage network for interregional exchange in the Andes. This exchange was not focused around political units, but religious routes (Sallnow 1987). Richard Burger has suggested Chavín de Huántar was the central pilgrimage center for the regional cult of Chavín (Burger 1988: 113; Burger 2014). The Cosma complex then may have been a node in this extensive Chavín network.

In summary, a review of the archaeological literature on pilgrimage centers as persistent places proves useful in framing archaeological sites in the Andes. I propose that the Cosma
Archaeological Complex represents a significant example of persistence and pilgrimage that developed from the Late Preclassic Period to this day. The following chapter provides a framework to understand the models and theories for the rise of public architecture and monumental constructions in the Andes. While traditional models often include agriculture as a catalyst for the rise of social complexity, alternate models will also be discussed, including the Maritime hypothesis and more communal based “bottom-up” approaches.
CHAPTER 3: A HISTORY OF ARCHITECTURE & PREHISTORIC LANDSCAPES IN NORTH-CENTRAL PERU

In Chapter 3, I provide an overview of the cultural trends and traditions identified by archaeologists along the north-central coast of Peru and the Callejón de Huaylas. The chapter is broken up into two parts, beginning with a review of the current Late Preceramic through Early Horizon and the role investments in monumental architecture plays in the development of communal labor practices, community commitments, and creation of permanence on the landscape. I review the dynamic changes which occurred in the north-central Andes during the Late Preceramic, and I highlight the distinctions between research programs in the coastal valleys versus those in the highland communities. I also examine the implication of cooperative labor and social development. Next, I unpack the crucial Initial Period and Early Horizon. There is a clear divide in the chapter, shifting focus from architecture to ceramic styles and iconography during the Early Intermediate Period through Late Horizon. This disconnect in some ways is an outcome of the cultural discontinuity at Cosma between monumental architecture and domestic use functions at the site.

3.1 The Preceramic & the Rise of Social Complexity

With the refinement of radiometric dating, Andeanists have generally agreed (Burger 1992; Haas and Creamer 2006; Moseley 2001; Pozorski and Pozorski 2005; Shady et al. 2001) that large-scale public works were an important part of social life by at least 3000 BCE. The “Cotton Preceramic,” “Aceramic,” “Late Preceramic,” “Late Archaic,” “Norte Chico,” and “Mito-Kotosh” are all descriptive terms previously developed to bind the temporal span of various early architectural traditions. Evidence for social complexity and relatively permanent settlements are indicated at a number of early sites. Yet, my purpose here is not necessarily to provide a framework for arguments presenting the reasoning behind increasing social complexity, but instead to provide a description of
the results of that complexity in the form of monumental architecture and ceremonial landscapes as it relates to the Cosma complex.

![Figure 3.1: Preceramic centers discussed in this chapter.](image)

Early evidence for communal labor practices as related to religious constructions is found in northern Peru in the Zaña Valley. The Nanchoc tradition has been identified based on early cemetery mounds constructed well before the adoption of agriculture. Dating to 5700 BCE, these mounds are attributed to a group of people who were still considered nomadic, only taking part in incipient horticultural practices on a seasonal basis (Dillehay et al. 1997: 46). The construction and use of the Nanchoc mounds likely came before permanent settlements in the region. Ritual and communal life at Nanchoc involved the extraction of lime and burial of individuals, which was done with a sense of shared purpose that culturally bonded these nomadic groups together to help give
them power as a society (Dillehay et al. 1997: 55). The presence of these small mounds by 5700 BCE illustrates a purposeful attempt by the prehistoric inhabitants to claim ties to the local landscape, despite still being relatively mobile populations, a trend that by 3000 BCE populations have successfully established on a monumental scale.

One of the largest and earliest known Late Preceramic monuments in the Central Andes is El Paraiso. It is located only 2 km off the coast, on the Chillón River. The site, which is 60 hectares, includes 13 mounds, seven of these mounds make up a central group, which form a U-shaped plaza. This U-shaped form has been suggested to be the prototype for the later U-shaped complexes of the Initial Period (Burger 1992). The dates for El Paraiso place its occupation as early as 2300 BCE (Quilter 1985, 1991). The organization and monumental pyramids at the site and at Aspero have been used by Feldman (1980) to argue for a chiefdom level society at least by this time. While El Paraiso is one of the earliest of these monumental complexes, one region in central Peru is known for its surfeit of these large scale religious constructions.

3.1.1 Norte Chico. Norte Chico, or the Little North, has been one of the most informative and influential zones for understanding Preceramic developments on the coast. Consisting of four separate river valleys, (from north to south: Fortaleza, Pativilca, Supe, and Huaura), by the Late Preceramic, at least 30 distinct centers were located within this region (Creamer et al. 2007). Sites among these rivers are situated along the coast as well as inland and include some of the earliest evidence for large scale preceramic monumental constructions, leading some researchers to believe that Norte Chico was the epicenter for innovation and more centralized social complexity within the Andes (Haas, Creamer, and Ruiz, 2005). A plethora of important early sites come from this region, Aspero, mentioned briefly above is one of the earlier and more complex of these centers. Aspero is made up of at least 17 pyramid mounds, six of which were centrally located pyramids forming a
central plaza and measuring up to 10 m high (Feldman 1980). The two largest mounds, Huaca de los Sacrificios and Huaca de los Idolos were decorated with clay friezes, had rooms over 10 m square, and stone walls over a meter thick.

One of the most famous of these early coastal sites which has garnered quite a bit of attention due to its size and early dates is the site of Caral, located 16 km from the coast within the Supe Valley. Caral dates back to 2800 BCE, at the time referred to as “the oldest city in the New World” (Shady 2006). The center includes sunken circular plazas, 25 platform mounds measuring between 10 and 18 m high, a central plaza, architecture which was arranged symmetrically, and numerous stairways as well as a domestic area, taking up a total area of 65 hectares. Eighteen similar sites dating to the same time period can also be found in the Supe Valley, though none are as large as Caral. Because of its size and architecture, Caral is considered by some archaeologists to be the “capital” city of what is now known as the "Caral-Supe Civilization." This “civilization” includes the 18 other Preceramic sites in the Supe valley and other similarly constructed sites in surrounding valleys.

Caral’s inland location made it especially productive for farming cotton and other gourds, beans, and chilies. Cotton was extremely important to coastal societies. It was used for their fishing nets, textiles, clothing, containers, and shicra bags. Their productive farming allowed them to trade with Aspero and the other coastal sites for salt, mollusks, sardines and anchovies. Caral's location was also situated for exotic trade with the highlands, making the center productive enough to outgrow Aspero in size and influence. The relationship between Caral and Aspero has lead researchers to develop the “Cotton for Fish” model to explain the connections between inland and coastal sites. The theory states that cotton and agricultural crops were grown inland at and around sites like Caral. The cotton at least, was traded to people living on the coastal fisher sites, so these communities could make their nets for fishing. In exchange, fish and other marine resources were
traded back to the inland communities to supplement their otherwise plant-based diets (Haas et al. 2005).

As research continues in the Norte Chico region, new sites with earlier dates have been added to the archaeological dataset. The site of Bandurria is one of these centers. Located along the coast in the Huaura valley constructed in a similar pattern and style to Caral, in 2008 it was published that the site dates back to 3200 BCE, earlier than Caral (Chu 2008). Bandurria includes two sunken circular plazas, stairways and other terraced/pyramidal mounds. Additionally, the site of Huaricanga in the Fortaleza valley has come back with even earlier dates around 3500 BCE, making it the earliest in the Norte Chico region. Due to the number of such early dating sites in Norte Chico, several archaeologists have concluded that the beginnings of Andean “civilization” must have started in this region (Haas and Creamer 2006; Piscitelli 2014).

3.1.2 Casma: Sechín Bajo. Another pertinent valley and region for understanding early monumental architecture and developments within the Andes is the Casma Valley. While Casma’s apex appears to have occurred during the Initial Period, antecedents have been noted during the Prece­ramic. One of the earliest sites to date with complex monumental architecture is known as Sechín Bajo. Located 12 km inland from the Pacific coast and composed of three constructed mounds, the corporate construction consists of a mix of stone and adobe elements. Dates from Sechín Bajo are as early as 3600 BCE. These early dates were associated with a sunken circular plaza and a two-meter-tall frieze, excavated by German archaeologist Peter Fuchs (2008.)

The Late Prece­ramic for Casma is known from the centers of Las Haldas, and Huaynuna. Las Haldas, located 20 km south of the Casma Valley has been intensely studied. First reported by Engel as a preceramic site in 1958, research has been conducted by two separate Tokyo expeditions, Rosa Fung, Terence Grieder, Edward Lanning, and Thomas and Shelia Pozorski at Las Haldas. The
site itself was initially reported by Engel to include six terraces, constructed in “the shape of a jaguar” (Matsuzawa and Shimada 1978: 653), and the terracing at the center has been referred to as a “temple complex.” Located only 100 m from the Pacific coast, Las Haldas is composed of midden deposits and a large mound surrounded by a series of smaller mounds (Pozorski and Pozorski 1987: 16). Throughout the different excavations, three separate preceramic midden areas were exposed. Additionally, the Pozorskis discovered a child burial within the preceramic stratum. This burial was flexed and estimated as an individual less than six months of age. It had been covered by boulders at the time of burial (Pozorski and Pozorski 1987). Dates from the Initial Period and Late Preceramic elements at Las Haldas range from 1850 BCE (Engel, 1966), and the Pozorskis’ dates of 795, 1835 and 2010 BCE (1987).

For Las Haldas, pre-temple refuse and architecture (small domestic units with “double faced walls with rubble fill” [Pozorski and Pozorski 1987]) have been dated by the Pozorskis, Matsuzawa, and Grieder as between 1650 and 1190 cal BCE. The main part of the site, which includes the temple terraces, platforms, and mounds previously mentioned date the temple constructions to two distinct Initial Period phases. The smaller circular court and its associated mounds have been interpreted as having been built and in use previous to the large circular court and the main elements of the temple (Pozorski and Pozorski 1987). This temple fell into disuse during the subsequent Early Horizon, and those who were occupying the site during this time ended up utilizing single stone deep walls “like windscreens,” relatively limiting the use of the larger earlier center or the monumental elements of the site (Pozorski and Pozorski 1987).

Finally, the site of Huaynuna, also located on the Casma coast, includes a large midden, domestic structures, and a “substantially terraced hillside structure” that was interpreted as a small temple complex. Interestingly, the Pozorskis have found evidence for two distinct ritual traditions at
this Late Preceramic site. The first included utilizing the temple complex for public/communal rituals, and the second involved a small ventilated hearth structure similar in size and composition to the private ritual constructions associated with the highland Kotosh-Mito tradition (Pozorski and Pozorski 1987, 1990: 17). Huaynuna has been dated to between 2250-1510 BCE (Pozorski and Pozorski 1990: 20).

Similar in settlement and architectural trends to the Huaynuna site, the nearby coastal site of Culebras 1, located in the Culebras Valley, was originally described by Lanning (1967) as consisting of small circular domestic structures. These rooms were interpreted as including “guinea pig hutches” which connected both rooms at the floor level. These were composed of a thick layer of clay. These guinea pig corals were small stone lined tunnels found in semi-subterranean multi-room “domestic” complexes. Lanning’s interpretation of “stone-lined tunnels connecting two rooms at floor level,” may in fact be the ventilation shafts or flues found within small privatized ritual-structures described for Kotosh-Mito. Each complex was made up of two-three houses constructed of stone. Some of these structures included rectangular niches (Lanning 1967: 67). These ventilated hearth structures have also been found in the Casma and Supe valleys, respectively. Lanning’s description of the excavations at Culebras do not mention the location of hearths, central or otherwise, or the number of floors documented. The excavations at Culebras, however, were conducted prior to the excavation of any other Kotosh/Mito complex known to date. Rosa Fung’s synopsis of Kotosh-Mito, however, points out the similarities between the Culebras 1 complex excavated by Lanning and the Los Chinos (also referred to as Los Chimus) site found along the coast in Nepeña (Fung 1988: 76).

3.1.3 Highland Ancash: Kotosh or the Mito Tradition. While the coast saw the introduction of the large pyramid mound constructions associated with sunken circular plazas (e.g.,
Norte Chico area, Casma Valley, Salinas de Chao), the highlands were home to a tradition of a different nature. Here, builders emphasized small privatized rooms with single entranceways (Burger 1992: 51). Known architecturally as the Mito or Kostoh tradition (though originally dubbed Kotosh-Mito by the Japanese expedition), it focused on small, closed temple structures, each with a central hearth, low level benches, and niches along the walls for offerings (Bonnier 1987; Burger and Salazar Burger 1980, 1985). Kotosh-Mito structures have been found throughout the Department of Ancash—mainly in the highlands, at the sites of Kotosh, Shillacoto, Huaricoto, La Galgada, Piruru, el Silencio, Chavín de Huántar and Hualcayan (Bonnier 1997; Bria 2017; Burger and Burger 1985; Contreras 2010; Grieder et al. 1988; Izumi and Sono 1963; Izumi et al. 1972; Montoya 2007; Quilter 1991).

The Kotosh-Mito tradition was originally named after the type site of Kotosh, located in the Huánuco Valley in the central highlands. Kotosh consists of multiple temple mounds, excavated in the 1960s by the Japanese expedition in Peru (Izumi and Sono 1963; Izumi and Terada, 1972). Excavations revealed numerous shrine like rooms, which included interior wall niches and mud-relief friezes decorating the temple walls. Additionally, these rooms included sunken floors with central hearth features. Each room has been interpreted as an individual temple and interestingly, before a room was abandoned it was ritually sealed in a process known as “temple entombment” (Matsuzawa 1972). Temple entombment involved taking sterile soil and rocks to seal off the structure, closing it off completely with a clay capping before constructing another temple over the original. Excavations further revealed that some rooms were re-utilized, repaired, and altered several times before being ritually closed off.

Dates at Kotosh and the nearby site of Shillacoto place their occupational use well within the Preceramic and Initial Period (2000-1000 BCE.) While the sites of Kotosh and Shillacoto were some
of the first of their kind to be excavated, to date the earliest Kotosh-Mito center is the site of Huaricoto, located in the Callejón de Huaylas, near the current day city of Carhuaz. Occupied well into the Early Horizon, the earliest date comes from a carbon sample taken from a central hearth in one of the rooms, which dates the earliest use at Huaricoto to 2430 cal BCE. Excavations at Huaricoto revealed at least 13 different structures with a similar pattern to those at Kotosh and Shillacoto. Burger states that this is evidence of the Kotosh tradition co-existing well into the Early Horizon and functioning side by side with Chavín religious ideology during this time (Burger 1992; Burger and Salazar Burger 1982; 1985). This belief is corroborated by the work of Daniel Contreras (2010), who excavated out a Kotosh-Mito structure, just outside of the site of Chavín de Huántar, in the Callejón de Conchucos. This room was utilized during the Early Horizon period, when Chavín was at its peak.

The other main Kotosh-Mito centers for which the Kotosh and Mito traditions have been defined are Piruru in the Tantamayo River Valley of Huánuco and La Galgada in the Santa River Valley. Originally excavated by Girault, Bonnier continued excavations at Piruru with Rosenberg throughout the 1980s. Bonnier was the first to describe and characterize what she coined “Mito architecture,” distinguishing it from Burger’s classification of the “Kotosh Religious Tradition.” Additionally, she used her work at Piruru to describe what she called “Pre Mito” structures, which like Mito architecture were small-scale ritual chambers, but lacking the split level floors (Bonnier 1997). For more information on the distinction between “Kotosh” and “Mito” please see my discussion in Chapter 7 dedicated to the Kotosh-Mito traditions. At Piruru, fifteen separate structures were excavated. The earliest Pre-Mito architecture at the site dates to 3960±340 years before present (Bonnier 1987), with the Mito phase’s earliest date falling into the Initial Period (3370±60 BP) (Bonnier and Rosenberg 1988; Bonnier 1997:127).
La Galgada located on the Tablachaca branch of the upper Santa Valley at 1,100 masl is known for its dual mounds, Mito style temples, and a sunken circular plaza (a unique addition not present at the other Kotosh-Mito highland sites). The circular plaza links coastal architectural canons with highland components. Excavated by Terence Grieder, the site’s location along major coastal-highland trade-routes may account for its shared styles, as evidenced by a number of exotic trade items recovered from the site (Grieder et al. 1988). La Galgada is to date an exceptional example in its abundance of Mito architecture. The rooms at La Galgada were rectangular with rounded corners and included wall niches, split level floors, central fire features, and single entrances (Grieder et al. 1988). Dates for La Galgada range from 3000 to 1700 BCE, however, the base of the mound and presumably earliest constructions were never reached. The largest mound, known as the north mound, revealed a unique burial tradition not documented at any other Kotosh-Mito centers. As each temple structure was sealed off, it was re-utilized as a burial space, sometimes housing multiple individuals at a time. Access into many of these rooms were kept open for multiple generations, and a shaft or gallery was constructed after the room was sealed in order to keep access open. New burials were continuously added until the room would finally be sealed.

Recently, the sites of El Silencio and Hualcayán have been added to our understanding of the Kotosh-Mito phenomenon (Bria 2017; Montoya 2007). El Silencio is located outside of the highlands, but like La Galgada it can be found along the Santa River at an elevation of 450 masl. Located only 30 km down valley from La Galgada, El Silencio’s ceremonial sector was made up of two platform mounds and a sunken circular plaza. Unfortunately, there are no radiocarbon dates at the site to corroborate the Kotosh-Mito occurrence at El Silencio. Though rooms show evidence for split floors with central hearths, they lack ventilation flues. Some of the rooms also exhibit single floor level rooms with central hearths and flues (Montoya 2007). The structures at El Silencio are rectangular, with the largest room excavated measuring 7 x 6 m in size. Like the sunken circular
plaza at La Galgada, the one at El Silencio has been seen to be a mixing of highland and coastal elements due to its location on a highly active trade route (the Santa River thoroughfare) between the coast and sierra. El Silencio is currently the most north-westerly known representation of the Mito tradition (Montoya 2007: 218).

The highland site of Hualcayán is also located along the Santa River, but in the Callejón de Huaylas. Excavations at the Perolcoto mound have documented Kotosh-Mito style curvilinear walls with dates dating to the Initial Period (Bria 2017). Like La Galgada, however, the Perolcoto mound has two mounded elements on an extended platform and was built in association to a sunken circular plaza. Dates from the sunken plaza date the earliest elements of the site to the Late Preceramic (Bria 2017).

Some of the earliest examples of communal architecture date to the Middle Preceramic period, in northern Peru. By the Late Preceramic Period, the coast as well as the highlands, are marked by more complex communal constructions in the form of pyramid mounds, sunken plazas, and the use of elaborate stone masonry. Several of these Late Preceramic centers were occupied well into the Initial Period and into the Early Horizon, showing these religious centers were important to their respective valleys for millennia. The following section will discuss the transition of several large centers into the Initial Period, and the changes marked by architectural trends and religious complexity during this time.

3.2 The Initial Period

The earliest signs of agriculture and the first signs of sedentism are indicated at many of the preceramic sites just discussed above. While the construction of monumental public architecture and contemporaneous small scale ritual chambers did occur during the Preceramic, there is a clear
expansion of these respective traditions taking place during the Initial Period. This time period is defined by the introduction of ceramic technology and a shift toward permanent settlement.

Figure 3.2: Initial Period centers discussed in this chapter.

structures dependent on plant and animal domestication. Though some sites show evidence for irrigation agriculture during the Late Preceramic (Pozorski and Pozorski 2012), one of the largest distinctions between the Late Preceramic and Initial Period is the escalation in size and the larger number of sites consisting of public architecture. Along with this change, settlement patterns at the time were focused inland rather than directly on the coast, and in association with a more intensive irrigation agriculture as a subsistence economy (Nesbitt 2012).

While coastal Preceramic centers continue to be utilized during the Initial Period, sites which are founded during the Initial Period tend to be located inland roughly 15-20 km from the coast.
Agricultural improvements such as irrigation canals allowed coastal peoples to depend less on marine resources and slowly move farther from the coast into more fertile areas of the valleys that could now be farmed more effectively. Construction techniques also changed dramatically during the Initial Period. Monuments were no longer constructed by small stones carried in shicra or fiber bags. During this period, adobe mud brick construction commonly decorated with plaster and colorful clay friezes are found throughout archaeological complexes. Some of the best examples of these can be found in the Casma and Moche valleys.

3.2.1 The Central Coast. Monumental Initial Period sites extend along the Peruvian coast from Lambayeque south through the Lurín Valley; however, two distinct architectural trends can be classified for the central coast and northern coast respectively. The central coast traditions are classified by monuments or platform mounds arranged in a U-shape, made up of a large temple mound in the center, and long linear mounds on either side of the temple mound. Two of these centers include the sites of Cardal and Garagay in the Lurín valley near Lima. Cardal can be found approximately 35 km south of Garagay and 15 km from the Pacific. A contemporary of Garagay, the occupation at Cardal has been dated to 1300-900 BCE. Cardal’s architectural features include a ceremonial road approaching from the northeast, rectangular enclosures, eight sunken circular courts, and a sunken central plaza. Over 30 stairs lead to the summit of the main pyramid, and like Garagay these stairs are decorated with white clay. An atrium was also found at Cardal, but unlike Garagay’s atrium it was not decorated with colorful friezes. Earlier constructions at Cardal, however, did reveal friezes and more anthropomorphic figures with large canine teeth. Excavations revealed at least 5 stages of construction and “ritual entombment” of the site. In one of the sunken circular courts, offerings were found, including a human skull and a ceramic bottle featuring interlocking snakes.
3.2.2 North Coast Developments. Unlike the U-shape constructions of the central coast, northern coast complexes were constructed as large rectangular terraced mounds with sunken plazas and sunken circular courts, continuing several architectural forms started during the Preclassic. Initial Period monuments include a series of several sunken circular courts and sunken rectangular plazas that were commonly found in association with large flat topped terraced pyramids. Though central coast sites occasionally contain sunken circular plazas—they are often later constructions and built off to the side of the main pyramid—northern coast sunken circular plazas are usually associated directly with the large rectangular pyramids. These differences in construction suggest that the north coast was an independent field of social and religious interaction unlike that of the central coast (Burger 1992; Pozorski and Pozorski 2008, 2012).

For the Casma River valley, several large complexes develop during the Initial Period in association with what has been referred to as the Sechin polity, an Initial Period phenomenon centered in and around the sites of Sechin Alto and Cerro Sechin. Cerro Sechin is near the juncture of the Sechin and Moxeke rivers and approximately 14 km from the Pacific coast. The main construction was composed of a retainment wall measuring 4 m high and flanked by two smaller buildings on each side. A circular depression was originally observed by archaeologist Julio Tello and believed to be a possible sunken circular court (Tello 1956). The outer retaining wall that surrounds the pyramid measures over four meters high and was decorated with over 400 stone sculptures (Pozorski and Pozorski 1987; Samaniego 1980). The sculptures depict warriors, most of them defeated, bound, naked and often bleeding or shown in distress or anguish. Bodies are wounded with their entrails and intestines spilling out, and random arms are present throughout the scene. The larger sculptures depict victorious warriors with arms raised holding decapitated heads. These sculptures are carved out of granite from a quarry behind the site. The iconography is believed to represent either a mythical or historical scene, and the carvings are arranged along the platform wall.
in two columns approaching each other from opposing sides. Excavations at Cerro Sechín have revealed four total construction phases, with the earliest constructions having been built out of adobe, and only in the later stages of construction are the granite slabs added. Cerro Sechín was abandoned by 800 BCE at the end of the Initial Period.

Sechín Alto is another Initial Period monument on the northern coast, located only 2 km from the Cerro Sechín center. Comprised of a large rectangular pyramid mound, five plazas, and three sunken circular courts, it has been radio-carbon dated to 1720 BCE and is believed to have been occupied for a time span of 1000 years. Sechín Alto is known for having the largest pyramid in the new world for its time period, measuring 250 x 300 m at the base and 44 m high (Pozorski and Pozorski 2008: 621). The earliest constructions at Sechín Alto were built with conical adobes and later faced with granite blocks.

Located 18 km inland, the site of Pampa de las Llamas-Moxeke has a long history of study. Originally described by Middendorf, Julio Tello was the first to make a plan map and detailed description of the site in the 1930s (Pozorski and Pozorski 1987). Moxeke was originally described by Tello as a separate site from Pampa de las Llamas, however, the Pozorskis and other scholars believe the two sites are related due to the “basis of proximity, architectural similarities, alignment, and artefactual evidence” (Pozorski and Pozorski 1987: 31). While Tello described the site as belonging to the Chavín phenomenon of the Early Horizon, the main occupation of Pampa de las Llamas’s mound dates to the Initial Period. The Pozorskis excavated the site in 1980, and their nine radiocarbon samples date the complex well into the Initial Period, contemporaneous with the site of Las Haldas (Pozorski and Pozorski 1987: 32). This center is comprised of two large mounds, the mound of Moxeke and Huaca A (Pampa de las Llamas). The mound of Moxeke measures 30 m in height, with a base of 160 x 170 m, and is composed of several terrace levels. This mound was
constructed both of conical adobes and stone. Tello’s earlier excavations uncovered large friezes along the third terrace of the Moxeke mound. These friezes show large anthropomorphic figures wedged between stone “niches.” Like the site of Cerro Sechín, anthropomorphic figures and depictions of trophy heads have also been discovered at the nearby site of Moxeke, also in the Casma Valley. These figures and sculptures discovered at Moxeke include large decapitated heads baring their teeth, anthropomorphic figures wearing tunics and carrying snakes, and carvings of human hands.

Huaca A, which measures 135 x 120 m at its base is a 12 m high construction of quarried stone, and the “occasional” use of conical adobes (Pozorski and Pozorski 1987: 33). While the mound of Moxeke has been interpreted as having a religious function, Huaca A is believed to have a more secular purpose. A large plaza (surrounded by earthen embankments on three sides) measuring 125 x 110 m separates the two mounds. The site also houses a circular court, and over seventy “small mound structures and several hundred small single-and multi-room domestic structures” (Pozorski and Pozorski 1987: 36).

The clustering of large Initial Period centers located in the Casma Valley has been argued by the Pozorskis to be the epicenter of a valley wide polity known as the “Sechín Alto Polity,” named after the Sechín Alto complex. The shared Sechín style iconography, collective architectural traditions such as the standardized “square room units” found throughout these Initial Period sites (and others not mentioned scattered throughout the valley) have lead the Pozorskis to conclude that the Sechín Alto polity was a large centralized administrative state or chiefdom (Pozorski and Pozorski 2011). The square room units will be discussed in more detail in Chapter 7, but it should be noted that by the Initial Period complex cosmological, administrative, and religious institutions were
already in place, laying the foundation and extensive networks for the Chavin and Cupisnique phenomena to take hold through much of central Peru.

One of the major architectural shift trends on the central coast during the Initial Period was the emergence of “U-Shaped” complexes. Archaeologists believe this change of construction, with the opening of the U-shaped plaza facing the mountains and headwaters of the valley, illustrates the change in reliance from marine resources to agricultural resources. It is at this point in time that researchers believe prehistoric people started worshipping mountain peaks, or Apus, a practice which is still practiced by certain Andean groups. The veneration of mountain peaks may date back as far as the Initial Period. According to Carlos Williams, it seems that early coastal U-shaped centers turned their backs on the sea and faced up river toward the important source of irrigation water (Moseley 2001; Williams 1985).

The construction of the U-shape reflects basic cosmological principals and beliefs underlying the religious worship at these centers (Burger 1992; Isbell 1978). In addition, researchers believe these centers were also used for fertility rituals related to agriculture. The presence of spiders/arachnid motifs at Garagay and Cardal is evidence of fertility rituals, as spiders were used in late pre-Hispanic times to predict the onset of rainfall and other agricultural matters. In some parts of the highlands spiders are still used today in similar rituals.

Archaeologist William Isbell has speculated that the meaning behind the U-shaped design expresses the opposing and complementary forces with the cosmos and society. Isbell also believes the central mound represents the synthesis of these two forces. This belief in duality and opposing forces can still be found today among tropical forest groups and was present in the buildings by the Inka (Burger 1992; Isbell 1978).
In sum, the above section has illustrated that the Preclassic and Initial Periods on the coast and highlands both have differing trajectories of development, specifically in the case of public and ritual architecture. While coastal traditions are defined by large scale monuments and public iconography—privatized ritual structures play only a minor role—developments in the highlands focused on small scale ritual structures, which were utilized from the Preclassic through to the Early Horizon. The upcoming section will focus on the period succeeding the Initial, known as the Early Horizon. Previous research on this period interpreted this era of Andean development as a time of homogeneity, under the control of what is known as the Chavín cult or phenomenon. However, more recent work has distinguished a coastal/Cupisnique tradition arising out of the Initial Period and functioning contemporaneously with the rise of the Chavín phenomenon. The subsequent section will try to explain the history of Early Horizon research, while showcasing
Figure 3.3: Chavin and Cupisnique related centers discussed in this chapter.

examples of the coastal architectural variations and interpretations of both these influential entities during the Early Horizon.

3.3 Cupisnique, Chavín & the Early Horizon

The Early Horizon is defined as the time period between 900 to 200 BCE (Rowe 1960). It is distinguished by the preceding Initial Period by advancements in sociocultural developments as well as innovations in material culture (Burger 1992; Kembel and Rick 2004; Lumbreras 1974). The Early Horizon was originally defined by what had been interpreted as a pan-Andean cult, or
“homogeneity” in ceramic and art styles found throughout the majority of Peru (Lumbreras 1974; Rowe 1962; 1967; Tello 1956; 1960). More recent interpretations, however, recognize the contribution and independence of regional developments during this period, stepping away from the idea of a “horizon.” Many of the earlier discussions on the Early Horizon have centered on what has been referred to as the Chavín “Cult,” “Religion,” and “Interaction Sphere,” based off the type site of Chavín de Huántar in the Callejón de Conchucos (Burger 1988; Lumbreras 1974; Rowe 1962, 1967). Specifically, this section discusses the history of research leading to the “naming” of the Chavín horizon and the initial early confusion distinguishing earlier variants that were originally classified as Chavín centers. The second part of this discussion seeks to identify current trends, which may account for coastal variations and recognize the influence from Cupisnique and coastal centers.

3.3.1 Origins of Chavín. Chavin was named and first described by the Peruvian archaeologist Julio C. Tello after he first visited the site in 1919. Tello not only excavated at the site of Chavín, but also dedicated a long portion of his career to identifying sites spread throughout the central Andes, which he believed were linked to the “Chavín style.” He interpreted many of these centers, specifically along the coast, as taking part in a pan-Andean phenomenon or horizon (Tello 1956; 1960). By the 1940s, many researchers accepted Tello’s early work defining the Chavín tradition throughout Peru, and the interpretation of this phenomenon as a Chavín “horizon.” Work over the last twenty years however has shed light on more localized traditions, which were originally overshadowed by this early misclassification.

The coastal Cupisnique culture and other coastal centers (Las Haldas, Sechín Alto, Manchay culture of the central coast), for example, are now known to have in fact started earlier than the occupations at Chavín de Huántar (Burger, 2008; Pozorski and Pozorski, 1987). Special attention has
also been paid to the updated chronology and architectural sequence at Chavín de Huántar, which has pushed the temple’s construction back into the Initial Period (Kembel 2001; Kembel 2008: 69; Rick et al 2011). This new sequence paired with numerous excavations and carbon dates from various archaeological sites, has illustrated that by the second half of the Early Horizon, homogeneity throughout Peru was lacking, and it was in fact a tumultuous time of uncertainty and developing regional cultures asserting themselves in several valleys (Burger 2008; Chicoine et al. 2017; Ikehara 2016).

The first half of the Early Horizon was a period of increased interregional interactions. Ceramic wares and shared iconography can be found between coastal and highland centers. These shared material and ideological similarities suggest an intensity in exchange and communication. These interactions are said to have been fueled by religio-networks, as evidenced by the presence of highland Chavín and coastal Cupisnique similarities in art and iconography. These themes were believed to have been radiating out from the type site of Chavín de Huántar (Burger 1988). This phenomenon had previously been dubbed the “Chavín Sphere of Influence.” For Burger (1988: 114), the success of Chavín’s spread was due to its regional cult status, which was fluid and “fostered universalness” and “openness.” The status of pilgrims and the success of these regional cults is based on the recognition of religious followers, despite their communal differences or any past hostilities, thus allowing for a flow of goods, peoples, and ideas. The far reaching expanse of “the Chavín Sphere” was done through the peaceful spread of religious ideas and not through coercion or militaristic endeavors (Burger 2014: 1091).

The archaeological site of Chavín de Huántar is located near the convergence of the Mosna and Wacheqsa rivers and is believed to have been constructed over an earlier Kotosh-Mito center (Contreras 2010). Originally investigated by archaeologist Julio Tello, the site of Chavín has been
subsequently researched and excavated by Luis Lumbreras, Wendell Bennett, John Rowe, Richard Burger, John Rick, and their teams (Bennett 1944; Burger 1981; Lumbreras 1989; Rick and Kembel 2008; Rowe 1967; Tello 1960). This work at Chavín has revealed that when the center was at its peak, it reached about 40 hectares and included a large temple complex open in a U-shape, along with sunken plazas, underground galleries, drainage canals, floating stairways, a sunken circular plaza, and elaborate stone carvings (Burger 1992). Chavín’s imagery also centered on the use of hallucinogens, shamans, and transformation. Themes of shamanic transformation can be found in Chavín ceramics, the stone carvings that line the sunken circular plaza, and the Tenon heads which once surrounded the outer walls of the New Temple (Burger 2008; Lathrap 1971; Roe 1974; Rowe 1967; Weismantel 2007).

Kembel’s (2001, 2008) most recent studies have revealed constructions began at the monumental center by 1100 BCE, with the documentation of at least five separate construction phases. Located in the earliest phases of construction was the “god of Chavín,” a 3 m granite sculpture known as the “Lanzón,” or the “Oracle.” This figure is located within the underground galleries of the Old Temple (Burger 1992). As more space was needed to incorporate more pilgrims and visitors to the center, the New Temple was constructed (around 900 BCE), incorporating aspects of the earlier Old Temple, but expanding out to the north and east. The New Temple included a rectangular sunken plaza, as opposed to the earlier circular sunken plaza associated with the Old Temple. Additionally, the New Temple carried on the U-shape tradition, with lateral arms surrounding the rectangular plaza (Rowe 1967; Burger 1992). At Chavín de Huántar, Kembel’s description of elements of the Northeast Corner of Building A (NEA), referred to as part of the “Separate Mound Phase,” sheds light on the earliest monumental constructions at the site. What’s intriguing about Kembel’s analysis is her interpretation of similarities between the earliest constructions in the NEA structure and the sites of La Galgada and Kotosh (Figure 3.4) (Kembel
To start, the NEA was originally part of a standalone mound which resembled the larger mound at La Galgada in “construction and form” (Ibid; 226). The niches located in the NEA Alacenas gallery specifically are the oldest construction at Chavín. These niches share similarities to those found in the ritual chambers at La Galgada. They are plentiful, small, and rectangular, and are located close together in the gallery wall chambers (Ibid). Similarities with the Kotosh-Mito tradition continue in Chavín’s Inner Lanzón Chamber, specifically the Inner Lanzón Rectangle “strikingly resembles the many rectangular chambers at Kotosh… as well as the rectangular chamber in the south mound at La Galgada in shape as well as size” (Kembel 2001: 227). These similarities also include distinctive floor vents (located in the walls rather than under the floor like at Kotosh). While the Inner Lanzón Rectangle is missing a central fire feature, the actual Lanzón is located in this central position. Kembel speculates that the central fire may have been replaced by the Lanzón (Ibid). The central fire feature had previously been interpreted by Grieder and Mendoza as the central position of authority and focal point of these structures, a position that cannot be denied to the Lanzón at Chavín de Huántar (Grieder and Bueno Mendoza 1985: 106).

The earliest dates from the monumental temple at Chavín de Huántar come from the Inner
Separate Mound Stage and the Inner Lanzón Rectangle, specifically a “terminus ante quem,” or a “date no later than,” the beginning of the construction of the separate mound stage. Because the analysis of architectural seems has shown that the NEA was constructed before the Inner Lanzón Rectangle was built, it can be surmised that the NEA is older than this 1190-901 cal BCE date. It should be noted that the original orientation of the NEA was oriented to the north, with the later constructions altering the orientation of the overall temple of Chavín towards the east.

Other similarities between the earliest phases at Chavín and the sites of Kotosh and La Galgada include the plastering of interior walls, a pattern also recognized in internal galleries at Chavín (Kembel 2001: 228). The Loco Rooms at Chavín are stated by Kembel to resemble chamber at La Galgada, though smaller in size. External walls at La Galgada also share construction techniques with external walls at Chavín, specifically the pattern of “large flat-faced stones interspersed with chinking and backed by stone and mud fill” (Grieder et al. 1988 cited in Kembel 2001: 229). Axial symmetry and primary central stairways and a U-shaped platform make their
appearance during the final Initial Period phases of La Galgada, forms that are also utilized during construction at Chavín (Kembel 2001: 229).

Early Horizon and U-shaped temples on the coast were oriented towards the east, just like Chavín was in its later phases. Originally though, the NEA had a northern orientation. Kembel sees this shift in orientation as an incorporation of coastal influences. It is also corroborated by the introduction of stepped platforms, containing multi-levels and patios, and eventually the sunken circular plaza, a strictly coastal architectural phenomenon (Kembel 2001: 230). Kembel (2001: 230), interprets the construction sequence of Chavín to be one of “transition as well as synthesis, beginning with local forms based in the Kotosh-Mito traditions and transitioning to the incorporation of coastal forms… while still incorporating aspects of the local forms”.

Many of the elements at Chavín, specifically in the artwork and stone sculptures, incorporate not only imagery of the supernatural, but animals and plants from around different regions of Peru, specifically the Amazon region. Earlier coastal architectural elements are also incorporated, like the sunken circular plaza and the U-shaped temple, as well as material goods like strombus and spondylus shells from the warm waters of Ecuador. This paired with ceramic studies have shown that Chavín was “receiving” ceramics from different regions throughout Peru (Druc 1998). These artifacts help to support the theory that Chavín was a pilgrimage center, the epicenter of a pan-Andean religious cult which stretched throughout the central Andes (Burger 1992, 1988, 2014), the details of which were discussed in Chapter 2 in much more detail.

Contemporaneous with the construction of the temples at Chavín de Huántar was the spread of shared iconographic and architectural elements throughout Peru. Tello spent decades traveling to different regions of Peru, looking for and connecting these shared criteria to the type site of Chavín. For Tello, finding these criteria at sites throughout the north, up through Cajamarca,
and south in Paracas, as well as locations along the northern and north-central coast, were all signs of a “Chavín Horizon.” John Rowe, building on Max Uhle’s work, would eventually create a “Horizon” chronology, based off dates when incised and stamped circle and dot ceramics (a ceramic style associated with Chavín) appeared in the South of Peru in the Ica valley (Rowe 1960, 1962). Chavín de Huántar was an impressive and influential ceremonial site, with far reaching influences; however, we now know that many sites once interpreted as “Chavín” temples were in fact localized variants.

While at the time the Horizon chronology was accepted by scholars as a useful cultural sequence for discussing and comparing archaeological centers, we now have a clearer understanding of the more nuanced and regionally dynamic local cultures which existed during this time. The subsequent section will expand on these regional centers and the history of research at several of these sites, specifically the Nepeña Valley, which is pertinent to this dissertation research.

3.3.2 Coastal Chavín or Cupisnique. The Nepeña Valley was first visited by Julio Tello in the 1930s, during his investigation of a newly exposed platform and mural at the center of Cerro Blanco (Daggett 1987b: 111). His follow-up excavations at both Cerro Blanco and the nearby pyramid of Punkurí led him to believe these two centers were manifestations of “Coastal Chavín” (Tello 1943). These early excavations took place during a time when archaeologists had little understanding of the “Cupisnique” phenomenon. Because excavations at Chavín de Huántar took place before many of these coastal centers were excavated, and paired with the impressive size and nature of the stone carvings and artwork at Chavín, it was easy for Tello to interpret coastal elements of the Cupisnique culture as a representation of Chavín on the coast (Burger 1981; 1988: 128). Subsequent archaeologists followed suit, often describing Cupisnique under the umbrella of a
coastal Chavín occurrence. Rafael Larco Hoyle (1941), however, was responsible for laying the groundwork to change this notion.

The first Cupisnique ceramics were documented by Rafael Larco Hoyle in 1934, in the Quebrada Cupisnique on the northern coast of Peru (Larco 1941; Onuki 1993). While Tello was arguing for a Chavín Horizon, Larco had identified what he believed was a separate, earlier tradition stemming from the northern coast (Larco 1945). Originally he postulated that Chavín may have been influenced by a “Feline Cult” established in the Nepeña Valley out of the sites of Punkurí and Cerro Blanco (Burger 2008: 111,128; Larco 1945: 149-150). After excavating sites located throughout the northern coast in the Cupisnique Quebrada, Larco classified “Cupisnique” as a unique style, based mainly off of ceramic iconography. Specifically, he recognized black stirrup spout vessels that had modeling or incising, with representations of shamanic transformations, as well as depictions of plants, humans, and felines as a marker of this unique culture (Larco 1945; Nesbitt 2012). Originally the term Cupisnique was used to refer to this specific ceramic style; however, through time and follow-up excavations, Cupisnique architectural canons were also classified to include friezes, colonnades, and platform mounds with graded access associated with central courts or plazas.

Stemming from Larco’s original research, Cupisnique centers have been documented by others to occupy the Lambayeque valley to the north through to the south in the Virú valley (Elerá 1997; Jones 2010; Nesbitt 2012; Pozorski 1976). Jason Nesbitt (2012: 19) points out that issues with identifying Cupisnique centers range with the varieties in contemporaneous Initial Period coastal styles, making one clear ceramic style hard to define. Additionally, the context of many Cupisnique vessels has been lost, as many were looted and now belong to private collections. Broadly, Cupisnique artifact similarities throughout the northern coastal valleys have been summarized by
Nesbitt (2012: 31) as “anthracite handled mirrors, bone rings, carved bone spatulas, flat & cylinder stamps, snuff tablets, and stone vessels that depict spiders.”

The architectural similarities for Cupisnique sites have also been classified as including rectangular units with rounded corners (Shibata 2004; Nesbitt 2012; Daggett 1984, 1987). Unlike the contemporaneous constructions of the central coast, Cupisnique monumental architecture often includes numerous mounds, which are typically rectangular terraced platforms with large central staircases. In addition, they are constructed of a combination of quarried field stone and conical adobes, and can consist of “colonnades and circular columns” (Nesbitt 2012: 32). Like the Chavín tradition, Cupisnique artifacts and public architecture from valleys on the north coast share iconography which is expressive of wide reaching religious beliefs (Burger 1992; Elera 1993; Larco 1941; Nesbitt 2012).

As with many archaeological constructs developed by early cultural historians, the understanding of the “Chavín” horizon or interaction sphere underwent a radical transformation with the application of radiometric dating. With the presentation of dates at sites that Tello originally suggested were Chavín related (Cerro Sechín, Las Haldas, and Punkurí), current interpretations suggest these were instead constructed during the Initial Period and earlier than Chavín de Huántar (Jones 2010; Nesbitt 2012; Pozorski and Pozorski 1987). The reclassification of several “coastal Chavín” centers as an earlier and distinct Cupisnique tradition, paired with the early radiocarbon dates reported from north-central coastal centers, like Punkurí and the sites in Casma, proved to researchers that the Initial Period through Early Horizon transition was much more nuanced and complicated than originally described. The importance of the above discussion on Chavín versus Cupisnique traditions and the history of research on the topic is presented for two main purposes: first, to provide a cultural sequence on the distinct Initial Period and Early Horizon traditions in
what is now modern day Ancash; second, to examine the various researcher agendas in which these
cultural sequences were developed and how these agendas have colored subsequent investigations. A
reflexive attitude needs to be applied when conducting research or discussing these early culture
histories. The following section will apply specifically to the Nepeña Valley’s role in this early debate
and act as a segue into Chapter 4 which will present on the specifics of Nepeña valley geography,
ecology, and historical founding of the upper Valley.

3.3.3 The Nepeña Valley’s Role in Early Debates & Current Standings. The Nepeña
Valley was a key geographic area for the early debates on Initial Period through Early Horizon
cultural traditions. As mentioned briefly above, the first scientific excavations in Nepeña were
undertaken by Tello at Punkurí and Cerro Blanco, both located near the modern day cities of San
Jacinto and Nepeña, respectively. While a modern paved road cuts through the middle of Cerro
Blanco today, it was once three distinct mounds built in a U-shape, with the largest of the mounds
reaching 14 m in height. Tello excavated the southern platform of Cerro Blanco in 1933-1934, and
revealed a number of polychrome friezes with supernatural beings (Daggett 1987b; Tello 2005). This
platform had a height of 4 m and length of 90 m, and was larger than the northern platform (Shibata
2010).

While Tello interpreted these centers as taking part of the Chavín phenomenon, the
understanding now is that Cerro Blanco and Punkurí have been established to be part of an earlier
tradition. Cerro Blanco only briefly took part in Chavín’s religious network (Ibid).

While Larco Hoyle originally tried to distinguish the sites in Nepeña Valley as a distinctive
culture, Daggett (1984) was one of the first of recent scholars to point out Initial Period elements at
both Cerro Blanco and Punkurí (Daggett 1984: 96; Larco 1941: 19). Daggett made this inference on
both the architectural remains at Cerro Blanco and the presence of “incised black ware sherds”
which shared similarities with Cupisnique sherd styles from Caballo Muerto (Daggett 1987a: 121). Daggett claims that no real evidence for an Early Horizon presence exists at Punkuri, and that the evidence for “Phase III occupation at Cerro Blanco” can only be found at the “largest of the mounds” (Daggett 1987a: 121). Further, both the Punkuri and Cerro Blanco sites were constructed with conical adobes, another coastal Initial Period development which predated any Chavín influence within the valley (Daggett 1984, 1987). Samaniego’s follow-up work at the center of Punkuri in the mid to late 90s confirmed the presence of conical adobes as “the first phase at Punkuri” (Samaniego 2012: 18), which he related to being contemporaneous with the Sechín era constructions. Unfortunately, his work has not been published in sufficient detail to allow archaeologists to fully grasp the chronological placement of Punkuri, only its spatial organization and associated material remains.

For Cerro Blanco, subsequent excavations conducted by Shibata has since proven the earlier dates, and the nearby site of Huaca Partida. While both sites share association with Chavín during Chavin’s proposed “peak,” and evidence for heavy use after 900 BCE, we now know that they were originally constructed independently and earlier, and did not strictly function as Chavín centers (Shibata 2010). Shibata conducted excavations at Cerro Blanco in 2002 and 2004, followed by complementary excavations at the nearby site of Huaca Partida in 2004 and 2005. His work was the first to establish a lower valley ceramic sequence through excavation and can be broken up into the following phases: Huambocayán (1500-1100 cal BCE) Cerro Blanco (1100-800 cal BCE), Nepeña (800-450 cal BCE), and the Samanco Phase (450-150 cal BCE) (Shibata 2011). The Huambocayán Phase was only found within the main platform of Cerro Blanco, and dated to the earliest occupation of the complex. Though according to Shibata there was no related architecture, ceramic fragments of this phase were found in association with burned ash lenses in the same layer. Shibata
compares these sherds as sharing similarities with the Las Haldas phase in Casma, and the representative ceramic form includes neckless ollas.

The Cerro Blanco Phase was found at all three mounds within the U-shaped complex, and associated with the conical adobe constructions found in the north platform before construction techniques switched to rectangular adobes associated with stone walls and evidence for storage spaces. It is within the Cerro Blanco phase that the large decorated friezes Tello had uncovered previously were associated. Shibata describes a scarcity of ceramics in this phase, except “in association to the remains of feasts on the northern platform” (Shibata 2010: 294). The ceramics which were recovered include neckless pots with rounded lips or acute outside angles of “very fine gray paste” or “porous red surface.” A few bottles were also recovered in this phase, which were “slightly flared with thin incisions.”

It is during a transitional phase between Cerro Blanco and Nepeña that is marked by “course foundational walls” and the largest concentration of ceramics and obsidian fragments. It is also during the Nepeña phase that maize (Zea mays) is documented for the first time at the center. This phase also defines more construction events and larger scale “megalithic architecture” at the site. The following Nepeña Phase shows a shift in constructions, as the northern and southern platforms are no longer expanded or rebuilt, while the main central mound sees more, larger scale activity. More of the constructions are built with stone, as adobes cease to be used for the outer walls. A “red and white staircase” is also built during this phase, which lead to a vaulted room with ventilation ducts.

Shibata (2008: 300) interprets megalithic architectural shifts as evidence for “foreign elements” at the site. Artifacts include a new form added to the neckless bowls, which retains the earlier shape, but also a higher frequency of neckless bowls with internal acute angling (Shibata 2011:
301). A second bottle shape also appears at this time, “characterized by an outer half oval rim, with a truncated arrow shape.” Rocker stamping and graphite painting, as well as incised lines with dotted lines, also appear as decoration techniques. Shibata mentions this is when incised circle and dots associated with the Chavín phenomenon appear on sherds. This style continues to be found well into the Samanco Phase. Other artifacts included panpipes, and ceramic disks, however the obsidian present in the previous phase is almost nonexistent during this time.

By the Samanco Phase, megalithic constructions cease, and patterns of trash depositions change at the site. “Accesses” appear to be sealed off during this time. Neckless ollas are “almost always” found with an outer beveled edge, pitchers also have a higher frequency for beveled edges. Decorated pottery decreases save for the concentric circles and dots started in the previous Nepeña Phase and textile impressed sherds. While flutes and the ceramic disks are still common, obsidian is no longer found during this occupation phase.

After the centers of Cerro Blanco, Punkurí, and Huaca Partida were shown to have been founded earlier, in the Initial Period, with a significant reuse during the Early Horizon connected to a Chavín/Cupisnique network, an emphasis was placed on researching localized Nepeña Valley polities during the Early Horizon. For the Early Horizon, Nepeña is marked by three differing site patterns, or traditions. The lower Nepeña consists of two different and overlapping phenomena. The first was concentrated around the Chavín-Cupisnique influenced centers discussed above, specifically those with large pyramidal buildings or U-shaped architecture such as Cerro Blanco, Punkurí, and Huaca Partida. The contrasting tradition was focused around the coastal site of Caylán (Chicoine and Ikehara 2014) and its three related centers: Samanco (Helmer 2014), Huambacho (Chicoine 2006) and Sute Bajo (Cotrina et al. 2003).
These three sites differed from the “Chavín” related centers in that they were densely populated domestic urban centers focusing on small patio mounds within separate compounds, as opposed to the large public centers associated with Chavín/Cupisnique. However, the cultural landscape in the lower valley was likely more complex as Cupisnique-like blackware stirrup-spout bottles have been encountered at Huambacho. In any case, the radiocarbon dates reported for these complexes also tend to fall between 600 and 200 cal BCE, mostly after Chavín’s strength and influence started to wane (Chicoine and Ikehara 2014; Helmer 2015).

Each of these centers did have a number of small mounds, associated with benched plazas, baffled entryways, and long ramps/corridors. None of these mounds, however, reached the size and
magnitude of the Chavín related centers. The mound plaza compounds are embedded inside the urban core of the site. Construction techniques also differed from the use of adobes at the Chavín related sites, or chinking stone (pachilla) walled constructions further up in the upper and middle valley. At Caylán and its satellite centers, constructions were made of quarried rock set in a mud mortar (Chicoine and Ikehara 2014). Additionally, the friezes excavated at Huambacho and Caylán show different religious themes than those at Cerro Blanco, Punkuri, and Huaca Partida (Chicoine 2006; Chicoine and Ikehara 2014).

The Caylán tradition in Nepeña shares similarities to a contemporaneous phenomenon occurring in the Casma Valley during the Early Horizon. While earlier Sechín Alto Polity sites fall out of use after the Initial Period, Pampa Rosario and San Diego (both located in the lower Casma Valley) were constructed at this time. These sites, like Caylán were proto-urban centers with similar site layouts and construction techniques. These Casma centers were the only Early Horizon centers built after approximately 900 BCE. While the earlier Casma centers were still utilized as small habitation centers, many of the large-scale constructions at them cease, and it is believed their populations may have moved to the middle and upper valley at this time.

By the second half of the Early Horizon, previously established centers in the Casma and Nepeña valleys are either abandoned or no longer participate in large scale monumental constructions. The Chavín-related centers either fall out of use or shift use to one or two consolidated areas while several densely populated complexes spring up in the lower valleys. For the Middle and Upper Nepeña Valley, however, a different pattern has been documented involving megalithic hilltop fortresses located throughout an area of land known as the Moro Pocket.

In the Middle Nepeña Valley, populations shift to defensible ridge-lines, away from the valley floor after 900 BCE (Ikehara 2015). In the area surrounding the modern day city of Moro,
known locally as the “Moro pocket,” a series of over a dozen fortress complexes were constructed. The Moro pocket is geographically an important zone for the valley, as it is where the Jimbe, Salitre, and Loco rivers converge, forming the Nepeña river. This area is a wide and fertile floodplain of farmable land. It has been surmised by Proulx, Daggett, and Ikehara that the fortresses corresponded to defensive structures protecting water and the arable lands located within the pocket. Ikehara has conducted excavation at the site of Kushipampa (Ikehara 2010b) and intensely surveyed the entirety of the Moro pocket (Ikehara 2015). His work has revealed over a dozen fortress structures within the Moro pocket. Ikehara and Chicoine (2011) have likened the presence of these sites within the Moro pocket as centers in competition for land and laborers (see also Chicoine et al. 2017; Ikehara 2015).

The fortresses documented throughout the Moro Pocket follow a similar pattern for those recorded by Wilson (1985) for the Santa valley, and Millaire (2008) in the Viru valley. As Millaire (Ibid) has stated for Viru, six “castillos,” or fortress structures, also appear around the mid valley neck after 900 BCE. Fortresses in the Moche Valley have also been tentatively dated to this time period (Topic and Topic 1978). To the south, in the Casma valley, the site of Chanquillo appears to flourish by the Early Horizon. Chanquillo is one of the most researched of these fortress complexes and is known not only as a fortress, but also for its related “solar observatory” referred to as the 13 Towers (Ghezzi and Ruggles 2008: 2011). Radiocarbon dates taken from the site have dated it to the second half of the Early Horizon, approximately 400-1 BCE (Ghezzi and Ruggles 2011). The radiocarbon dating has shown that Chanquillo was constructed, occupied, and abandoned all within that time period. The fortress itself does not feature parapets but has large walls towering over 8m in height, and a number of sling stones were recovered, indicating its use in religious warfare (Ghezzi 2006).
The fortress structures in the Moro area have not been as intensely studied as Chankillo. However, like Ghezzi speculates for Chankillo, Ikehara believes that many of the middle valley fortress structures were not used entirely for warfare or defense, claiming that those which had large “open spaces” may have also been utilized for ritual practice (Ikehara 2015: 163). These Early Horizon constructions within Moro fall into a completely different architectural and ritual pattern than those present in the lower valley, further illustrating the importance of understanding localized traditions rather than larger blanket Horizons. What was originally believed to be all under a blanket of a “Chavín Horizon” has now been broken down into three separate contemporaneous and overlapping traditions. While Ikehara has also filled in gaps for an understanding of the middle valley zone, the data we have for the upper valley within and above the Salitre-Jimbe area is still lacking. Based off of Richard Daggett’s surface survey (1984), however, we do know that like the Moro pocket, the upper valley saw a pattern of scattered ridge-top habitation sites. Many of these ridges had small platform mounds associated with the domestic areas.

Daggett’s original chronology for the Nepeña included three phases. For his Early Horizon Phase I, the majority of sites can be found within the upper valley area. These centers consist of “one or more stone faced ridge top mound constructed of earth and rubble” and mounds were “stepped on either ends with associated platforms.” These mounds were found isolated throughout the Jimbe area and Moro pocket. For the Jimbe and Salitre areas, the sites of Huaca Grande and Salitre Alto were Daggett’s type sites for this phase. The largest of these sites, however, is known as Virahuanca Alto, a ceremonial center located in the middle valley. At the time of Daggett’s survey it was characterized as “the largest platform mound known for the valley, with measurements of 70 x 20 x 2 m. Not only is there a large mound at the site, but two lateral mound constructions, which Daggett has pointed out give the entire center a “U shape” like so many other ceremonial complexes on the coast. Daggett also puts the lower valley site of Caylán in this category of Phase I sites,
though similar stepped platform mound sites do not exist in the same form as in the middle and upper valley. Ceramics for Phase I include the following: bowls with “convexed rim,” neckless jars, flanged bowls, grater bowls, ceramic panpipes, ceramic discs, and the ground stone blades (Daggett 1987a: 73).

Similar in pattern to the Phase I occupations, the majority of the Phase II sites Daggett documented within the valley are found in the upper portions above the Moro pocket. While most Phase I sites continue to be occupied during Phase II, activities at the sites of Salitre Alto and Huaca Grande begin to diminish. Fortresses are constructed on the eastern borders of the Moro pocket associated with new clusters of ridge-top sites. Huancarpon, a large ceremonial center near the convergence of the Salitre and Jimbe rivers is founded at this time. Diagnostic forms from Phase I continue, but “carinated bowls” are present in the assemblage without decoration. Neckless jars also go through experimental phases, including the addition of strap handles or spouts. Daggett describes new decorative techniques as fabric impression, appliques, and bossing, as well as the addition of a high necked jar (Daggett 1987a: 74).

Like Phase I and II, the majority of Phase III sites are located in the upper valley. While a number of Phase II period sites were abandoned at this time, thirty new sites were founded. Phase III is distinguished from the other two phases by the presence of megalithic architecture. Daggett categorizes the sites into three categories, which include aligned mounds, compounds, and fortresses. The Salitre area continues to expand at this time, while earlier Phase I and II sites are abandoned. Daggett suggests that the construction of better defensible sites may be part of this demographic shift, as populations moved to the more heavily fortified sites (Daggett 1987a: 77). It is during this phase that the majority of the fortresses discussed previously were founded. These fortresses include megalithic walls and parapets located on ridge-tops. Across the ridge from the
earlier Huancarpon site, the Kushipampa compound is founded during Phase III. This site is a combination of defensive and ritual plazas. The contrast between the construction and composition of the Kushipampa site and the neighboring site of Huancarpon is intriguing, and Daggett as well as other researchers have speculated on the nature of the different site types and their locales. These fortress constructions surround the Moro pocket. Fortresses or large walls can be found near any of the passes/quebradas, which have entry into the pocket. Daggett also notes the lack of any fortresses within the pocket itself, further illustrating the threats were coming from outside the area.

Daggett describes Phase III artifacts as a collection of bowls and jars, including some neck jars, while bottles have fallen out of use. Strap handles can be found on some of the samples, and large underground storage jars also make their appearance during this phase. Additionally, the introduction of a new bowl type replaces the carinated bowl of Phase II. This new form has a contoured base and walls which flare outward slightly. It is also decorated with red slip, pattern burnishing, cross-hatching, or geometric designs (1987a). Other ceramics in the Phase III assemblage include ceramic discs, slate blades, and ceramic panpipes. New innovations include stone clubs, and donut shaped digging stick stone weights (Daggett 1987a: 76).

Ikehara’s (2015) dissertation research expanded on Daggett’s original survey methodology. His in-depth survey of the entirety of the Moro pocket has expanded our knowledge of the geopolitics in the Moro pocket during the Early Horizon. As Daggett previously described, there are differences in the architectural traditions between the Huancarpon complex and Kushipampa center, located on opposing ridges on the eastern boundary of the Moro pocket. Ikehara’s work goes a step further, as he refers to the Kushipampa phenomenon and the similarly related Moro complex sites as “the mound enclosure complex” or “the Kushipampa tradition.” These two complexes (Kushipampa and Huancarpon respectively) are currently seen as the markers between the distinct
middle and upper valley phenomenons occurring during the Early Horizon Period.

This tradition is associated with Ikehara’s transitional Phase I/II Period and is defined by complexes with “plazas and low platforms distributed in an orthogonal layout” (Ikehara 2015: 197). Many of these sites were “never finished” or were “finished” expediently in a way which did not fit the original construction design. San Juan, Paredones, Anta, Quisque and Virahuanca Bajo South are all examples of the “Mound Enclosure Complex” tradition with unfinished or unoccupied elements (Ikehara 2015: 198). Of all these unfinished sites, Quisque was the only fortress for the time period with evidence on not being properly finished. As Ikehara points out, the original construction started with megalithic masonry, and bastions and angles in the external walls, which would help to “facilitate against attackers,” were also started. The completion of the fortress, however, included walls with small cut stones that were “expeditiously built”—Ikehara sees this as an “urgency” to finish the fortress by “abandoning the original design” (Ikehara 2015: 198). Quisque is located at the entrance to the Moro pocket, between the middle and lower valley, with great visibility into the traffic patterns entering and exiting the area. Ikehara has also interpreted these unfinished projects as “examples of failed leadership.” As these structures were built within what Ikehara has defined as Phase I/II Transitional. This represents a time period associated with the collapse of the Chavin-Cupisnique network. This fragmentation of a once more homogenous network could be corroborated with the construction of independent complexes and subsequent collapse of their constructions. Ikehara explains that many centers were abandoned at this time, and populations clustered around a few new centers and previously established centers like Kushipampa. When the population shifted, people moved from lower/flat terrain to the hilltop and slopes which were more easily protected (Ikehara 2015: 199). These newer centers, Ikehara notes were constructed differently, by decreasing the “accessibility to ritual spaces” or smaller scale “open spaces,” which Ikehara (2015: 199) interprets as these spaces now being utilized only by local groups. This indicates
that sacred space and “ritual inequality” was now present within the population. These fortresses are mentioned and described because of their relation to a similar structure located within the Cosma complex, known as Iglesia Hirca. Like Quisque, walls at Iglesia Hirca were left unfinished. The relationship between the Cosma hilltop fortress (among others documented for the upper valley) and those in the Moro pocket will be discussed in more detail in Chapter 4.

The lower and middle valley excavations conducted by Chicoine, Helmer, Ikehara, and Shibata, paired with the previous survey work of Proulx and Daggett have given us a more in-depth understanding of ritual and religious life and networks within the Nepeña Valley during the Early Horizon. This work has also helped us to document Nepeña’s place in larger socio-political networks occurring throughout the Initial Period and Early Horizon. Following the Early Horizon and the collapse of Chavín’s regional influence, a transitional period expanded into what is referred to as the Early Intermediate Period. Geographically, this time period varies, but on average ranges from 100-600 CE. The following sections will present the Early Intermediate Period through Late Horizon sequence more broadly, while bringing in Nepeña Valley centers and related research where applicable.

3.4 Summary of Early Monumentality in the Central Andes

While evidence for small scale mounds and communal buildings exists in northern Peru by 5400 BCE, large scale monumental architectural complexes are clustered in central Peru by the Late Preceramic. The earliest of these constructions are public ceremonial spaces, a trend that continues through the Early Horizon. Distinctly, the highland Andes are centered on a tradition of small scale religious chambers built of stone with plaster lined walls, split level floors, and niches. These structures are ritually sealed at the end of their use-cycle and constructed over by new temples, causing these centers to gain size and monumentality through time. The Initial Period and
subsequent Early Horizon introduce more complex religious constructions, such as U-shaped complexes, numerous sunken plazas, and elaborate friezes and stone carvings. At least three separate phenomenon occur during this time, including the central coast architectural tradition, Sechín Alto Polity, and the onset of the Cupisnique and Chavin religious traditions. Numerous Preclassic sites are continuously occupied into the Initial Period, and subsequent Early Horizon, hinting that religious and interaction networks were established well into the Late Preclassic. By the Early Horizon, Chavin de Huantar and its religious network have peaked throughout much of the central Andes, but by around 700 BCE several regional centers begin to mark their architectural and religious independence. By the collapse of Chavin, a transitional period occurs in the Andes and several regional polities emerge throughout the highlands and north and central coast respectively.

As reflected in the Cosma basin, a clear distinction is made in the way archaeologists have defined the “post-Chavin” cultural traditions. This loss of a homogenous Chavin influence is reflected across a broad swath of the highlands and along the coast. The post-Chavin period is discussed based more on ceramic designs rather than architecture. At Cosma during this transitional period, monumental architecture ceases and much of the subsequent occupations in the basin are more localized and domestic. This somewhat disjointed presentation is necessitated by the material evidence from Cosma (shifting in monumental to domestic use function). Therefore, the following section will shift from a focus on architectural trends, to material traditions, with a focus more on ceramics, artistic styles and other materially mobile artifacts.

3.5 The Early Intermediate Period

The north coast transitional period is marked by local styles known as Gallinazo and Salinar. Salinar (400 BCE-200 CE), was a north coast phenomenon following the Cupisnique tradition that left a large footprint in the Moche Valley. Salinar ceramics share themes with the earlier Cupisnique
culture, however these ceramics are rougher in artistic skill than the earlier wares. Additionally, ceramics are mostly beige in color (as opposed to polished black wares) and more representative of animals and people instead of shamanic transformations and other supernatural entities. During this time, populations moved to defensible valley necks, specifically in the Virú and Santa valleys, and while fields and sites near the coast were abandoned, new centers were established inland, specifically on more defensible ridges (Bawden 2000). This new settlement pattern indicates a time of conflict, and possibly raiding among north-coast populations. In the south, there is evidence of interaction and possible “foreign invasion” by the highland Recuay (Bawden 2000).

Though evidence for Gallinazo wares are found throughout the north coast, it is believed the Gallinazo culture was centered out of the Virú valley, specifically around the Gallinazo Group site (Millaire 2009; Downey 2014). Dating between 200 BCE-600 CE, Gallinazo wares have been categorized into two distinct traditions: elite wares and common/utilitarian ceramics. The latter were modeled vessels with incised designs, while the elite ceramics were negatively painted, a technique also referred to as wax or resin painted (Castillo et al. 2009). During this “transitional period,” there is evidence for population increase, while the “first real centralized multi-valley polity” (centered in the Virú valley) emerged. Gallinazo groups were centered on “freestanding platforms” and supported by rural villages (Bawden 2000). Irrigation agriculture was utilized throughout sites and there was evidence for highly specialized craft production (Millaire 2010). While there was persistence and even some overlap of the Gallinazo and Moche, it is the continuity of Salinar centers and their distinct “style” that would become the base for the Mochica culture which follows this transitional period (Shimada 2010: 78).

The Moche dominated much of northern-coastal Peru between 200-850 CE. Current research implicates the Moche functioning like a confederacy, or as several independent, yet related
polities based out of different coastal valleys (Castillo and Uceda 2008). These polities were classified into two distinct regional variations, the “Southern Moche,” based out of the Huacas del Moche in the Moche Valley, and and “Northern Moche,” based out of Pampa Grande in the Lambayeque Valley (Castillo and Uceda 2008). In general, though, Moche sites are dominated by large adobe pyramids and associated open spaces marked as public plazas. Moche ceramics are molded, mass produced, and often depict the supernatural, deities, and scenes including warriors, sacrifice, and elaborate rituals and processions (Quilter 2010). Stirrup spout vessels often depict fine line drawings, displaying narrative scenes. On top of their fine ceramics with painted themes, the Moche are known for their colorful murals and friezes which have been found decorating pyramid walls. In addition to their ceramics and public art, Moche metallurgy was highly developed, producing many ornaments of silver, gold, and copper (Arsenault 2002). At its peak, the Moche phenomenon ranged from the Piura valley in the north down through the Huarmey valley in the south. Broken up into two main political spheres, the Northern and Southern Moche, the Southern Moche capital was based out of the Moche valley at the Huacas del Moche (Huaca del Sol y Luna). Northern Moche included the Piura, Lambayeque, and the Jequetepeque valleys. It appears that following CE 650, the Huaca del Luna was abandoned, and the Huaca del Sol was quickly constructed in a style more similar to northern Moche architectural canons (Castillo and Uceda 2008: 18). The northern Moche would have a stronger longer standing foothold until the introduction of Wari groups from the south during the Middle Horizon Period.

The Nepeña Valley is often considered the southern periphery of Moche political control during the Early Intermediate Period. The large huaca of Pañamarca, located in the lower valley near the city of Nepeña, is the last of the major Moche administrative centers to the south, though smaller Moche sites and ceramics have been found further south and into the Huarmey valley. Pañamarca is a large adobe pyramid, marked by painted friezes and “narrative iconography,”
specifically with “scenes of processional dances, ceremonies of ritual presentations of goblets, and cycles of mythological battles” (Trever 2017: 253). Moche ceramics have also been documented well into the upper reaches of the Nepeña Valley and into the Callejón de Huaylas, though it appears their control of the valley extended only into the middle valley zone (Proulx 1973, 1982, 1993.) The site of Huancarpon near the confluence of the Salitre and Jimbe branches is believed to be the buffer between Moche and highland groups, much as it was during the Early Horizon (Daggett 1984; Ikehara 2015; Proulx 1982).

One Early Intermediate Period highland group pertinent to this study is the Recuay culture, which occupied the north-central highlands between 1-700 CE. Emerging out of the transitional Huaylas (or white on red) phase, Recuay has been classified as a confederacy (Lau 2011). Recuay settlements ranged from 2500-3600 masl, and the epicenter for their settlements were focused in and around the Callejón de Huaylas, specifically around the modern day center of Huaraz. Important Recuay sites that have been previously excavated include the following: Wilkawain, Chinchawas, Yayno, Hualcayan, Pueblo Viejo, Pashash, Queyash Alto, and Jancu, to name a few (Bria 2017; Gero 1991; Grieder 1978; Lau 2011, 2016; Wegner 1988.) Recuay groups are known for their distinct pottery, which includes the use of white kaolin clay and a unique iconography representing house forms, warriors, ancestors, and felines. In addition to their distinctive pottery, Recuay sites often contain unique stonework depicting warriors, the ancestors, and felines (Schaedel 1952). They are also known for a variety of tomb types, which include machay, chullpa, box tombs, and most notably, stone lined subterranean tombs (Bennett 1944; DeLeonardis and Lau 2004, 87; Lau 2001.) The majority of Recuay settlements are located on hilltops and are typically heavily defensible (DeLeonardis and Lau 2004: 83).
In regards to the Nepeña Valley, Proulx and Daggett documented several sites in the middle valley around Moro, Salitre, and the Jimbe area, which included Recuay ceramics. Several chullpas style tombs were also recorded in and around sites in Jimbe (Proulx 1968, 1982, 1985; Daggett 1985). Proulx has postulated that the Salitre-Moro area was a buffer zone between the highland Recuay and coastal Moche groups (Proulx 1982), while Hugo Ikehara has described the main highland-coastal interaction route through the Salitre tributary pass to Pamparomás (Ikehara 2015).

Amateur archaeologist and collector, Wilfredo Gambini documented several funerary sites in the Rayan area above Jimbe with large quantities of Recuay ceramics (Gambini 1984). Recuay groups are known to have interacted with several coastal and other highland cultures. On the earlier end of the spectrum, interactions were with the coastal Gallinazo and Salinar groups, followed by the Moche. Closer to the Middle Horizon, there was interaction and influence with the Wari, who would eventually “colonize” the Callejón de Huaylas and the upper valleys of Ancash. Evidence of Wari ceramics, textiles, and increased warfare are found throughout the Recuay territory towards the end of the Early Intermediate Period (Ibid). While there is evidence for a significant occupation of Wari in the upper reaches of the Huarmey and Casma valleys, this is not the case for the Nepeña Valley.

3.6 Middle Horizon Developments

The Wari were an expansive state that originated out of the Ayacucho and Huamanga basins in the southern highlands around 600 CE. The Wari (also referred to as Huari) utilized military force as well as more peaceful techniques to expand their empire, and by 1000 CE, much of central and southern Peru had been included in the Wari empire (Isbell and Cook 2002; Williams and Nash 2006). Wari, the capital city, was located in Ayacucho, however there were numerous “second order” provincial centers located throughout the empire (Cook and Tung 2006, Isbell and Schreiber 1978). Known for their distinct tri-color (red, white, and black) of polychrome ceramics with supernatural deities (specifically the Staff God), along with textiles, Wari religious iconography was spread
(Schreiber 2001). Wari sites (constructed of stone) had unique architectural styles as well, with cities planned out orthogonally with expansive plazas and square “patio groups,” as well as the distinct ceremonial “D-shaped” plazas, which were less common (Isbell 2008). Other distinctively Wari items which spread throughout their empire at this time include the following: the “kero,” or a tall, stylized drinking vessel typically painted in polychrome designs, burnished black ceramics, tupus (or metal shawl pins), four cornered hats, and bronze items (Ibid).

Little Wari has been reported for the Nepeña Valley, though a significant amount of Wari activity has been recovered from the neighboring Casma valley to the south (specifically in the middle-upper branches) and the Callejón de Huaylas to the east. The Callejón de Huaylas was considered the major north-south corridor during the middle horizon, specifically in regard to Cajamarca and Wari exotic exchange wares (Isbell 2008: 159). Wari influence throughout the Callejón de Huaylas was felt strongest for sites along major trade routes, for example Chinchawasi, Honcopampa, Wilkiwain (Lau 2011). Lau proposes that Wari “control” of highland Ancash, specifically in the Callejón de Huaylas, most likely came in the form of elite alliances through prestige economy and not through direct control (Lau 2011: 259).

While the Wari would go on to control much of southern Peru and the north-central highlands during the Middle Horizon, the north-central coast would be ruled by Casma-Chimú groups. The Casma, a coastal polity which ranged the north-central coast from the end of the Early Intermediate Period through the first half of the Late Intermediate Period, were eventually incorporated into the Chimú state (Fung and Williams 1977). Their capital city was located in the Casma Valley, at the site of el Purgatorio (Vogel 2016). This site reached 5 square km, and was made up of four distinct sectors. Each sector was made up of “platform/plaza complexes” composed of rectangular plazas in association with small platforms (Vogel 2011). El Purgatorio was also
composed of domestic terraces, free standing clusters of rooms, and cemeteries. In addition to el Purgatorio, the site of Cerro de la Cruz, in the Chao river valley to the north is one of the other most documented Casma sites. This site, Vogel states, was a Casma “frontier” site, or secondary political center (Vogel 2012). Vogel (2011: 206), and suggests the Casma polity is in actuality a “hierarchical confederation of semi-autonomous regional elites.”

3.7 Late Intermediate Period: The Casma & Chimú Polities

Dates for Casma ceramics range from 800-1200 CE, and Casma centers in general include carefully planned compounds divided internally with rectangular patios. Domestic terraces have also been found along hills and ridge-lines. Casma constructions are built of “thick stone walls” as well as stone foundations with adobe walls. Sites are typically found in defensible locations along hillsides or are fortified (Vogel 2005). Ceramic workshops were located at the major Casma centers of Cerro del la Cruz and El Purgatorio, pointing to evidence for craft specialization (most likely under the purview of the ruling elites) (Malpass 2016).

Casma’s ceramics were molded and typically much thicker than the earlier Early Horizon through Early Intermediate Period wares. They have been found from the Huarmey through Chao valleys, and include at least four “sub-styles” (Pacifico 2014). These styles have been classified as: Casma Incised, Casma Molded, Serpentine Appliqué, and Black-White-Red (Pacifico 2014; Vogel 2011). As David Pacifico notes, the most common of these four are mostly utilitarian and are the Casma incised and serpentine appliqué (Pacifico 2014: 120).

Casma sherds have been observed at the majority of sites in the lower Nepeña Valley as well as numerous sites in the Moro Pocket. Daggett has also mentioned the presence of Casma surface ceramics in and around several sites in the Jimbe/Salitre zones, but the Casma occupation of the Nepeña Valley is still poorly understood. What is known, however, is that by the Late Intermediate
Period, Casma groups on the coast had been subjugated by the Chimú, and this period is marked by shared Casma-Chimú ceramic ware styles throughout the Casma and Nepeña Valleys.

The Chimú culture flourished in much of the same area once occupied by the Moche beginning around 1000 CE. By 1470 CE, the Kingdom of Chimor, or Chimú Empire had reached its apex and conquered the north coast and beyond, until it was finally conquered by the Inka Empire (Moore and Mackey 2008). The Chimu was one of three polities which controlled parts of the north coast at this time; the other two being Lambayeque (or Sicán) to the north and Casma to the south. The Chimú is the most studied of the Late Intermediate Period polities on the north coast (Conlee et al. 2004). Chan Chan, the primary center of the Chimú kingdom was located in the Moche Valley. The site of Chan Chan covers over 20 sq km, and is one of the largest pre-hispanic urban centers in the Americas (Mackey and Klymyshyn 1981).

The Chimú were a coastal state which spanned from Motupe in Lambayeque to Acaray in the Huaura valley (Brown Vega 2009). Archaeological evidence showing conquest took place over a 200 year period (Conlee et al. 2004; 214). First expansion ran from the Moche valley north to Jequetepeque. The second wave of expansion started in the “late Chimú period,” or between 1300-1470 CE. This wave moved from the Moche valley towards the south (Conlee et al. 2004; 216). It is believed that Chimú rule to the south differed from northern rule. In the south the Chimú jointly ruled with local lords (Conlee et al. 2004: 217). Chimú centers typically mimicked the elite compounds at Chan Chan, constructed in areas for control of irrigation systems and farm fields (Conlee et al. 2004: 216; Keatinge 1974). Chimú centers were rectangular and contained enclosure walls, storerooms, plazas, and burial platforms. At the sites of Chan Chan and Manchan, there were at least part time populations of craftsman for the manufacture of chicha and other goods. This same pattern of local lord rule was also seen in the Casma valley, where the local lords would
continue to rule from their earlier centers, and few Chimú centers were constructed after conquest of the valley (Mackey and Klymshyn 1990).

While no Chimú centers have been scientifically excavated in the Nepeña Valley, it is most likely that Chimú rule in Nepeña followed the pattern of Santa and Casma, with a shared rule by local lords. This appears to be the case considering the Chimú sites currently documented for Nepeña are in association with earlier centers, such as Caylán, and Samanco. Chimú activity in Nepeña is seen in association with Casma ceramics; however, Matthew Helmer’s work at the site of Samanco, right off the coast, exposed elaborate Chimú-Inka burial chambers filled with elaborate Chimú ceramics and metals (Helmer 2014). Additionally, the site of Maquina Vieja, Pan de Azúcar, and Huacatambo in the lower valley has been attributed to the Chimú culture. Huacatambo, originally documented by Squier, is also referred to as Tambo Warpo (Proulx 1968: 125). The site is composed of rectangular adobes, some with traces of red paint, and several rooms were reported to have niches. Squier describes the site of including several “open courts of various sizes, with platforms at their ends and sides, the former ascended by graded ways” (Squier 1877: 198). Some of the walls were reported by Squier to measure upwards of twenty feet, and his interpretation of the site was non-domestic. The Huacatambo center has since been interpreted as a major Chimú administrative center, while Pan de Azúcar and Maquina Vieja might have continued to be major residential settlements for the local lower valley populations (Proulx 1999).

The Chimú occupation however would be short lived, as they were conquered by the Inka Empire around 1471 CE. An Inka presence is poorly understood for the Nepeña Valley. The next section briefly describes the Inka Empire, their presence in Ancash, and the few centers in Nepeña which have been reported or documented.
3.8 The Inka & the Late Horizon

The Inka were the largest state to occupy the Americas prior to the arrival of Europeans, originally emerging out of the Cusco region, in the southern highlands of Peru. By the 15th century, Inka rule stretched across a 40,000 km elaborate road network spanning into what is now Peru, Bolivia, Ecuador and parts of Chile and Argentina (D’Altroy et al. 2000; Hiltunen and McEwan 2004; Lau 2016). Though recognized today as the Inka Empire, the Inka referred to their empire as Tawantinsuyu (or the land of four corners [or parts]). The Inka would go on to use several different methods to create their empire, including intimidation, military force, marital ties and political alliances, and economic relationships (Bauer and Covey 2002). Inka road network connected large provincial centers, as well as tambos, or way stations, which were located approximately every 20 km (D’Altroy et al. 2000). They counted on skilled craftsmen producing high quality wares such as textiles and metal, specifically silver and gold. Their stone cities and monuments, however, may be considered among their finest achievements. The Inka state utilized its stone monuments constructed in and around its state centers in order to “incorporate and order the provinces of Tawantinsuyu… Stone was a vital, transformative medium that communicated the will of the state” (Lau 2016: 192). While the Inka lacked a formal writing system, they utilized a specialized device known as a khipu (a system of knotted cords) for administrative records, and saving past narratives (Covey 2006: 169; Urton 2017). The empire lasted until 1532, when Pizarro and his forces would arrive in Peru, starting a period of conquest, genocide, and colonialism.

Ancash fits into the “part” of Tawantinsuyu known as Chinchaysuyu, and at the time of the Spanish arrival it was home to several different ethnic groups. For the Cordillera Negra and neighboring Callejón de Huaylas, the associated ethnic group was known as “Huaylas” (Lau 2016). This area would eventually be separated into the Huaylas province. Archaeological investigations previous to the 2000s have shown “very few verifiable Inka sites between Huánuco Pampa and
Cajamarca… “(Lane 2011: 123.) Specifically, there is minimal evidence for Inka occupation or administrative sites for the area in and around the Callejón de Huaylas (Lane 2011). Kevin Lane and Alexander Herrera conducted both survey and excavation work in the upper reaches of the Nepeña Valley, specifically associated with the Loco and Salitre branches into the Cordillera Negra. Their work revealed a new pattern of Late Horizon occupation and Inka use of the valley, linking the coast and Callejón de Huaylas (Lane 2011). It had previously been proposed by Von Hagen (1955) that the site of Huambacho Viejo was an Inka Tampu. This coastal site is located along the modern day Pan American highway, which follows the north-south coastal route of the original Inka highway system. This assertion was likely based on the fact that the Nepeña Valley was formerly known as Guambacho, a foreign Quechua name. Excavations by Chicoine (2006) revealed that Huambacho (PV31-103) saw a primary occupation during the Early Horizon, followed by subsequent mortuary reuses by groups producing Gallinazo, Moche, Casma and Chimú pottery.

For the upper valley, Proulx reported two sites off the Jimbe branch of the Nepeña River as possibly Inka. These included Rocro and Palacio Colcap (also known as Palacio Hirca), located near the upper valley towns of Canchas and Colcap, respectively. This was based off a 1953 El Comercio article reporting the sites, with special attention paid to Rocro and a possible Intihuatana spotted at the complex (Lane 2011; Proulx 1973). Surface survey I conducted in 2013 and 2016, however, showed Early Horizon wall constructions and no associated surface ceramics for both these sites. While the site of Rocro is an impressive construction of alternating walls, rooms, and patio-plazas (see Chapter 5 for further description), no Inka style stone work was visible at the surface. The site of Palacio Hirca, is a large enclosed “fortress” that parallels the megalithic hilltop constructions of those reported for the Moro pocket, most notably Paredones.

For the zone surrounding the upper Chaclancayo tributary located to the south of the Jimbe
basin, Lane and Herrera have reported on at least three Inka centers. The most significant is known as Intiauran, an Inka administrative complex located at the start of the Chaclancayo, between the entrance to the upper Nepeña Valley and the Callejón de Huaylas. This center is large and composed of two different sectors (an upper and lower). It displays Inka elements, such as the shape of distinct buildings known as kallankas, way-stations specific to chasquis (or messenger/runners of the Inka Empire), and other rectangular buildings whose constructions suggesting Inka domestic architecture (Lane 2005: 105). In addition to these Inka administrative features, the site is also known for its two distinct Inka roads, one which connects the Callejón de Huaylas, and heads down the valley branch towards the coastal town of Huambacho, the second which turns to the southwest and the Jimbe valley zone (Lane 2011).

A second Inka complex, known as Huampu, was originally reported in the Cordillera Negra at an elevation of 4000 masl by Alexander Herrera (2005). Huampu is located on a ridge between the Loco River tributary and the Sechín branch of the Casma River. The center is located on a steep slope with at least three hills separating the site into different sectors. Inka surface ceramics were found in an Inka style plaza enclosed by “rectangular structures” and a mound with trapezoidal access (Herrera 2005; Lane 2011). Herrera and Lane have posited this site may have been a mitima, or Inka mitigated colony, due to its strategic location between the Sechín and Loco river branches, as well as the presence of defensive walls which protect the site, and “domestic architecture that are different from those in the surrounding area (Lane 2011).

The final major Inka site which Lane discusses is known as “Kipia.” Located northeast of Pamparomás, Kipia extends along a high ridge approximately 5.5 km from the Cajarumi ridge-line to the east. Situated at an elevation of 3100-3400 masl, Kipia has been surveyed and excavated by Kevin Lane as well as Laurie Martiarena, and has been interpreted as a Late Intermediate Period
through Colonial sacred-ceremonial center. Materials included Akillpo through Inka and Spanish ceramics and associated artifacts including metals. The site has several different sectors, one including an abandoned colonial chapel shrine to the St. Santiago. This shrine was located in Sector B, which was also the location of the earlier pre-Hispanic W’aka stone, and several pukullos, or what Lane has dubbed “cist lined tombs” (Lane 2005, 2011; Martiarena 2014). According to Lane (2011) the w’aka stone was utilized during the Late Intermediate Period, and eventually by the Inka. The w’aka stone had been carved, and a “series of gravel strips and niches” are present, “representing the three mountains located behind the rock face.” Small holes were also carved into the top of the large stone, which Lane believes could represent the lagoons or lakes located on top of the mountains (or, Lane speculates, they could be used for libations or the draining of water downhill through a panel) (Lane 2007). Lane has interpreted the w’aka stone as the focus of prayer activity for the center, or a possible way-point on a pilgrimage route which leads further up the mountains. Inside the niches and holes associated with the w’aka stone, carved stones, andesite, river cobbles, smoothed fragments, and spondylus fragments were recovered. These offerings corroborate the importance of the stone for the people occupying the center during the Late Intermediate Period and Late Horizon. In addition, these specific types of offerings are associated with water. When the Spanish arrived, they added the chapel/sanctuary to Sector B as a way to “impose their political and religious authority” on the ridge (Lane 2007). In one of the test pits, there is a mix of local ceramics that are located over the Spanish offerings, suggesting that local populations continued to visit the stone even after the abandonment of the sanctuary by the Spanish.

Finally, the site of Cajarumi is a significant Inka occupation which can be found on the Cajarumi/Kunka ridge between the Cosma river tributary and Pamparomás. The site of Cajarumi is the most well-documented site in the area. Previously described by and reported on by Gambini (1975), Advincula and Chirinos (2000), Lane (2006), Martierina (2014), and Lau (2016), the site sits
on the border between the Caserio of Cosma and the dividing line of the Cáceres District and
District of Huaylas (Pamparomás). Cajarumi is located at 3600masl and, as its name suggests (Caja =
box, Rumi = stone), is well known for its stone carved boulders. The researchers have proposed that
these boulders had been carved by the Inka for the use in water-rituals. Cajarumi is composed of a
sector of subterranean tombs, followed by a number of carved granite boulders. At least eight of
these boulders have chambers cut into them, and each was probably covered with a large stone slab
(Lau 2016). Additionally, the other worked stones include carvings of channels, stepped profiles,
carved triangles, and carved depressions for pooling water. Like the site of Kipia, these carved pools
and channels have been interpreted as having been utilized by the Inka for water rituals (Lau 2016;
Lane 2006). A modern day road runs through the Cajarumi ridge just west of the location of the site;
however, I propose that it is likely this road follows an old Inka/Pre-Inka trail connecting the
communities of Cosma and Pamparomás. I suggest this because of the presence of two segments of
Inka road which are located within the town of Cosma proper. One segment is stepped, stretching
36 m, and fades away shortly before entering into the town near the NW corner of the plaza. A
second segment is located just south of the plaza, between a stretch of modern day houses. This
segment is made of paving stones and eventually fades off after a 107 m stretch. Much smaller
portions of stepped/paved trail lead up through the isolated houses on the hill-side, along the
modern day path to Cajarumi.

While Proulx (1973) and Von Hagen (1955) both suggested that the location of the Inka
road running through the Nepeña Valley followed the Jimbe River up to Colcap and over the
mountain pass to Huaylas, Lane suggests this route actually went up through Moro and the
Chacalancayo valley into the Callejón de Huaylas near Pueblo Libre. This is due mostly to the fact
that the three main Inka sites in the valley are located along this branch, and the location of the
mountain passes (there is no real mountain pass through Colcap to Huaylas, and the easier passes
are through the Pamparomás and Recuaybamba/Macate areas). While I agree with Lane that the main Inka route connecting the highlands and coast ran through the Chaclancayo valley, I believe an offshoot of this road ran from Pamparomás, connecting the sites of Kípia, Cajarumi, and the Cosma basin. This may have provided an alternate route into the Jimbe area, or as Kevin Lane suggests for the site of Kípia, Cajarumi may have been another stop on a pilgrimage high into the mountain peaks.

3.9 Summary

This chapter has framed a relative culture history for the central Andes around an understanding of architectural trends and material remains. The first part of this chapter focused solely on ceremonial architecture in the early Andes, while the second segment shifted gears to mobile material markers of culture like ceramics. This was done in an effort to understand the shift in the Cosma basin which is also marked by early ceremonial architecture, with later occupations centered around domestic use of the basin marked by mostly utilitarian ceramics. The purpose of this dissertation is to help expand our knowledge on the sequence of occupation and the corresponding religious networks present throughout the prehistory of the upper valley past the Jimbe zone. Before presenting the survey work and subsequent excavations conducted throughout the Cáceres District and the Cosma basin, the following chapter provides a description of the geography, ecology, and past research specific to the Nepeña Valley. It also delves specifically into more detail on the history of the Cáceres District, including historical accounts, while providing information on the formation of political boundaries. This is done in order for readers to understand the significance of the Cosma basin throughout Prehistory-Colonial occupation. The discussion on the political and historical “founding” of the Cosma basin is provided to illustrate the importance of Cosma’s background throughout history and the Colonial Era, which ties back into persistent place models for the use of the Cosma basin.
CHAPTER 4 THE NEPEÑA VALLEY: GEOGRAPHY & HISTORY OF RESEARCH

The Cosma complex is located in the Nepeña River Valley (Peruvian Valley number 31, or PV31), on the north-central coast of Peru, in western South America (Figure 4.1). Consisting of a coastline of over 2,400 km, Peru is bordered to the north by Ecuador and Colombia, east by Brazil and Bolivia and Chile to the south. Peru is broken up by the Andes Mountain range, the longest continental range in the world (Custred 2016: 186). On average, the peaks of the Andes reach 4000 masl, with the tallest peak, located in Chile, reaching 6962 masl (Ibid). Ancash is home to the highest peak in Peru. This peak, located in the Cordillera Blanca range is located at an elevation of 6,768 masl, and known as Huascarán.

Figure 4.1: Location of the Cáceres District and Cosma in the Nepeña River Valley.
The Andes can be longitudinally separated into three distinct regions: Northern (Colombia, Venezuela), Central (Ecuador, Peru), and Southern (Chile, Argentina). The Central Andes are considered part of the tropics, due to their start just north of the equator into the Tropic of Capricorn (Ibid). The term “Andes” comes from Antis, meaning the people of the tropical forests to the east of Cusco during the Inca Empire (Gade 1999). During European explorations of the continent, the term began to be used to refer to the mountain chain (Ibid).

The Pacific Ocean and high peaks of the Andes create differences in patterns of humidity and vegetation, creating climates which vary from subarctic, tropical, and arid and warm (Custred 2016: 187). The nearly 7000 km of mountain chain stretches from North-South across the continent and is responsible for breaking up the Central Andes into a non-cohesive unit; thus causing vertical zonation and vast climate differences by altitude (Gade 1999). Additionally, the fertile river valleys on the western slope are broken up by patches of arid desert to the north and south, causing an additional separation of any cohesiveness of the region. The Central Andes can be further separated into the “Costa, Sierra, and Selva,” or coast, mountains, and tropical forest, respectively. These regions can be separated additionally by distinct ecological life-zones. L.R. Holdridge originally created a classification of ecological life zones. Holridge’s classification of these life zones (1947) was applied to the Andes by Tosi in 1960. Of the 37 which were previously classified by Holridge, 34 can be found in Peru (Custred 2016; Mayer 1979; Tosi 1967), illustrating the unique diversity of the central Andes based on a number of factors.

Not only do the Andes Mountains contribute to the creation of a unique geography and climate, but a second contributing factor, known as the Peru, Galapagos, or Humboldt Current, affects the climate and ecology as well. The current which starts on the southern tip of Chile near the cold waters of Antarctica extends north along the coast of Peru and Ecuador into the Galapagos. It is a shallow, cold ocean current, which has a cooling effect on the surrounding air. This cold air
prevents the coastal areas of Chile, Peru, and southern Ecuador from generating precipitation, making it one of the major factors contributing to creating this arid climate. This current is also the lead factor in the productivity of the marine environment, as the coast of South America is the most productive in marine resources for the Western hemisphere. Seasonally on the coast, however, wherever there are high rising hills, which help to intercept the cold clouds, precipitation, increased moisture, and areas of fog/mist build up to produce humid conditions. These areas are ecologically referred to as “lomas” (Holridge 1967: 146).

Seasonally, rains affect the Central Andes in the selva and sierra during the austral summer months. The high peaks of the mountains, however, prevent these rains from reaching the western coast, contributing once again to the pattern of dry-desert like conditions (Custred 2016: 188). While the three main landscape categories include selva, sierra, and costa, they are more specifically broken down based on elevation and their related flora and fauna. Starting from the western coastline of the central Andes, moving inland toward the sierra, the environment can be broken up into the coast or chala, yunga, quechua, suni, puna, and janca ecozones respectively (Figure 4.2).

Figure 4.2: Chart showing location and order of ecological life zones in the Central Andes (looking south).
The chala ranges from 0-500 masl, with little to no annual rainfall, making all land located away from the river a dry desert environment. Moving higher in elevation, the yunga ranges from 500-2000 masl and receives little annual precipitation; however, most of the land surrounding the river makes for good fertile settlements. In addition to maritime animals, terrestrial fauna include deer, rodents, foxes, reptiles, batrachians, and birds. The yunga is also known for productive farming of sugar cane, (as a modern day staple crop) maize, fruits, coca, and trees and shrubs used for light building materials. Depending of each drainage’s topography and geography, the yunga can be a key zone for controlling water intake into the coastal region. In Nepeña, the yungas of the Moro Pocket represent such a bottleneck (Figure 4.3).

![Image of crops growing in the yunga life zone, taken in the Salitre area.](image)

The quechua life zone is located between 2000-3000 masl. It is made up of well-watered valley slopes intermixed with tracts of rockier land. Flora is typically consistent of shrubs, cactus, and periodic green plants. Domesticated crops grown here include cereals, potatoes, alfalfa and a more limited variety of fruits (Figure 4.4). Following this is the suni, which ranges from 3000-4000 masl.
masl, is non-forested transitory grasses with the occasional scattered shrubs. This zone is dependent on the seasonal rains that can occur during the austral summer months (November-April), and plants include tubers, potatoes, olluco, and cereals (at present wheat and barley, but in prehispanic times this included quinoa and amaranth). Animals present in the suni include deer, foxes, birds, and skunks.

![Figure 4.4: Quinoa field in the Cosma basin (quechua ecozone).](image)

The puna, which is 4000-4800 masl, are the cold mountainous grasslands where camelid grazing is prevalent. This zone is abundant in water, and marshy lands, including *polylepis* forests (composed of shrubs and small trees), which provided timber for building. The highest ecological zone is the jacea, which contains rocky mountain peaks, some higher than 6000 masl. This zone includes glacial lakes, fish, fox, deer, viscachas, wild cats, and raptors such as condors. These zones are repeated coming down the eastern slope of the Andes, however, instead of the yunga and chala, the tropical amazon forest (Herrera 2005; Lau 2011).
Each of these life zones can support human life in different ways. While the janca is generally uninhabited, it is from the lagoons and melting ice associated with glaciers and snow runoff that water is collected or irrigated for use lower down respective valleys. The puna is today utilized by herders for sheep and camelid grazing. While the majority of people who utilize the grazing lands of the puna live lower in elevation, small clusters of villages can be found within the puna. First are temporary base camps (known as estancias) for herders, which are dispersed throughout grazing areas (Mayer 1979: 30). Following this are small homes generally located along any roads through the puna, and at least one administrative or communal center. The suni zone is utilized for both pasture/grazing lands and agriculture, and often agricultural fields can be found on flat expanses of land as well as along the slopes. Many “peasants” or “campesinos” live in the suni, located in both nucleated villages arranged around a central plaza, school, and church, or dispersed villages found in association with familial chakra lands (Ibid). The quechua ecozone is affected by seasonal rains like the Suni, however it is a dryer life zone due to “higher evapotranspiration rates” (Ibid). The vast majority of the quechua is utilized for farming and irrigation agriculture and includes a high population density (Ibid). According to Brush (1976), the majority of villages are based within the quechua zone, with farmers and pastoralists taking advantage of both the quechua and yunga zones for farming and puna for herding and sheep grazing. For those fields in zones a few hours walk away, farmers set up temporary huts or base camps during times of harvest and planting, when work needs to be conducted over several days (Malpass 2009: 6). While the coast is made up of a dry desert environment, the rivers that flow down from the mountains break up these deserts with fertile east-west flowing transects. Settlements are typically located close to the rivers or their tributaries for access to fresh water.
These life or agricultural zones are described in part to lay the foundation for understanding the basics of complex exchange and kinship networks in the Andes, often based out of what is referred to as the ayllu. An ayllu is an Andean system of social and spatial organization. They are utilized to organize descent, land, and labor as well as reciprocal exchange (Vindal Odegaard 2010).

4.1 Verticality & Andean Exchange Systems

John Murra’s pivotal work on Andean network exchange systems, which he called verticality, would forever change how researchers framed future work in the Andes. The theory was influential in understanding a system of reciprocity and describing how exchange and trade functioned throughout the Andes. Murra’s model suggested a system of “Vertical Archipelagos,” or an arrangement of land control in which different ayllu groups colonized different ecological zones outside of their core areas (Murra 1972). This is an important concept which plays a major role in Andean exchange networks.

In its basic form, verticality can be described as such: Due to the geography of the Andes breaking up the environment, several altitudinal zones exist from east-west as one ascends to the high mountain slopes and back down the eastern side and into the tropical lowlands. The altitude and climate associated with each of these zones produced specific crops and resources within them. Therefore, individuals or groups of people associated with a specific ayllu group would settle in or take advantage of these different zones. Murra’s work, which was based on ethnohistoric documents, produced a model to understanding how Andean ayllu or kinship groups would spread out throughout the different ecological life zones in order to take advantage of the different resources. These communities and kinship networks were spread out as “island archipelagos,” thus allowing them to exchange with other members of their ayllu group in the different ecological life zones. As such, a physical community in a specific life zone could have members of several different
ayllu groups living within it, while those in the same ayllu would be spread out along valleys to take advantage of all the ecological niches.

The theory of verticality relies heavily on kinship and the notion of the ayllu. The smallest unit making up these ties is considered the nuclear family, or a married couple. These families are their own economic entities, which exchange their labor services throughout the year communally with other members of the community or their kin groups (Gose 1996, 2016). These services are then reciprocated by those members as help is needed for harvest and other tasks such as home building (Moseley 1992: 50). Ayllu groups have their own founding ancestor and are typically in charge of their own rites and ritual practices (Gose 1993: 487). Indigenous groups living in southern Peru and northern Bolivia, such as the Aymara Indians, still practice these reciprocal ties (other ethnic groups in Peru, such as the Quechua Indians, also practice similar ayllu ties). Not only is this ayllu system responsible for reciprocal labor, but also for the control and exchange of goods and commodities between kin groups (Bawden 2004).

Though influential and often cited, Murra’s model is not without its critics. Mary Van Buren (1996) has previously argued that due to Karl Polanyi’s influence on Murra’s work, which focused on capitalist societies within a market system, Murra’s concept may have been based on models not isolated to the Andes, or follow the ideological framework of “Lo Andino.” Van Buren used early colonial census records of the Lupaqa in the Titicaca area to support her argument. After inspecting historical records and accounts of re-distribution during Inca and colonial times, it became apparent to Van Buren that some goods were never redistributed, and that the “Andean exchange system” described by Murra was incorrect in this example. It appeared to Van Buren that “poor indians” were sent, through the use of political coercion, to work certain environments to retain goods for kurakas, or elite officials, and not for a kin based network exchange system (Ibid 348).
Expanding on Murra’s model, however, Brush (1976) utilized ethnographic accounts to understand how indigenous populations in the Northern Andes continue to utilize the landscape. Brush’s research focused on communities on the eastern slopes of the Andes which still participate in vertical exchange networks. He discussed the two forms of exchange for these groups, which take place on individual household levels and community levels. Focusing on a Chachapoyas community in the Northern Andes, known as Uchucmarca, Brush’s work illustrated how communal lands were considered to range between 800 and 4300 masl. The site was also isolated—an 8-hour mule ride to the nearest road and 14 hours to the closest regional market. Brush described the land use and communal spread as sufficient enough for most of the villagers to meet their needs without extending to outside sources. Though the community itself was self-sufficient, Brush points out that not all households always are, and those who could not meet their household needs traded labor for land or additional resources. Brush expanded on verticality by categorizing three different types he witnessed: 1. Compressed (or where all zones can be reached within short travel time, typically 1-2 days travel between top and base of the valley), 2. Archipelago (involving a wider separation between zones that may have lengthy travel times between them, often taking between 4 to 8 days) and 3. Extended (reserved for long, less steep valleys, where the zones are contiguous and continuously exploited, meaning there is not as much clustering of settlements. Instead demographically, the population is extended and spread out more evenly throughout the valley.

The complementary theory of “horizontality” was developed by Shimada (1987). This theory contains a similar range of variation as verticality; however, it is specific to a horizontal pattern extending along coastal regions (130). Shimada’s works at Late Moche and early Lambayeque sites on the north coast influenced the development of this theory. For the Moche, he discusses a pattern of site clustering in the middle-lower valleys. Paired with this clustering there was an existence of an Inca roadway connecting the Zana, Lambayeque, and Leche valleys, which he believes was most
likely formalized by Moche III or IV (132). In Nepeña, an Inca Road system had also previously been documented running through the valley from the mountains to the coast, with roads extending out towards Santa and Casma to the north and south (Proulx 1968; Von Hagen 1955) (Figure 4.5).

According to Shimada, the Chincha and southern islands would have supported fishermen and guano miners. For Netherly (1977), the northern islands were believed to have been utilized as multifunctional fishing stations. Guano may have helped the Moche with agricultural intensification and expansion into marginal zones, Shimada believes in the possibility that the Moche monopolized the guano access, and rights may have been granted to different ethnic groups or used in exchange/as tribute. Additionally, evidence for horizontality was apparent by the congregation of Moche sites located in valley necks. During Moche V, control over the southern Moche valleys dwindled as a new center was flourishing in the north. Despite losing its influence on the more southern valleys, marine resources (such as penguin, sea lion, and deep sea fish) were recovered from sites up to 50 km inland, causing researchers to believe the Moche retained their traditional maritime orientation and power (138).

Figure 4.5 Map redrawn and edited from Proulx, illustrating prehistoric roadways.
By this time, llamas and alpacas are argued to have been bred and herded on the north coast. Considering the addition of llama caravans, the horizontality model and Moche polity may have been connected through the sea and the land (138). Shimada believes that localized small-scale barter likely existed between coastal and neighboring highland communities, with elite gift exchange probably in existence at this time (139). The Moche polity was concerned with control (or an attempt at sharing) the yunga or chaupiyunga zone, for mineral resources, access to coca and san pedro cactus, and control of coastal water resources. This horizontal model argues for a coast-centric resource base with minimal vertical complementarity occurring.

Not only do the Andes Mountains account for drastic changes in elevation, climate, and lifeways in each respective valleys, but these high mountain peaks are also heavily ingrained in Andean cosmology and sacrality. The following section will discuss the importance of mountains as beings in the Andes and how they relate to and influence sacred geography. This is presented to provide further context into understanding Andean landscapes as they pertain to ritual or the sacred.

4.1.1 Mountains in the Andes. Mountains in the Andes are revered and venerated, specifically those associated with snowcapped peaks or sources of water (Gose 1986; Williams and Nash 2006). Referred to as apus, a term also reserved for local leaders in prehistory, or jach'aranas (Rasnake 1986) mountain peaks are considered guardians, connected to ancestor spirits, and overseers of the territories for which they tower over (Gose 1996). They are tied to fertility rites (Gose 2016), pacarinas, or places of emergence into this world in creation myths (Gose 1993), and are often associated with ancestral mummy bundles or group burial locales for different ayllu groups. Mountains themselves as a whole were not considered sacred, but typically a designated local on the mountain peak or slope was (whether a lightning strike, cave, or odd rock outcropping) (Gose 1993: 13). This would be marked by a w’aka or “specific shrine” (Ibid).
While different kin groups or ayllus are defined by their mountain apus (Williams and Nash 2006), it is believed that mountain peaks can be hierarchical and tied together through their own lines of kinship (Zuidema 1978). Mountains seen on the horizon were part of an “ever expanding geographic hierarchy of more potent sources of water (Ibid 138). Williams and Nash’s spatial analysis of Cerro Baul in southern Peru (2006) has illustrated the interconnectivity of Cerro Baul with the surrounding mountain peaks, which was greater than all other points in the valley. While over a half dozen peaks can be viewed and recognized from the site of Cerro Baul, there are three—Picchu Picchu, Hauilau and Arundane—that are predominantly displayed on the landscape. These peaks are also principal regional apu acknowledged by the modern religious pilgrims and shamans (464). These two peaks along with Baul, the authors argue, must also have been recognized as regional apus of importance. Visibility plays a large role in pagos and knowledge of the supernatural. The strings of apu that tie the system together reference each other through inter-visibility and the strings are the subject of ritual pilgrimages by shamans…. Moquegua’s apu reference an extensive ritual landscape that covers the entire Titicaca Basin, hundreds of kilometers in diameter (Ibid 461). The visible peaks from Cerro Baul then make a string of apus which join geographic regions together. The visibility and interconnectedness of the mountains help to explain the construction of the Cerro Baul site on a mountain mesa away from the local water and food sources. The site may have been chosen due to its defendable location; however, the analysis conducted also illustrates that it was chosen as a display of religious power in the region, through its link to the snowy mountain peak and connection to the other Apus visually.

Not only are mountain peaks associated with points of origin on the landscape—ancestors and ayllu descent—but also the ritual and political control of water. Mountains were venerated due to their control of weather and water which in the Andes were associated with fertility of crops and animals (Reinhard 1985: 299). Because of this, they must be “fed” in order to maintain the fertility of
the crops and animals (Bolin 1998). This feeding is often done in the form of ritual offerings, including chicha, or cane alcohol (Williams and Nash 2006). Other offerings may include ocean shells, and items typically associated with water (Ibid 458). These rituals help to restore water resources to the mountain spirits in a reciprocal act of thanks for the agricultural fertility given from the mountain (Gose 1986; Williams and Nash 2006). Zuidema (1978) describes the association of mountain lakes and snowcapped peaks, specifically for coastal communities, as relating to or being derived from the ocean (138). Gose (1993) expands on this, discussing water rituals between the huari (farmers) and llacuaz (pastoralist) complementary moiety groups referred to in historic and ethnographic accounts in Cajatambo. The local groups of agriculturalists controlled water “up to a certain point” through ancestral ties to their huari ancestors, who “are constantly scribed as creators of local springs and canals” (Ibid 493). However, the water is said to have originated from far away sources, suggesting that “contact with the Pacific Ocean underwrote their ability to create water locally” with the “source of water laying beyond the scope of local political control” (Ibid). For the pastoralists, or llacuaces, their original “foreign origins” associated with distant water bodies caused them to be the mediators for water rituals concerning the need for rainfall. This caused the huari farmers to be dependent on the llacuaces and their “aquatic pacarinas” (Ibid 494).

While the majority of accounts associated with mountain ritual, sacrifice, and water rites in the Andes comes from ethnographic or historical accounts, archaeological sites have also illuminated our understanding of how far back mountain veneration may have begun. U-shaped constructions of the Andean coast during the Initial Period have been interpreted as opening towards the high peaks of the Andes, and therefore the mouths of rivers and sources of water (Moseley 2001; Williams 1985). For the Moche culture, fine lined vessels have been found depicting scenes of sacrifice associated with mountain peaks (Bourget 2006; Donnan 1978). According to Bawden (1996), the locales of these mountain peaks offer access to the supernatural world and could have
been an ideal place for rituals which may have involved human sacrifice. While no human sacrifice has been found dating to Moche times, this is a practice that was attributed to the later Inca. By the time of Spanish Conquest in 1532 CE over 100 ceremonial centers or shrines had been built on mountain peaks throughout Inca controlled territory (Ceruti 2004). Not only did these shrines include human sacrifices, but also ushnus, small ruins, and other sacrificial offerings, such as spondylus, textiles, and the remains of camelids (Ibid). Additionally, the association of tombs, either in the form of chullpa (above ground chamber tombs) or machay (cave tombs), are often associated with mountain ridges and slopes. Burials have not only been found within agricultural terraces, but chullpa are also commonly found within or in association with fields. Burials have been interpreted as associated with planting, and that the mummies of ancestors are representative of dried seeds, ready to be resurrected (Gose 1993: 494).

Today several pilgrimage rituals still exist in regard to the worship of mountain peaks or visitation of mountain shrines. The Qoyllur Rit'i, an annual pilgrimage to a glacial peak associated with the feast of Corpus Christi, is one such festival. It is associated with small groups of pilgrims who climb toward the glacial sanctuary before sunrise, and is associated with ritual dance, the leaving of offerings, and miniatures (Allen 1997). While the Quyllur Rit'i takes place in southern Peru, it illustrates the importance of mountain shrines in pilgrimage not just as sacred places in the past, but today.

The mountains which tower over the upper Nepeña Valley are known as the Cordillera Negra mountain range, a branch of the Andes which runs north-south. This mountain range is typically overshadowed by the higher peaks of the Cordillera Blanca Mountains, just to the east and across the Santa River. Within the Cáceres District on the western slope of the Cordillera Negra, there are several lagoons, and the district is home to two of the highest peaks in this mountain chain.
The highest of which is known as Coñocrana (5181 masl). Coñocrana is located just on the boundary of the district of Cáceres and Macate, along the route between Recuaybamba and Macate, into the Callejón de Huaylas.

Following Coñocrana is the peak of Qarwaqucha, also referred to by locals as Fleury Punta, at 5070 masl it towers above the lagoon of the same name, and is accessible through the hamlets of Colcap and Carhuamarca. Along with these high peaks, there are a number of crystalline/blue-green lagoons in the high reaches of the Cordillera. According to former district mayor Gambini, the most popular and important to the people of the district are; Mama Cocha or Matar, Pintada Cocha, Quepan Cocha or Huampucallan, Huirf, Conoccanra, and Capao. Minor lagoons are: Yawar Cocha, Mata Mata, Ichic Cocha, Chopin Cocha, Coyllur Cocha, Huanca Cocha, Artesa Cocha and Isla Cocha (Gambini 1975). Out of one of these high mountain lagoons known as Tocanca, originates the Huiru Cатаc canal, a long, prehistoric canal which runs at least 28 km, and past several archaeological sites in the upper valley (Maza 2016: 22). This canal starts at a location of 8°51'27.31''S, 77°59'33.91''W at an elevation of 4500 masl, down to an elevation of 3800 masl, extending from the Puna, Suni, to the upper reaches of the Quechua ecozone, near the town of Quilcay (Maza 2016: 23).

With a broader understanding of Andean kinship systems, sacred mountain peaks, and distinctive ecological life zones in mind, the following section will cover the specific geography and ecology of the Nepeña River valley and specifically the nuances of the upper river valley where this dissertation was conducted.

4.2 Geography & Climate of the Region

Bordered by the Lacramarca and Santa Rivers to the north and Casma River to the south, the Nepeña can be found 393 km north of the capital city of Lima. This zone, coined as the “north-
central coast” by Willey (1971), is made up by the Lacramarca, Nepeña, Casma, Rio Seco, Huarmey, and Culebras river valleys. The Nepeña River itself is made up of three main tributaries, the Jimbe to the east, and Saltire and Loco (previously known as Vinchamarca) rivers to the south. All three tributaries converge near the town of Moro in the middle valley, where the Nepeña River reaches 8 km at its widest. In total, the Nepeña spans 74 km in length from the northeast to southwest, and has been classified as a second class river system with a seasonal water flow due to the rainy season, on top of a steady supply of water provided by the highland lagoons located in the Cordillera Negra Mountains (ONERN 197: 36). As Proulx (1968: 2) described, a “second class river is a river that does not have its origin in the continental divide, but has enough affluent reaching the zone of regular annual rains.”

![Figure 4.6: Map of important mountain peaks within the Caceres District, Nepeña Valley.](image)
The Nepeña River ends at the Pacific Ocean at the Los Chimús Bay at the very southern end of the valley; however, prior to the 1998 El Niño, the river ended in the Samanco Bay. A total of 74.7 million cu m of annual water flow discharge from the Nepeña River, most of which is during the months of February and March during the rainy season in the adjacent mountains. While this may sound like a large amount of water discharge, this flow is much lower than the neighboring Casma River (172.4 million cu m) and Santa River (4593.9 million cu m). While the nearby rivers may have more annual water flow, the Nepeña is a relatively shallow river, making it favorable for agriculture both today and in the past.

The upper parts of the Nepeña River, from the town of Jimbe upwards are especially productive for agricultural products. This yunga life zone, which surrounds the towns of Salitre through Jimbe, is favorable for the growing of crops throughout the year. For the specific area covered in this study, crops cultivated in the yunga zone around Jimbe include lúcuma, avocados, pepino, snap peas, beans, maize, some potato, and in the lower part of the zone, lagoon reeds for use in creating reed mats for temporary roofs and walls. For the Quechua region, of which Cosma is a part, crops include wheat, maize, quinoa, potatoes, sweet potatoes, olluco, alfalfa, apples, beans, and peas.

4.2.1 The Upper Nepeña Valley Zone & Cáceres District. Located at the headwaters of the Cosma tributary which feeds into the Jimbe River of the Nepeña Valley, the Cosma complex expands from the yunga-quechua to puna ecozones in the Cáceres District, Santa Province of Ancash. The Cosma River is fed by natural year-long springs in the Cordillera Negra Mountains (Figure 4.7). The two main zones which concern the upper Nepeña Valley, and the location of the Cáceres District, survey area, and Cosma complex are the Yunga (Jimbe-Salitre areas), and Quechua (Cosma complex).
These areas especially have a warm, dry climate throughout the year, with an abundance of sunny days, and daytime temperatures reaching into 32 degrees Celsius. Night time temperatures can get as low as the mid-40s, however, and annual afternoon and evening rains run from January through April.

Figure 4.7: Photograph of one of the natural springs above the Cosma basin in the Cordillera Negra Mountains.

4.2.2 The Upper Valley: A Note on Interaction Routes. On top of the favorable climate, these zones have access to both coastal trade routes, which in the past provided access to marine resources and coastal crops, as well as access to the Callejón de Huaylas through several mountain passes. These passes traditionally provided access to highland goods and people. For the upper Jimbe area, the three main routes through to the Callejón de Huaylas were the Pamparomás pass to Pueblo Libre, the Colcap pass to Huaylas, and the Recuaybamba-Macate route, which also loops around to Huaylas (Figure 4.8).

In fact, it should be noted that during the War of the Pacific in the 1870s and 1880s, the most important “locale” for guerilla organization in Ancash was in Moro and Jimbe, due to the “strategic passes” into and out of the highlands, specifically that of the Jimbe-Macate-Huaylas route, and the Moro-Pamparomás-Caraz road” (Thurner 1997: 62). Of these three passes, which were
traditionally accessed through narrow foot trails, only the Pamparomás and Recuaybamba passes are now accessible with a car.

As Topic and Topic (1983) had previously mentioned in their study on coast-highland trade routes, there do appear to be recognizable patterns in road/path constructions on the north coast. These patterns consisted of a northwest to southeast flow, with valley routes running north-south along the coast. Additional parallel footpaths between some valleys at the start of the yunga life zone were also present (Ibid 242).

Figure 4.8: Map of Cáceres District/Upper Valley. The yellow arrows indicate three historic routes/footpaths from Jimbe through mountain passes into the highlands.

In the sierra, the only linear road segments that were encountered in the analysis were found along the quechua-suni life zones, in areas of arable land. When discussing node (center) analysis, especially in the Andes, there are two distinct spatial models utilized for the purpose of connecting centers: the traveling salesman and hierarchy solution. Traveling salesman models are routes where
the first and last node are the same (typically running from the quechua into the suni, back to quechua, down to the Yunga, and finally back up to the quechua), while the hierarchy solution weighs one node or center higher than the others, and calculates minimum distance traveled from the more important center to all the other nodes in a network. Traveling salesman models typically correspond to localized scales of interaction, typically between Yunga-quechua ecozones, but can reach upwards of 75 x 75 km if a primary center is involved. It is only when primary centers on the coast and the sierra are included in the model that larger scales of interaction are reached (up to 150 km). At the 150 km range however, due to its length, this scale is most likely used for the movement of elite goods and pilgrimage, rather than the transportation of subsistence commodities between zones (Topic and Topic 1983: 249).

The Topic’s study is mentioned in the case of the upper Nepeña Valley for two reasons. First, it covers basic principles and patterns of route analysis, especially as it applies to the Andes. Second, the Topics discuss the importance of buffer zones, specifically located on the western flank of the Andes, and the roles these buffer zones, and the sites located within them play in larger exchange networks. In Cosma’s case, a flat pampa at the headwaters of the river protected on three sides by the Cordillera Negra Mountains, the geography of the site and its location along coast-highland passes in the valley may have fostered the growth of this large center during the Preceramic on.

By studying pre-historic routes, as well as the principles of network analysis, we can hypothesize patterns of social and religio-political interactions on a broader scale. A significant amount of information is known on ancient roads for the lower portion of the Nepeña Valley. Between 1967 and 1971, archaeologist Donald Proulx’s survey work recorded several roadways, the major heading north and south to the Santa and Casma valleys, respectively. They traverse passes and defensive walls through a gap in a pampa near the modern day town of Nepeña. The only other
entrance to the valley from the north is the area where the Pan American Highway is now located, 5 km to the west of the Nepeña pass. The main northerly route was documented to have been delineated by rows of stone on each side, and the main route was 12 m wide in some places.

In 1949, Paul Kosok had attempted to follow the northerly road out of the Nepeña, but it eventually faded out into the desert. It is possible that this route leads directly to Cambio Puente in the Santa Valley and is the shortest distance between the irrigated lands in Nepeña and Santa (Kosok 1965). Because the road fades out into the desert, and its destination is not clear, an alternate route has also been proposed. The road out of Nepeña may also make a sharp turn towards the west, bringing it to the present day city of Chimbote. This route is still used today by drivers heading to Chimbote and looking to avoid the toll located on the Pan American highway.

The southerly route also leaves from the Nepeña pampa, and though it is narrower with an average width of only 7 m, it is lined on both sides by a low fieldstone wall and eventually connects with a larger road which heads to the Casma Valley. Several more roads were documented during Proulx’s surveys. None of them, however, appear to be part of the main coastal Inca roadway, which is predicted to be located in the lower valley where the modern Pan American Highway currently runs. Cieza de León passed Nepeña on the Inca Road in 1547, and reported to have stayed overnight by the road at the location of Huambacho. The site of Huambacho itself is currently located just off of the modern Pan American highway.

One last route, which has yet to be documented visually reported, was printed in Victor Von Hagen’s 1955 map of an Inca Road system. One of the East-West routes coming down from the Callejón de Huaylas cuts down through the Jimbe tributary. Local inhabitants who reside in and around Jimbe claim that it is a two-day hike over the pass from the community of Colcap, which lies at the base of the Cordillera Negra. Once over the pass, this route leads down to the community of
Huaylas. The survey work of Daggett and Proulx corroborate this route, as many Early Horizon sites are located along Hagen’s proposed route down from the highlands. A 2015 visit the town of Huaylas in the Callejón de Huaylas corroborated this path as it can be seen coming out of the mountain pass. When asked by locals where the road leads, they responded that the pass forks on the western slope of the mountain, with one route heading towards the community of Recuaybamba, and the second to Colcap. This Colcap route also follows the modern day road up to Jimbe.

Alternate routes down from the highlands have also been proposed. Alexander Herrera, based on his recent survey of the Loco branch, suggests a road connecting the lower valley Chimú-Inca administrative centers with the Inca center of Intiauran, which is located in the lower puna ecozone in the Cordillera Negra (Herrera 2005). He believes this route follows the Chaclancayo and Chumbe valleys into the Salitre tributary, which eventually meets with the Nepeña River near Moro. Currently, daily combis follow this route to Caraz in the Callejón de Huaylas.

In addition to these descriptions of pre-Hispanic routes from past researchers, I have compiled a map of Santo Toribio de Mogrovejo’s 1603 visit through the region (Benito 2006). The route was drawn in by following the sequence and respective dates each place/town was visited (Figure 4.9). The town names are as follows: Mato followed by Huaylas (both in the Callejón de Huaylas), followed by Macate (located near the summit of the Cordillera Negra), Taquilpon (on a tributary to the Santa River), Santa Ana, Lacramarca (both in the Lacramarca valley) Lampanín, Suibe (Jimbe), Canchas, and finally Moro (all in Nepeña). More descriptions are also listed for the area in his 1603 travel; however, it appears from Moro, Santo Toribio went south to the upper Casma valley (Paricoto), before following the river down to Sechín, Casma, and finally looping back north to Guambacho, Nepeña, and into the Santa valley (Benito 2006). Toribio’s route is overlaid on
present day footpaths present in the upper Nepeña valley, which connect the modern day communities within the valley (and surrounding valleys) (Figure 4.9).

This was done to extrapolate the paths Toribio most likely took during his visit through the area. Many of the footpaths utilized today are in all probably prehistoric, as they pass through and connect prehistoric sites and canals. They also follow several of the patterns discussed in the models above. For example, their presence along ridgelines, and following water sources through paths of least resistance (Topic and Topic 1983).

While the place name “Cosma” was not reported during Santo Toribio’s visit through the area, it should be noted here that Canchas was a place on the landscape at least by this time. The community of Canchas is part of the Cosma extended community, and the prehistoric ruins on the Canchas ridge (Rocro) date to the Early Horizon, and share a viewshed into the Cosma basin (and vice-versa). Estimates from the modern day inhabitants of both Cosma and Canchas state that the walk between the two settlements is a two-to-three-hour walk depending on pace. The other hamlets considered affiliated with the Cosma extended community and lands are Miraflores, San Juan, Guadalupe, and Collique. Community members in Cosma still have families that live in Canchas, Miraflores, Guadalupe, and Colcap. These family members continue to travel to Cosma for festivals, voting on communal affairs, shared labor (repairing or building adobe houses) and harvesting crops. With the discussion of footpaths and routes within the valley, it should be noted that Cosma is situated between two of the major historical trade routes coming out of the highland passes (Figure 4.10).

The first of these passes is the Jimbe-Recuaybamba route through Macate and into the town of Huaylas. The southern pass extends from Moro-Pamparomás and into the Callejón de Huaylas through Pueblo Libre. Cosma is located along the route from Jimbe to the Pamparomás pass (Figure
Pamparomás is just an eight-hour hike from the town of Cosma, and from there an additional two days travel time will take a traveler on foot to the Callejón de Huaylas. Least Cost Path and slope modeling in ArcGIS, as well as descriptions from the documented pre-historic trade routes (Herrera 1998; Proulx 1968; Von Hagen 1955), suggest that although Cosma is in a prosperous zone (flat basin, water resources, temperate climate). It is also located in a secluded and hard to reach area. The basin is tucked away and protected by three steep ridges of the Cordillera Negra Mountains (Figure 4.11-4.12).

Figure 4.9: Map illustrating the 1605 route Santo Toribio most likely took. This map was compiled based on the order of descriptions from his travel. His route is shown in orange, with direction flow with orange arrows. I.e. Mato listed first, followed by Huaylas, Macate, Taquilpon, Santa Ana, Lacramarca, Lampanín, Suibe (Jimbe), Canchas, and finally Moro. This map was compiled in order to frame how communities were connected through footpaths in the Andes.

4.2.3 Summary. This section has covered a basic background of the unique geography, climate, and historical-political setting which makes up the Nepeña Valley. Work by numerous
archaeologists and researchers have illustrated the complexity and longevity of human settlement within the valley, as well as the diversity of sites. The mountain passes of the Nepeña Valley into the Callejón de Huaylas were strategic and important pathways between the coast and the highlands, and Nepeña has a long-standing history of occupation and research. Below I will briefly cover a history of the researchers within the Nepeña Valley. More information on some of these surveys, excavations, and sites can be found in the subsequent chapters of this dissertation.

Figure 4.10: Jimbe-Cosma route to the highlands through Pamparomás. Yellow arrows indicate direction to Jimbe.

4.3 A History of Research in the Valley

The earliest explorations in the valley were originally conducted by Ephraim George Squier, an American diplomat and explorer who visited the valley in the 1860s. His travels were written up in the 1877 book, *Peru: Incidents of Travel and Exploration in the Land of the Incas*. Having landed in the port town of Samanco, his explorations only took him up through the San Jacinto hacienda, exploring no further than Motocachy to the east and the area surrounding Moro to the south. Some of the sites
he documented included Huacatambo, the fortresses of Quiske and Kushipampa (Moro), Pañamarca in the lower valley, and several platform mound structures in and around the Motocachy hacienda. Squier is a useful resource due to his in depth descriptions, and accurate sketches of the sites he mentions in his text.

Figure 4.11: Facing southeast from the Rocro ridge towards Cosma. Yellow arrow indicates modern road to Cosma. Red arrow shows the location of the original footpath followed from Cosma to Jimbe, which runs parallel to the road and is still utilized today by pedestrians. Green arrow points out the Cajarumi ridge which separates the Cosma basin from Pamparomás. Green translucent polygon marks the location and size of the Cosma basin.

Figure 4.12: Facing northeast from the Cajarumi ridge down towards the Cosma basin. The Cosma road/paths to Cajarumi. Yellow arrows indicate the modern day road, white arrows show the footpaths which run parallel along the modern road.
Following the work of E.G. Squier, Julio C. Tello was the next to conduct significant survey and excavation work in Nepeña. Tello visited Nepeña while on his quest for evidence of what he referred to as “coastal Chavín,” something he believed he found at his excavations at the sites of Punkuri and Cerro Blanco, starting in 1933. Both these sites are located in the lower valley, near the modern day settlement of Nepeña. At Cerro Blanco, Tello uncovered the remains of multiple friezes and murals with large “Chavínoid” faces. The temple, a U-shaped construction of smaller lateral mounds, and a large central mound, was constructed of conical adobes and decorated with multicolored friezes (Daggett 1987a; Tello 2005). After beginning excavations at Cerro Blanco, Tello also simultaneously started work digging at Punkuri, located a short distance up the valley. It was here where a large feline idol in the temple stairway was discovered, and at the base of these stairs, a human burial was uncovered (Daggett 1987a; Tello 1933). Tello would go on to argue that the Nepeña valley had been occupied by people of the highland Chavín culture during the Early Horizon (Proulx 1999; Tello 1943).

Following the excavations of Punkuri and Cerro Blanco, interest in Nepeña largely stagnated, specifically in the way of excavations. Researchers who visited the valley and reported on sites or prehistoric walls and roadways included Wendell C. Bennett, Frederic Engel, Paul Kosok, Victor Von Hagen, and Richard P. Schaedel. It was not until the 1960s when Donald Proulx conducted an in-depth pedestrian survey of the lower Nepeña Valley. Proulx and later Richard Daggett documented over 360 sites in the main tributary of the valley up through the town of Jimbe (Daggett 1985; Proulx 1968, 1973, 1985). Proulx also recorded Recuay wares in the valley, and argued for the presence of Early Intermediate Period, Moche/Recuay interactions within the valley (Proulx 1982). Proulx and Daggett’s work laid the foundation for understanding settlement patterns in the lower, middle, and lower-upper valley and for producing ceramic chronologies for these zones.
(Daggett 1985, 1987b). Daggett’s work specifically documented upper valley sites and produced a three phase ceramic sequence for the Early Horizon.

Since the 1980s, numerous archaeologists have excavated within the lower and middle portions of the valley. Lorenzo Samaniego returned to the site of Punkurí to expand on Tello’s excavations (Samaniego 1993). In the early 2000s, archaeologists of the CHINECAS irrigation project documented several sites, including the Early Horizon structure of Sute Bajo (Cotrina et al. 2003). David Chicoine conducted site evaluations in the lower valley and carried out excavations at the Early Horizon elite center of Huambacho (PV31-103) in 2003 and 2004. He resumed fieldwork in 2009 and 2010 with excavations at the Early Horizon proto-urban complex of Caylán (PV31-30). At the nearby site of Samanco (PV31-4), Matthew Helmer excavated the coastal remains of an Early Horizon complex between 2012 and 2013 (Helmer 2015). Koichito Shibata revisited the temple site of Cerro Blanco (PV31-36) from 2002 to 2004, and conducted related excavations at the nearby site of Huaca Partida (PV31-125) in 2005 and 2013. It would be Shibata’s work that established an in-depth ceramic chronology (developed through stratigraphic excavations) for the middle and lower valley (Ikehara and Shibata 2005; Shibata 2010). These ceramic sequences are still utilized today by researchers working in the valley. Hugo Ikehara conducted an in-depth survey of the entire Moro pocket between 2012 and 2013 following his 2008 excavations at the monumental complex of Kushipampa (PV31-56) (Ikehara 2010b; Ikehara 2015). Lisa Trever’s 2010 excavations focused on the Moche site of Pañamarca (PV31-38), in the lower valley near the town of Capellina. This work specifically focused on the imagery of a Moche mural uncovered at the site. Nearby Pañamarca, Carlos Rengifo led excavations at Cerro Castillo (PV31-40), an Early Horizon through Middle Horizon center between 2010-2012; his dissertation, however, focused on the Moche elements of the complex (Rengifo 2013). In 2017, Jenna Hurtubise and Jeisen Navarro began a research project
at the Late Intermediate Period center of Pan de Azúcar de Nepeña (PV31-28-29) located in the vicinity of Caylán.

For the upper valley, Wilfredo Gambini, the mayor of the Cáceres District in the 1970s-80s was an amateur archaeologist and collector who would go on to document 71 sites throughout the district. His work was published in the monograph “Santa y Nepeña dos Valles dos Culturas” in 1985. This manuscript described numerous sites, ceramics, and funerary remains collected throughout the upper valley. Several photographs and sketches are also included of some of these sites. Unfortunately, Gambini did not always visit the sites where ceramic materials came from, as they were often brought to him in the district capital, and many of the sites were not visited by Gambini, but only described to him by the huaqueros (Carrasco-Chavez 2016). It is because of this that many sites were never documented by Gambini, and for those that were visited and photographed, only the monumental elements were noted.

For the upper valley, specifically the Loco and Salitre branches, survey was conducted along a transect by Alexander Herrera and Kevin Lane. Numerous sites were documented along the Loco branch by Herrera, while Kevin Lane focused on an in-depth survey in the area surrounding Pamparomás. Lane would go on to excavate Late Intermediate Period sites related to water irrigation in the Cordillera Negra. The current survey work discussed in this dissertation overlaps only slightly with that of Lane’s, as the boundary for the Pamparomás and Cáceres District is along the southern ridge-line which borders the Cosma complex. An additional excavation of the site of Cajarumi was conducted in 2000 by Peruvian archaeologists Advincula and Chirinos. They documented the looted tomb elements and major Inca carved stone works at the site. Cajarumi is one of the sites within the boundaries of the Cosma ridge-line and on the border with the two districts.
4.4 Summary

This chapter has covered the geography, ecology, and history of research within the Nepeña River Valley. A background of Andean lifezones paired with an understanding of basic settlement patterns and the exploitation of these ecological niches was provided to anchor this dissertation in the Andean landscape. Understanding the basic settlement and subsistence patterns of upper-valley lifezones and mountain environments helps to understand the context of the ensuing chapters.

Survey work in the Cáceres District, specifically within the Cosma basin will now be discussed in order to fill data gaps for these time periods. While previously described by Tello, Rowe, and Lumbreras as a homogenous cultural period throughout the central Andes, the updated dates coming from the center of Chavín de Huántar (Rick et al. 2011) combined with a more refined understanding of a Cupisnique connection on the coast (Shibata 2010), and a more in depth demographic understanding of middle and lower valleys, we are now forced to rethink the role of upper valley communities in the unfolding of trade networks and religio-political interactions during the Preceramic and Early Horizon.
CHAPTER 5: SURVEY IN THE UPPER VALLEY: THE CÁCERES DISTRICT

The current chapter presents on the methods and results of the regional survey I directed between 2013 and 2016. Following the broader Cáceres District survey is a short site atlas/description of the different occupation centers found within and around the Cosma basin and surrounding ridge-lines.

5.1 Survey Methodology

Survey methods were twofold and included a general pedestrian surface survey of archaeological sites in the upper Nepeña River Valley in north-central Peru and more in depth general surface survey collection within the Cosma basin. The first step in survey methodology consisted of compiling maps from previous researchers (Daggett 1984; Gambini 1984) and amateur explorers in the district (Paz 2010). These maps were then digitized in ArcMap in order to create a preliminary database of upper valley sites. Additionally, Google and Flash earth satellite imagery of the upper valley was compared with previous survey maps in order to identify sites which had not been previously reported/visited. This digitized data was turned into several maps for use in the field as well as data for a handheld GPS unit in order to re-locate them once on ground level. Sites were then photographed and architecture was measured when applicable. Rough sketches including measurements were drawn in a field notebook. Any surface materials were photographed and described, and when pertinent, artifact scatters were GPSed with a handheld Garmin Etrex unit. No materials were collected in either the 2013 or 2016 survey (except in 2016 and then only in the case of the Cosma basin).

Prior to survey, and through discussion with Richard Daggett, a preliminary list of twelve sites around the Jimbe area was constructed as sites’ of priority to revisit, due to the presence of exotic wares, and their potential for sites with higher evidence as interaction sites. On top of this
Figure 5.1: Purple stars indicate sites originally documented by Daggett and Proulx during their survey work in the 1960s and 1980s. This map was constructed in GIS as a jumping off point for the original 2013 survey plan.
original list of sites Daggett had documented, several sites were observed in Google Earth, and added to the list of sites to survey during the 2013 season (Figure 5.1). The maps created by Gambini in his 1984 monograph were also georectified, in addition with several potential sites photographed and mapped by amateur photographer and local Jimbe explorer, Eduardo Paz. These sites encompassed much of the upper valley, specifically in and around the sites of Rayan, Recuaybamba, Colcap, and Cosma (Figure 5.2).

Over 240 km were walked over the course of the survey (which took place over three weeks in July of 2013 and continued over a week in August of 2016). Our survey team typically totaled three or four people and was conducted by foot. In total, 36 sites were visited. Of these, 18 had not been reported on by the previous surveys of Proulx, Daggett, or the amateur work of Gambini and Eduardo Paz (Figure 5.3). The areas were broken up into the following: Salitre area, Jimbe area and Colcap, Rayan area, and the Cosma basin.

Centers that had been previously documented were revisited because they exhibited evidence of highland-coastal interactions, as indicated by ceramic/architectural styles. The 2016 survey portion focused on the upper Jimbe tributary of the Nepeña River, while the 2013 portion focused on the Salitre and Jimbe areas, followed by the Cosma and Colcap ridges. The Jimbe River which feeds into the larger Nepeña River forms in the town of Jimbe where the Lampanin, Colcap, and Cosma tributaries converge. The 2016 survey prospected sites along the Colcap and Rayan tributary branches, documenting 8 more sites previously undocumented by archaeologists.

Previous sites recorded by Daggett and Proulx are referenced by their site number which always starts with PV-31. PV standing for “Peru Valley” and 31 in reference to Nepeña Valley’s sequence in the larger context of Peruvian river valleys. The following numbers reference the order
in which a site was documented. Any sites referred to in the following survey without a number was not documented by Proulx or Daggett and therefore do not have a reference number in their sequence. Several sites documented in earlier surveys have both a name and a number, for example PV31-267, also referred to locally as the “Huaca Grande” site. For detailed site descriptions and locations, please reference Appendix A.

Figure 5.2: Map produced by combining the previous survey maps from Gambini, Daggett, and sites documented by Ed Pax. Blue squares indicate sites previously documented by Pax or Gambini. Orange circles illustrate the centers visited in 2013 during the initial survey.
5.1.1. 2016 Lots, General Surface Survey. Surface artifacts were collected within the basin and surrounding hills during the summer of 2016. The site was first divided into lots, using landscape features, modern architecture and walls, and aerial imagery. Originally 368 lots were distinguished;
however, problems with visibility (fields that had been planted, or areas of high overgrown vegetation which prevented walking through) excluded lots from the survey, but representative lots were walked per site sector (Figure 5.4).

In total, 55 lots were surveyed; transects were walked 5 m apart for each lot, and any surface ceramics, lithics, or bones were collected as the lines were walked. The purpose of this survey was to help fill in gaps in the chronology of Cosma, as the major focus of the excavations within the basin were on ceremonial components of the site.

A general surface survey was also conducted for sites reported and shown to me by local guides in the Cosma area (Figure 5.6). Most of these sites were located along the surrounding ridge-lines and mountains that surround the basin. One included megalithic architecture, and all except Iglesia Hirca had been reported to house either chullpa tombs, subterranean tombs, or machays. All of these centers had been named (save for two) by the local community, and unless otherwise noted they are referred to by their local quechua names here.

Two areas were not named, but included a clustering of different tomb styles. The first, located within the Cosma basin just outside the modern day cemetery has been named “cuevitas,” or “little caves.” These small tombs are located within an exposed soft sandstone formation in a hillside at 2550 masl, just 615 m Southeast (SE) of the Kareycoto mound, and 286 m South (S) down a footpath to the prehistoric terraces (Figure 5.7). Three cuevitas were documented, though two had previously been opened and looted. One was partially opened and still included the remains of at least two adult individuals.

While isolated machays are located throughout the basin, a clustering of machay tombs was located along the south western Iglesia Hirka ridge line (Figure 5.8). Inside several of these tombs
Figure 5.4: The Cosma basin and outline of different lots for surface survey. This map also shows the location of the other sites/occupations throughout the Cosma complex.
Figure 5.5: Image of lots surveyed (in green) verse those not surveyed (white), orange diamonds point out clustering of surface ceramics/materials or other archaeological features (huanca stones, machays, chullpas, etc).
Figure 5.6: Archaeological elements in the Cosma basin
were the remains of individuals, including several crania. Additionally, ceramics were recorded in at least six of these machays. Broken sherds were mainly plainware, or Akillpo, later period wares. Designs included beige paint and incising. Identifiable forms were neckless jars and cuencos or small bowls, as well as at least one human face bowl (Figure 5.9). The extent of Machay activity extended at least 1000 m along the ridge-top from an elevation of 2000 to 2800 masl and nine individual machays were documented.

5.2 Documentation of the Cosma Basin

In 2013, during the initial pedestrian survey, the Cosma complex had yet to be properly documented or explored by researchers. While Daggett mentions the site in his 1984 dissertation, due to the limited transportation and lack of road access in the 1980s, he was unable to make it to Cosma (Daggett 1984: 44). Gambini mentions the town of Cosma in his 1975 monograph as well as his 1984 book. Unfortunately, his interest in Cosma focused on its historical founding, and the
megalithic elements at the site, specifically Cajarumi, Iglesia Hirka, and Watsi. No description, photographs, or mentions of the Kareycoto and Acshipucoto mounds at the site were ever reported by Gambini. In fact, Gambini mentioned multiple times to Daggett that there was no “Early Horizon” elements in the Cosma drainage or higher up the valley, and the only Chavín-related vestiges in the upper valley were within the Colcap drainage (Daggett 1984: 46-47). It was this lack of transportation and the misclassification of the cultural elements of the Cosma basin that lead Daggett to focus his work in and around the town of Jimbe.

Figure 5.8: Example of machays documented within the Cosma basin. Some of these were heavily looted, however others still housed human remains and burial items.

Figure 5.9 Example of ceramic forms recovered from inside machays in the basin.
This original 2013 survey of the Cosma complex included the two mounds located in the basin—Kareycoto and Acshipucoto—as well as the later domestic activity located on the Kunka ridge (Figure 5.10). Originally a third mound was believed to exist on the Kunka ridge sharing a N-S alignment with the two mounds in the basin, however our 2016 excavations have revealed this was a natural knoll which was modified in antiquity, most likely during the Early Intermediate Period through Middle Horizon. While this does not rule out a purposeful effort by Early Intermediate Period and the Middle Horizon cultures to create an axial alignment with the earlier ceremonial elements of the center, in light of our excavations, only the Acshipucoto and Kareycoto mounds were likely built during the original construction of the monumental elements of the site.

As Cosma is surrounded on three sides by high peaks of the Cordillera Negra Mountains, for the purpose of this study, the “Cosma Complex” is considered made up by everything found on or within these three mountain ridges (Figure 5.10). While the excavations were broken up into three main sectors: Kareycoto (Sector A), Acshipucoto (Sector B), and Kunka (Sector C), several different centers or site occupations were documented along these ridges and mountain peaks (Figure 5.11).

The occupations ranged from simple wall foundations and/or associated artifact scatters, tombs, carved boulders or huana stones, and monumental constructions. The basin itself consists of two platform mounds arranged north-south. The eastern mountain slope exhibited the most evidence for prehistoric terracing activities, while the western mountain base was associated with a clustering of boulder machay (cave or boulder tombs). Additionally, a large hilltop fortress (Iglesia Hirka) and Inca ritual site (Cajarumi) were documented on the western and southern ridges, respectively.

The sites of Cajarumi and Iglesia Hirka were originally documented by our team in 2013. Elements within the basin which were explored and photographed included the chullpa, located
Figure 5.10: Map of the Cosma basin, with location of sites and activity clusters recorded between 2013-2016.
along the southern footpath leading to the Kareycoto mound; a granite lintel stone with a simple carving of a face and two serpentine figures was also documented near this mound. One of the most striking features of the mound was the underground gallery which led within it several meters (Figure 5.12).
This gallery, paired with several stamped circle and dot ceramics and incised sherds observed on the surface were the main catalyst for returning to Cosma for future excavations. Along with the larger mounds and activity on the ridgelines (Kunka, Iglesia Hirka and Cajarumi), an area of prehistoric terracing was explored to the east of the Kareycoto mound on the mountain slope. This terracing was overgrown, but several walls were observed, along with the presence of three more possible chullpa located in this sector (Figure 5.13-5.14).

![Figure 5.13: Map of Sector A, red dot indicates location of lintel stone with carving. The course of the Cosma tributary is represented by the blue dashed line.](image)

After the 2013 documentation of site elements within the Cosma complex, specifically the two large platform mounds in the basin, one of which featured an internal underground gallery, it was determined the Cosma center met several criteria to potentially answer several research questions. Cosma was located in an isolated basin, but also in association with historic trade routes.
and passes between the coast and the highlands. Additionally, the large mounds exhibited features which dated to the Early Horizon Period, paired with the hilltop fortress and Inca elements at the site, there was obvious potential for understanding long term ceremonial landscape use.

5.3 Survey Summary & Interpretation

Pedestrian survey took place over the course of two field seasons, and served two major purposes. The first was to focus on an area for dissertation research, and the second was to better understand the settlement patterns of the upper Nepeña Valley. After the initial documentation of the Cosma complex in 2013, several questions remained about the large size and complexity of the Cosma center. Was it unique in its size and complexity? Did the other tributaries of the Jimbe River have similar large mound complexes, or did they follow the smaller mound-ridge tradition Daggett had originally documented in the 1980s? With the previous work of Kevin Lane and Alexander Herrera focusing on the Salitre and Loco branches, and special attention paid to the area surrounding Pamparomás (Lane 2010), a fuller understanding of the upper reaches of the Jimbe area were still lacking. This prompted the need for excavations within the Cosma basin, which will be discussed in the subsequent chapter.
5.4 Excavations within the Cosma Basin (2014-2016)

Excavations in Cosma commenced in July of 2014 and ran three seasons through September of 2016. The first two seasons would focus on the elements within the basin, mainly the two platform mounds. The final season focused on understanding the Kotosh-Mito activity on the smaller, Acshipucoto mound, as well as the domestic use of the Kunka ridge-line. Fieldwork was conducted under the supervision of Peruvian archaeologist Jeisen Navarro Vega (R.N.A. CN-9513, Project Director) and Kimberly Munro (Principal Investigator), under the field permit numbers RDN N°329-2014-DGPA-VMPCIC/MC, RDN N°204-2015-DGPA-VMPCIC/MC, and RDN N°280-2016-DGPA-VMPCIC/MC. Excavation teams were composed of US, Canadian, and Peruvian archaeologists, as well as local Cosma workers, and funded through several sources (see Acknowledgements). Excavation crews averaged between 12 and 15 people per season. General surface survey within the basin revealed numerous other site elements or centers of activity (e.g., machays located on and along ridges and slopes, sandstone “hueco” tombs or “cuevitas,” petroglyphs, huanca and pecked stones, and other isolated ceramic or lithic scatters or walls), as well as several other centers surrounding the basin (Watsi, Cesurhirka, Ishki Rumi, Iglesia Hirka, Cajarumi). The excavation and survey data is listed below, organized by sector and site element. The excavation data has been described by sector and mound area together, rather than by excavation year.

5.4.1 Excavation Methodology. The two mounds in the basin are separated by the Cosma river tributary. This allowed for a relatively easy sectorization of the basin based on this natural boundary (Figure 5.15). Sector A was the area designated around the Kareycoto mound and included the prehistoric terraces which extend up the southern hill slope. Sector B is located to the south of Sector A, across the ravine and includes the lower machay concentration and the Acshipucoto mound. Sector C was designated as the area at the lowest point of the ridge to the south of Cosma. Excavations were conducted within Sector A in 2014 and 2016, Sector B in 2014, 2015, and 2016,
and Sector C in 2016. Following each season, all excavation units, test pits, and trenches were back
filled to prevent elements exposed during excavations from any damage due to weather, looting, or
erosion.

The location of the excavation units was based on the spatial organization of each sector and
partially determined by exposed architecture, without gridding, in order to search for the best
possible results (ie, Tikal System). Excavation units were numbered consecutively by the order they
were excavated, and the sequence of numbers continued in the following year. For instance, we
ended with excavation Unit 5 in 2014 and started the 2015 season with Unit 6. The sequence was

Figure 5.15: Main sectors and sites which were excavated in 2014-2016.
not affected by sector. For example, in 2016, Units 9, 10, 12, and 13 were excavated in Sector C (Kunka) and Unit 11 was located in Acshipucoto.

All units, features, and materials were recorded horizontally in cases of primary contexts, and vertically through the use of elevation datum points (masl) established within each sector. The stratigraphic data were detailed through the use of the Harris Matrix system (Harris 1989), which can be implemented at the same time as the excavations in order to obtain the best results (Bibby 1993, Mills and Vega-Centeno 2005). The locations of the excavation units were mapped with a Topcon GTS-725 total station, as well as drawn by hand throughout the course of the excavations.

The excavations were organized by natural and cultural strata. Each level of excavation, each context and the respective associations are controlled three-dimensionally, through written, graphic and photographic records. In addition to strata (which are referred to as contexts in field notes), features and architecture were also recorded, sketched, and mapped.

All soils were described by the use of a Munsell Soil Color Code, and samples were tested to determine clay, loam, or sandy consistencies. Soil samples and phytoliths were taken from each horizon and feature and the elevations of the elements observed in the test pits were mapped using a total station and datum measurements recorded daily in field notes and forms.

During the excavations, in each stratum, all the artifacts and ecofacts that were found were collected, counted, and bagged. All excavated soil was screened using 3 mm mesh (1/8 inch). In each natural or cultural stratum, at least five points were recorded using the main datum, typically these were the four corners of the unit and a central point. When a measurement had to be offset due to a rock or other feature it was noted in the field notes. For each unit of excavation, drawings were done using plumb-bobs and tape measures, as well as a line level. They were drawn on graph paper and at least one plan map was made per unit, as well as one profile wall drawn in at the end of
excavation. Each feature was also photographed, and each excavation level was photographed prior to excavation.

Topography was mapped using a Topcon GTS-725 total station with points at 5 m intervals, as well as supplemental elevations extrapolated from aerial photos provided by Arqueosystems out of Lima, Peru, in the 2015 field season. All points were brought into ArcGIS and AutoCAD to produce figures and 3D images of the topographic data. Elevations of all exposed features, walls, and units were also taken with the Topcon station. Handdrawn plan maps and profile maps were also made for each unit. Prior to excavations, however, both the Acshipucoto and Kareycoto mounds were completely overgrown with trees, shrubs, bushes, and large cacti. The top portion of each mound was especially difficult to walk across due to the thickness in vegetation. The first week of the 2014 season involved a crew clearing the mound with loppers, machetes, and barretas.

Over three field seasons, one test pit and 13 separate block excavation units were excavated. In total 241.23 sq m were removed with a total soil volume of 543.93 cu m excavated (Table 5.1). Of these, six separate units (Units 1-4, 6-7) and one test pit were excavated at Kareycoto in 2014 and 2015. Three units were realized at Acshipucoto over the course of the three field seasons (Units 5, 8, 11). Finally, four units were placed at Kunka in 2016 (Units 9, 10, 12-13).

5.5 Acshipucoto Excavations

The Acshipucoto mound is located at an elevation of 2518 masl, at a longitude of 9° 2' 33.91" south, 78° 2' 47.18" west, at the northern flank of the southern Kunka ridge line, just a half kilometer to the south of the Kareycoto mound. The smallest of the mounds within the basin, Acshipucoto (which in Quechua translates to “centric” or “central” mound) was mapped at a height of 10 meters from its base (Figures 5.16-5.17). The dimensions of the Acshipucoto mound measure 19 m diameter at the mound summit and 41 x 32 m at its base.
Table 5.1: Excavation units by year, size, volume and square meters. Dimensions include excavation unit size after extensions were also dug/added.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Unit</th>
<th>Dimensions</th>
<th>Depth</th>
<th>Total Sq Meters</th>
<th>Total Volume</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaseycoto</td>
<td>Test Pt 1</td>
<td>3x1</td>
<td>280cm</td>
<td>3</td>
<td>8.4</td>
<td>2014</td>
</tr>
<tr>
<td>Kaseycoto</td>
<td>1</td>
<td>2x4</td>
<td>89cm</td>
<td>8</td>
<td>7.12</td>
<td>2014</td>
</tr>
<tr>
<td>Kaseycoto</td>
<td>2</td>
<td>2.5x2</td>
<td>80cm</td>
<td>5</td>
<td>4</td>
<td>2014</td>
</tr>
<tr>
<td>Kaseycoto</td>
<td>3</td>
<td>3x2</td>
<td>154cm</td>
<td>6</td>
<td>9.24</td>
<td>2014</td>
</tr>
<tr>
<td>Kaseycoto</td>
<td>4</td>
<td>4x2</td>
<td>125cm</td>
<td>8</td>
<td>10</td>
<td>2014</td>
</tr>
<tr>
<td>Achipucoto</td>
<td>5</td>
<td>3x2</td>
<td>170cm</td>
<td>6</td>
<td>10.2</td>
<td>2014</td>
</tr>
<tr>
<td>Kaseycoto</td>
<td>6</td>
<td>6.5x2.5</td>
<td>146cm</td>
<td>16.25</td>
<td>23.725</td>
<td>2015</td>
</tr>
<tr>
<td>Kaseycoto</td>
<td>7A</td>
<td>8x2</td>
<td>30cm</td>
<td>16</td>
<td>4.8</td>
<td>2015</td>
</tr>
<tr>
<td>Kaseycoto</td>
<td>7B</td>
<td>12x2</td>
<td>350cm</td>
<td>24</td>
<td>84</td>
<td>2015</td>
</tr>
<tr>
<td>Achipucoto</td>
<td>8</td>
<td>8x8</td>
<td>333cm</td>
<td>64</td>
<td>213.12</td>
<td>2015</td>
</tr>
<tr>
<td>Kanka</td>
<td>9</td>
<td>10x3</td>
<td>90cm</td>
<td>30</td>
<td>27</td>
<td>2016</td>
</tr>
<tr>
<td>Kanka</td>
<td>10</td>
<td>3x2</td>
<td>63cm</td>
<td>6</td>
<td>3.78</td>
<td>2016</td>
</tr>
<tr>
<td>Achipucoto</td>
<td>11</td>
<td>7x6.75</td>
<td>300cm</td>
<td>24.98</td>
<td>74.94</td>
<td>2016</td>
</tr>
<tr>
<td>Kanka</td>
<td>12</td>
<td>4x2</td>
<td>45cm</td>
<td>8</td>
<td>3.6</td>
<td>2016</td>
</tr>
<tr>
<td>Kanka</td>
<td>13</td>
<td>8x2</td>
<td>375cm</td>
<td>16</td>
<td>60</td>
<td>2016</td>
</tr>
</tbody>
</table>

| Total Square Meters | 241.23 square |
| Total Volume of excavations | 543.93 meters cubed |

Figure 5.16: The Achipucoto mound as seen from the west (facing southeast).
Figure 5.17: Acshipucoto from the Kunka ridgeline, facing north.

Figure 5.18: Acshipucoto from the eastern ridge, facing southwest.

Figure 5.19: 3D representation of the Acshipucoto mound (and Kunka ridgeline to the right), made in ArcScene from total station data collected of the mound.
The first test pit was placed within Acshipucoto during the 2014 season. While field workers were clearing the mound of vegetation, an exposed portion of wall was noted within the remains of a large looter’s trench. The trench, which measured roughly 4 x 2 m in size was located within southwest quadrant of the mound, and had been cut into the mound approximately 2 m in depth. Based on the looter’s activity and the exposed section of wall, Unit 5 was placed abutting the looter’s pit.

Figure 5.20: Location of excavation units at Acshipucoto.
Unit 5: Unit 5\(^4\) was a 3 x 2 m unit excavated in 2014 and placed along the southwest edge of the mound top. Datum 6 was placed at the southeast corner of the unit at an elevation of 2538.044 masl. Excavations were dug by natural levels, and a total of three stratigraphic levels were documented.

Unit 8: Unit 8 was placed on the southwest sector of the Achipupcoto mound top in 2015. The datum point from 2014 associated with Unit 5 was relocated and re-utilized for measurements during the 2015 season. The size of the unit was determined by taking into account the circular shape of the wall and allowing for overlap to account for any external features which may have been associated with the structure. Like in 2014, excavations were conducted in natural levels, and a total of 5 levels were documented.

Unit 11: Unit 11 was dug in 2016 and located on the central mound top, with the initial dimensions of 5 m long (N-S) and 3 m wide (E-W). After several walls were found, the unit was eventually extended by 4 m to the west and 1.75 m to the North. The total excavated area for this unit by the end of the field season was 30.84 sq m, with a perimeter of 27.49 m.

Looter’s Activity: After the clearing of the vegetation on the mound top, a large looter’s trench and three separate smaller looter’s holes were noted. These four holes were cleaned around any exposed architecture in order to better document any possible walls or structures. All the exposed walls, save for the circular wall in the large looter’s trench were associated with the final stages of mound construction on Achipupcoto, and not the earlier Preceramic component. The objective of this cleaning of looter’s pits was to gain knowledge on the constructive characteristics of the structures exposed at the top of the Achipupcoto mound, their constructive dynamics, function, and any associated materials which had been disturbed by the looters. This data allowed us to obtain

\(^4\) Unit 5 was labeled as such because the excavations started in 2014 on the Kareycoto mound. The first four units then were located on the Kareycoto mound top. Therefore, Achipupcoto excavations began with Unit 5.
a closer reconstruction of the mound in order to understand its characteristics and construction phases and at the same time to establish its relation with the other structures of the site in a synchronous and diachronic way. The data attained from the cleaning of looter’s pits helped us to establish a framework for which to place our units in 2015 and 2016.

![Figure 5.2: Location of the looter’s holes and trench on the Achipucoto mound top.](image)

Looter’s Pit 1 (PH-1 for “Pozo de Huaquero”): Located on the southern edge of the Achipucoto mound, 2.5 m to the east of excavation Unit 5. This hole was of irregular shape, and covered an area of approximately 2 x 2 m, with a depth of 1.50 m from the surface. A datum was established on the northeast corner of the stone wall, at an elevation of 2,538.099 masl. The entirety of the looter’s hole had been overgrown by shrubs and small bushes, and after clearing off the vegetation, it was determined that the exposed wall bordering the hole did not extend past a single
coursing of stone. Each of the stones were large boulders, however, and had a depth of on average 60 cm below datum (cm bd). Cleaning along the walls and base of the hole was conducted, and all soil cleaned from the inside was screened. Ceramic fragments recovered were later wares, interpreted as related to Casma applique, incised, and modeled styles.

Figure 5.22: Example of looter’s holes found in Acshipucoto after clearing of vegetation off the mounds. Most of these holes were associated with exposed architecture related to later period activities and intrusive tombs (Middle Horizon-Late Intermediate Period).

Figure 5.23: PH 2 before clearing.
Figure 5.24: PH 2 after clearing.

Figure 5.25: Stone mortar fragment (highlighted in Figure 5.24 in yellow circle) recovered from inside PH 2.

Looter's Pit 2 (PH 2): This pit was located on the northwestern end of the Achipucoto mound top, 7.15 m to the north of excavation Unit 5. The hole was an irregular shape, with two main depressions, the first measuring an area of 1.50 x 1.50 m and reaching a depth of 60 cm from the surface level, and the second was a 80 x 80 cm depression associated with a stone wall placed above the surface level. Adjacent to the first depression to the northwest was a stone wall structure where a datum was placed at 2,538.044 masl. Like PH 1, vegetation was cleared from inside the pit and all loose soil was cleaned around the exposed architecture and base of the hole. All soil was screened from the cleanup. Ceramic wares recovered were Late Intermediate Period or Chimú in
style. Toward the base of the looter’s pit was a mounded lens of ash; when this feature was screened, it was realized that the majority of the material inside the ash lens was burnt human bones. The bones were heavily fragmented and in poor condition due to the burning, and no aging or sexing or Minimum Number of Individuals (MNI) could be established from the remains. Within the smaller depression more Casma/Chimú ceramic wares were recovered, as well as a small stone mano. The architecture was an incomplete linear wall which did not continue lower than Stratum 1.

Looter’s Pit 3 (PH 3): Located on the eastern mound top, 2.60 m to the northeast of PH 1. The shape of the pit was 1.50 x 2.20 m and reached a depth of .80 cm below the surface. A datum was established in the southwest corner at 2,537.512 masl. Again vegetation was cleared and the disturbed soil was removed and screened. Ceramic wares included Casma and Chimú styles. Towards the bottom of the pit, a linear wall measuring 1.5 m was documented. This wall was located at a depth of 70 cm bd and continued into the unexposed portion of the mound. Only one coursing was exposed, and its depth corresponded to the top levels of the circular wall associated with Unit 5. It is possible the wall is associated with the Preclassic activity of the mound, but without controlled
testing and with the disturbance from the looter’s pit it is hard to confirm without a doubt if this is the case.

Figure 5.27: Wall documented within PH 3. Top photo is oblique aerial image facing south. Bottom photo is oblique image facing east.

5.5.1 Description of Excavations. Excavations within Acshipucoto can be separated into two main focus areas. During the 2014-2015 excavations, a large (6 m) circular room (AC-1) was uncovered. This room had been ritually sealed by a distinct filling sequence, which are presented here as strata. In 2016, excavations focused on the area outside of and to the east of AC-1. Fill located outside of the AC-1 room fit a different fill pattern however, which included alternating layers of clay with stone fill. Due to the uniqueness of fill both inside and out of the main AC-1 structure, Acshipucoto excavations will be presented in two separate parts. The first section will
cover the strata within the structure, followed by the area outside of the main room. To preface this, however, is stratum 1 and stratum 2, the top two strata of the mound which cover the inside and outside of the structure in the same uniform pattern. Since these strata are the result of later occupations and cover the top of the mound in a uniform manner they will be presented first.

**Stratum 1:** Stratum 1 corresponds to the surface stratum, composed of dark brown compact organic soil. Intermixed with this stratum were some medium-sized field stones; there were also small roots from the shrubs and other vegetation which had been growing on the mound top. Stratum 1 had a depth which ranged between 10-30 cm, and in the profile distinct “pits” or “pockets” of stratum 1 could be seen extending deeper into stratum 2 in some places reaching 50 cm deep (Figure 5.29-Figure 5.30).
Materials recovered were mostly plain sherds; however, many rim and neck fragments were recovered. Decorations included appliqué and incising, and designs were most attributable to Casma Incised, Casma Molded, Serpentine Applique, stamped circles, and notching. Black wares associated with Chimu “goose pimple” ceramics were also recovered (also known locally as piel de ganzo).

Stratum 1 was associated with several “tomb”-like structures consisting of single coursings of stone built in a rectangular shape. Three of these were documented on the mound top. All three were heavily looted and are described above in the section on the looter’s pits (see discussion of looter’s pits above). There were human remains found within and surrounding these holes, as well as a large amount of decorated pottery, copper disks, a ceramic llama flute, and wooden diamond (broken, but most likely the head of a wooden staff) fragment. Stratum 1 covered the entirety of the unit and was uniform throughout, save for where the looter’s trench had dug deeper into it, essentially destroying it in that area.
Stratum 2: Stratum 2 had a thickness of 70-80 cm and was completely devoid of rocks and cultural materials. This stratum was also constructed of extremely hard, sun-baked clay resembling concrete to dig through. Situated directly on top of both the rock fill from Stratum 3-I and the circular exterior wall of AC-1, stratum 2 was a purposeful (and highly successful) attempt to seal the room (Figure 5.31).
This stratum was uniform throughout the mound top, save for areas where tombs had been
dug into the mound, or the looter’s pits/trenches had disturbed it. In fact, even though the large
looter’s pit had dug a deep into the western quadrant of the mound, there was still a large portion of
stratum 2 left protecting the inside of room, especially in the SE section of the room (Figure 5.32).

Figure 5.32: Example of stratum 2 sterile clay fill, which covered architecture associated with the
AC-1 room.

5.5.2 Fill and Strata Within AC-1: Stratum 3-I (3-Inside): Stratum 3-I is the first rock fill
stratum in AC-1. This fill stratum consisted of rocks of differing sizes, but mostly medium (10-20
cm in length) sized stones, with the occasional larger (40-50 cm) boulder mixed in (Figure 5.33). The
rock filled down to the top of the upper floor, down to a depth of 2.92 cmbd. There was no mortar
or clay between any of the stones and very minimal soil. This level was completely sterile of any
cultural materials, and was located directly preceding the compact clay level from above. Stratum 3
reached 1.70 m to the top of the circular wall in AC-1 (Figure 5.34).
Figure 5.33: Photo taken from the 2014 test pit, showing rock fill stratum within AC-1.

Figure 5.34: Photo taken from 2015 Unit 8 excavations, midway through excavating stratum 3. The small rock fill (and intermixed larger rocks) filled the entirety of the structure.
Only two objects were found within the fill. The broken rim of a smoothly polished stone mortar/bowl was recovered from the northern niche. The second object recovered from within Strata 3A was located towards the center of the room in the fill. At a depth of 1.95 m below the surface, a small clump of what has been identified as camelid wool (not yet spun) was collected.

**Stratum 4-I**: Stratum 4 is a continuation of rock fill (Figure 5.35). This fill level starts at 2.92 mbd and extended to 3.28 mbd when a second floor level was reached. Stratum 4 can only be found in the center of the room, measuring 3 m in diameter. Similar to Stratum 3-I, Stratum 4-I’s stone fill was composed by larger stones, in the 20-50 cm size range (Figure 5.36).

![Figure 5.35: Blue circle and arrow indicating top of Stratum 4-I inside AC-1.](image)

**Stratum 5-I (AC-1 Floor 1 [Upper Floor]):** Stratum 5-I is the first floor level documented within AC-1. Located at a depth of 2.92 cmbd, it is composed of a stratum of compact light brown clay located at the base of the circular stone wall. It is well preserved throughout the structure; however, the floor was not excavated, so its total thickness is unknown (though it measures at least 40 cm deep from the location of the subfloor). One unique feature of the floor was the imprints of stone fill imbedded within the top stratum (Figure 5.37). Possible footprints were also noted in two places. The floor was most likely wet when filling occurred, given these stone imprints. On the eastern edge
of the floor abutting the southern outer corner of the pony wall, a small hearth feature was documented. This hearth measured 20 x 20 cm and consisted of a red exterior as well as grey and white ash interior. On the western end of the floor, and elevated by 64 cm (located at 2.28 mbd), sits a 1 x 2 meter “banqueta” or stage/altar-like structure composed of the same material as the floor.

Figure 5.36: During excavation of Stratum 4-I rock fill.

Figure 5.37: Stratum 5-I, or the upper floor. Blue arrows indicate rock imprints left from the fill in the floor. Green lines point out the “banqueta” documented on the upper floor, and grey polygon outlines the hearth/ash feature documented on the upper floor.
Stratum 6-I (AC-1 Floor 1b [Sunken Floor]): Stratum 6-I, or the sunken floor was of the same color and composition as the upper floor (Figure 5.38). Additionally, dark patches of shadowy ash remnants were mottled within the lighter clay (Figure 5.39). Charcoal was also present intermixed in the floor, especially surrounding the central hearth. While the upper level floor exhibited imprints of the stone fill, the lower floor level was relatively smooth. Based on the bisection from a 1 x 1 m sondage, the floor is 5 cm thick on either side of the central hearth (Figure 5.41). The “sunken” floor measures 160 cm across and the top of the floor was located 40 cm below the upper floor (3.33 mbd). What remains unclear is the construction sequence of the upper and lower floors. The two most likely scenarios: (1) the entire room was filled with the mud/plaster up to the top of the upper floor (approximately 40 cm), then the lower floor was dug into it; (2) the upper floor was intentionally built higher and thicker than the lower floor (either with rock fill or mud plaster). The lower floor was demarcated by rocks or some perishable material until the plaster set, at which time the “frame” was removed.

Figure 5.38: Blue circle indicates sunken floor, yellow arrow points to location of central hearth.
Figure 5.39: Sunken floor (stratum 6-I) after excavation. Pale blue lines show patches of grey/darker ash in the floor. Red circle indicates central hearth. Yellow line outlines the hearth feature documented on the upper floor near the base of a pony wall.

**Stratum 7-I (AC-1 Floor 2 [Sub-Floor]):** Room AC-1 was constructed on a gritty stratum of compact light brown sand intermixed with dark brown earth mottling of softer consistency (Figure 5.40). This “sterile level” appeared to be a gritty yellowish-brown bedrock with small pebble inclusions. However, it was discovered in the 2016 season, after this level was dug through outside of AC-1, that this in fact was not bedrock, but a thin (2-3 cm thick) sub-floor, covering a stone fill stratum above another structure. The current interpretation is that stratum 5 extended across a large portion of the mound. It served to cap an earlier structure, and also it served as a subfloor for at least two rooms (AC-1 and AC-2).
Figure 5.40: Location of sondage in relationship to the central hearth.

Figure 5.41: Photo of sondage and stratum 7-I inside of AC-1 structure.
5.5.3 Fill & Strata Outside AC-1: Stratum 3-O: Stratum 3-O was identical in composition and depth to Stratum 2, which consisted of the compact thick sterile clay which sealed the inside of AC-1 (see above for more in depth description). Interestingly, its depth reached different levels outside of AC-1. For the portion of the unit abutting the staircase, and the southern profile, Stratum 2 reached a depth of 80 cmbd, consistent with the level associated with the inside of AC-1 (Figure 5.44). However, in the majority of the rest of the unit, Stratum 3-O reached up to 120 cmbd, approximately 40 cm deeper than the original depth of the strata. Once again this level was sterile of any cultural or other materials.

Stratum 4-O: Stratum 4-O is located beneath stratum 3-O, and consists of a similar pattern of rock fill within the AC-1 structure. On the outside of AC-1, however, while the stone fill is of the same source, size, and consistency, there was an alternating pattern of rock fill strata and clay filler.
Figure 5.43: Photo facing southeast, with AC-1 stairway in the foreground. Northern and eastern profiles are visible, with the end of stratum 1 indicated by the yellow line. Black dotted line shows the slope caused by a tomb constructed on mound top, with dark patch of soil under the dotted line as part of a looter’s back dirt pile. Blue arrows point out the alternating rock fill/verse sterile clay fill pattern (stratum 4-O), which was not present inside the AC-1 structure.

This was unlike the inside of AC-1, where only one thick clay fill level existed, followed by a deep level of soil-less rock fill (Figure 5.43-Figure 5.44). It appears the filling on the outside of AC-1 may have taken place as multiple events, with periods of hiatus in between, or may have been associated with the sealing and building of individual, smaller rooms, taking place outside of AC-1, or a series of platform constructions. The remains of three individual structures (AC-2, AC-3, AC-5) were found within Stratum 4-O, along with a single level wall (AC-4) and a long, tall retention wall, which appears to be associated with the construction of a platform for AC-1 (these rooms/walls are described in detail below).

**Stratum 5-O:** Stratum 5-O starts at a depth of 180 cm bd through to 308-312 cm bd. Clay is the same color and consistency found in stratum 2, and rock fill size and material is the same as that inside of AC-1 (Figure 5.45). Only one piece of human cranium was found within strata 3, which otherwise was completely sterile of artifacts and other materials.
Figure 5.44: Oblique view facing the east and southern profile during excavation. Yellow line indicates the end of stratum 1. Blue arrows point out the alternating strata of rock fill. White lines outline a wall associated with the later tomb/occupation on the mound top.

Figure 5.45: This photo, facing towards the northern profile was taken from inside the unit. Blue arrows indicate Kotosh-Mito walls. Red brackets identify rock fill imbedded within hardened clay levels. Top blue arrow is pointing to structure AC-5, while bottom arrows point to AC-2 wall and AC-3 structure respectively.
**Stratum 6-O:** Stratum 6-O was composed of a level of “broken floor” located within AC-2, to the south of a long linear wall (AC-2). Within this structure, there were two main areas where the floor had been destroyed in antiquity: a small patch 50 cm to the SE of the wall, and a larger broken patch near the SE corner of Unit 11 (Figure 5.46). The decision was made to put in 1 x 1 m (which was expanded to 2.5 x 1.5 m after architecture was recorded) sondage in the broken section of floor in the southern quadrant of the room, due to its proximity to a hearth feature in the corner profile. Soil was light brown in color and semi-compact, once again lacking any cultural artifacts or other materials. This floor measured 4 cm in depth.

![Figure 5.46: Photo of patch of broken floor documented in AC-2 prior to digging of sondage.](image)

**Stratum 7-O:** Stratum 7-O was only dug as a sondage in the SE corner of Unit 11. Located within this stratum another structure was documented (AC-6) at 335 cmbd. The sondage was aborted at 400 cmbd due to the architecture preventing further digging in the small space. Like the other fill strataums, Stratum 7-O was sterile of all cultural materials, save for the cross-sectioning of a hearth located in the southeast corner of the unit. Located at 335 cmbd within the sondage, a thin 3-
4 cm thick gritty level of compact light brown sand was documented within the southern, western, and northern profiles of the sondage. It is believed this thin gritty level corresponds to Stratum 7-I, documented within the 2015 sondage dug in AC-1. Color, consistency, and depth are the same, and it is possible that 7-I was a thin capping stratum utilized to cover AC-6 subfloor for AC-1.

Stratum 7-I: This was a gritty fill stratum or “sub-floor” constructed on a rough stratum of compact light brown sand and soil with dark brown earth mottling of softer consistency (Figure 5.48). In 2015 when we reached the sub-floor in AC-1, we interpreted this stratum as a “sterile level,” as it appeared to be bedrock, a gritty yellowish-brown soil with small pebble inclusions. However, it was discovered in the 2016 season, after we encountered and dug through this stratum outside of AC-1, that in fact it was not a level of bedrock, but part of the sub-floor of AC-2 as well, which covered a stone fill stratum above AC-6. The current interpretation is that stratum 5 extended

Figure 5.47: Room 6 was documented within a sondage at the bottom of Unit 11. The sondage not only revealed the outer wall of another curver/circular structure, but a dark level of ash associated with the broken floor of Room 2.
across a large portion of the mound. It served as the final cap the earlier structure, and it also served as a subfloor for at least two rooms (AC-1 and AC-2).

5.5.4 Description of Rooms, Architecture & Other Features. AC-1 was the first documented structure in our excavations (originally called “Recinto 1” in field notes and early reports; from this point forward it will be referred to as “AC-1”, short for “Acshipucoto-room-1”). A general description of the circular room exposed in Units 5 and 8 is given here, with the stratigraphy and features discussed in more detail above. Measuring 6 m in diameter, the room consisted of six coursings of dressed fieldstones, with each course approximately 40 cm high. The stones appeared to be unfinished on the exterior and were set in a hard mud mortar.

The Interior wall: The stone wall originally noticed prior to excavating Unit 5 was referred to as “Wall #1.” The wall reached 1.70 m in height. When it was noticed that the wall curved, field workers started cleaning all exposed stones within the looter’s trench; it was at this point the field crew realized the trench was dug within a circular room, and three quarters of the top of the wall
were entirely exposed. The looter’s trench had destroyed four coursings of stone on the western end of the room, but the lowest three were still intact. Within the first coursing of the wall, six separate niches were visible, though two had been destroyed in antiquity. Four of the niches were relatively equal in size (40 x 30 cm). Two niches however flanked the entrance to the room, these were elongated, approximately 75 cm in height by 30 cm wide. Associated with three of the niches were protruding triangular rocks (Figure 5.49).

Figure 5.49: Oblique view of the AC-1 room, facing southeast. Blue arrows show location of niches (dotted arrow on the right edge of photograph points to a niche broken in antiquity). Black arrows indicate the location of triangular “hanging stones.”

Five relatively steep, stone steps descend into the room from the stairway (Figure 5.50). These steps were flanked by two clay plastered pony walls (half wall features). Both of these walls had slightly different measurements with a length of 220 m (northern wall) and 2 m (southern wall).

The pony walls of the staircase guided someone entering the room directly to the lower floor. Both of these walls had slightly different measurements with a length of 220 cm (northern wall) and 200 cm (southern wall). The northern wall had a height of 67 cm from the upper floor, and
1.08 m from the lower. The southern wall's height reached 82 cm from the upper floor, and 1.23 m from the sunken floor. Both walls were constructed from the wall, dead-ending into the sunken floor. Above both pony walls were also elongated niches (Figure 5.51).

Figure 5.50: (top) view of the AC-1 stairway, facing east. (Bottom) overhead view of the pony walls which flank the entryway and steps leading into the AC-1 structure. Steps ran into the 2015 eastern profile wall.

The floor of the room was split-level. Both the upper and lower floors were made of sun hardened mud. The lower floor was 3 m in diameter and measured 30 cm in height and had a hearth located within its center. The central hearth (measuring 40 x 60 cm) was filled with a light ash material and a red clay outline was lined with a simple mud mortar. A 1x1m sondage was excavated in the western portion of the lower floor. It revealed a large spondylus shell and associated shell bead, but with the exception of a broken polished stone bowl in one of the niches, no other artifacts were recovered from the room. The top level of the floor is located 1.70 meters below the top of the stone wall, and 3 m below surface level. The sunken portion of floor is located at 210 cm below the top of the stone
wall. Both the upper and lower sections of floor showed signs of what could have been footprints left in a muddy sediment. There were also portions of floor where the outline of individual large rocks from the fill event were left in place.

![Image](image.jpg)

Figure 5.51: Oblique view of the entryway, pony walls, and stairs from AC-1. Image taken facing east. The eastern profile view shows the darkened top level of activity which makes up strata 1, followed by the hardened clay fill level of strata 2. The small rock fill which makes up strata 3 can be seen at the top of the stairway in the profile.

The central hearth: A hearth feature was documented within the sunken portion of the floor, directly in the center of the room. This hearth, which had dimensions of 60 x 40 cm, consisted of white ash with a red ringed exterior. Several large pieces of charcoal were recovered from inside the hearth, and soil samples and phytoliths were collected from within. Surrounding the hearth and imbedded in the sunken floor were also smaller pieces of charcoal. Several carbon samples were also collected from the imbedded pieces within the floor. The hearth was not excavated, as it was technically considered part of Strata 5, only soil and phytolith samples were taken; however, part of a sondage (mentioned above) cut a cross section of the hearth, revealing the hearth had a depth of 8-10 cm (Figure 5.52). Directly across and facing the stairs was a low, rectangular prepared clay “altar.” Measuring 64 cm (located at 2.28 cmbd) above the top floor, this “banqueta” like structure is
composed of the same material as the floor and measures .75 cm north-south x 140 cm east-west (Figure 5.53).

Figure 5.52: Red line indicates the depth and shape of the central hearth located at the bottom of AC-1. From the top of the hearth to the center of the red line is 10 cm length.

Figure 5.53: Blue line points out the “banqueta” while black arrows show the broken western side of the AC-1 wall due to the looter’s trench documented on the mound top.
The Spondylus shell in the lower floor: A sondage was dug into the lower floor on the western side between the hearth and the “altar.” Five centimeters into the cut, a large spondylus shell was recorded (Figure 5.54). The shell was associated with a worked shell bead, and more charcoal fragments, however only one half of the bivalve was found in the unit. The spondylus shell was placed on what at the time was perceived to be a sterile natural level (Stratum 7-I), and the sondage was abandoned at this time.

Figure 5.54: Photograph of the spondylus shell in the AC-1 sondage during excavation.

5.5.5 AC-1 Floor Descriptions. The split level floors documented within AC-1 had purposefully been covered with a distinct rock fill stratum prior to the room’s closure. When the fill had been cleared from the top of the main floor, fill remained in the center of the room, in an approximate 3 m circular area (Figure 5.55). This fill had larger rocks than the smaller stones, which filled the majority of the room. After removing the fill, it was revealed that a lower, or subfloor, was located underneath this distinct fill. In the center of this sunken floor was a shallow hearth. The subsequent
section will describe these floors and the sondage that was dug into the sunken level. Following this, a stratum of clean clay had capped the entirety of the structure.

![Figure 5.55: Clearing of AC-1 in 2015. This photo illustrates the fill which covered the “sunken floor” once the upper floor was exposed.](image)

**AC-1 Floor 2 (Sub-Floor: Stratum 5):** Room AC-1 was constructed on a gritty stratum of compact light brown sand intermixed with dark brown earth mottling of softer consistency. This “sterile level” appeared to be a gritty yellowish-brown bedrock with small pebble inclusions. However, it was discovered in the 2016 season, after this level was dug through outside of AC-1, that this in fact was not bedrock, but a thin (2-3 cm thick) sub-floor covering a stone fill stratum above another structure. The current interpretation is that stratum 5 extended across a large portion of the mound. It served to cap an earlier structure, and also it served as a subfloor for at least two rooms (AC-1 and AC-2).

**AC-1 Floor 1A (Upper Floor):** The upper floor in AC-1 is composed of a stratum of compact light brown clay located at the base of the circular stone wall. It is well preserved throughout the structure; however, the floor was not excavated, so its total thickness is unknown.
(though it measures at least 40 cm from the location of the subfloor). One unique feature of the floor was the imprints of stone fill imbedded in the floor. Possible footprints were also noted in two places. The floor was most likely wet when filling occurred given these stone imprints. On the eastern edge of the floor abutting the southern outer corner of the pony wall, a small hearth feature was documented. This hearth measured 20 x 20 cm and consisted of a red exterior as well as grey and white ash interior.

**AC-1 Floor 1B (Sunken Floor):** The sunken floor was of the same color and composition as the upper floor. Additionally, dark patches of shadowy ash remnants were mottled within the lighter clay. Charcoal was also present intermixed in the floor, especially surrounding the central hearth (Figure 5.56-5.57). Based on the bisection from the sondage, the floor is 5 cm thick on either side of the central hearth.

![Figure 5.56: Charcoal and ash deposits highlighted in pale blue polygons. Red circle indicates central hearth, while yellow line points to the hearth on the upper floor level.](image)
The “sunken” floor measures 160 cm across and the top of the floor was located 40 cm below the upper floor. What remains unclear is the construction sequence of the upper and lower floors. The two most likely scenarios: 1) the entire room was filled with the mud/plaster up to the top of the upper floor (approximately 40-50 cm), then the lower floor was dug into it; 2) the upper floor was intentionally built higher and thicker than the lower floor (either with rock fill or mud plaster). The lower floor was demarcated by rocks or some perishable material until the plaster set, at which time the “frame” was removed.

5.5.6 Outside AC-1 Structures and Features: Unit 11 was located on the central mound top, with the initial dimensions of 5m long (N-S) and 3m wide (E-W). After several walls were found within the original unit, the unit was eventually extended by 4m to the east and 1.75 m to the North. The total excavated area for this unit by the end of the field season was 30.84 sq m.

Excavation within Unit 11 led to the discovery of additional walls and prepared floors, following several strata of alternating clay and rock fill. Although none of these walls were excavated completely, three constructions were interpreted in the field as “rooms” (AC-2, 3 and 5), due to the
presence of dressed field stone walls and associated prepared clay floors. Two additional walls were interpreted to be “rooms” in the field based on limited evidence (AC-4 and 6), while their function is still undetermined, we will retain the field names given to them for consistency. One additional wall near AC-1 was interpreted as a retaining wall for that room. Each room and associated floor is discussed in detail here.

Figure 5.58: Photo of the outer portion of the AC-1 retainment wall which was exposed in 2016. The internal elements of the room/structure were excavated in 2014-2015 and made up AC-1.

AC-1 (Retaining Wall): During excavation of Unit 11 to the east, the top of a wall was identified 1.4m to the north of AC-1. The top of the wall, like the top of the AC-1 wall, starts at a height of 1.68 meters below datum. It reaches a depth of 3.13 m below datum and is constructed of 8 coursings of rough field stone. The stone used to construct this wall was distinct from the other rooms at Ashipucoto (save for AC-6)—they were not finished/dressed on either side, and were comparatively courser and smaller in size. Sterile, compact clay was used to fill the space between this wall and the outside of AC-1. The hardened clay is the same color and consistency as strata 2, although it would seem that this fill was placed as AC-1 was being constructed rather than as part of
the strata 2 fill. Additionally, the retaining wall is constructed in the “pachilla” style, or a style of alternating strata of larger stones, with mortar and small rocks filled in to level out areas between the larger rocks.

![Figure 5.59: Close-up of retaining wall stones, the outside of AC-1.](image)

This wall appeared to curve around the AC-1 structure, but did not continue fully around. While the wall dead-ends into the western profile, it is here that it is at its narrowest distance between the original AC-1 wall (50 cm), by its eastern end it has flared out, and there is a full 1.5 m difference between the two walls. During excavations, it was originally believed the wall to be the outer, or double wall for the AC-1 structure, but once the 2016 excavations were completed, it appears this wall was most likely utilized as a retention wall, and to create the outer platform associated with AC-1.

**AC-5:** In the expansion of Unit 11, a single-course wall with a curved outline was identified. It was originally called “Recinto 5,” here referred to as AC-5 (Figure 5.61). Part of the wall of this
room had been broken; however, a general oval shape was clear. From what was exposed, the longest part

Figure 5.60: Facing west towards the AC-1 structure and retaining wall. The broken part of the outer wall is marked by blue arrows. Orange arrow indicates the end of the stairway in AC-1. Note the clay fill stratum between both the inner and outer wall, creating a platform between them.

of the room measured a length of 3.10 m. The eastern section of wall that was exposed had one single coursing of stones, and though the two sections of exposed wall were broken and did not connect, it can be surmised by their shapes that at one point they were walls to the same structure (Figure 5.62). The western section of exposed wall did include two coursings of stone and was a double level wall. A rough, poorly constructed floor was documented within the structure.

**AC-5 Floor 1:** This floor had a small, 5cm upper lip situated along the eastern wall of the room (Figure 5.63). The floor was constructed of prepared light brown clay and had been broken by the rock fill in at least one location. The floor was rougher than that documented in AC-1, and was 5 cm thick. This clay floor level reached a depth of 1.80 m below datum and had several pieces of charcoal imbedded within it.
Figure 5.61: This oblique image, taken facing towards the east profile shows the different strata uncovered at Acshipucoto. The blue arrows point to an elevated dirt pile associated with looter's pit #1, and was most likely the backdirt associated with this looting activity. AC-5 is the first structure under the white line on the left side of the photo.

Figure 5.62: AC-5 in relationship to AC-3 structure below, and the AC-1 retainment wall on the right hand side of the photo.
Figure 5.63: AC-5 and floor exposed in structure.

AC-3: Just to the northeast of the AC-1 structure and almost 1.12 meters directly below AC-5, a third room was documented. Though only a small portion of wall and rounded corner protruded from the northern profile of Unit 11, a pristine white clay floor was exposed within this structure. The exposed architectural elements of AC-3 followed similarly with those of AC-5 located above it. The two rooms were separated by a stratum of thick (over a meter in depth) sterile small rock fill. No charcoal or ash was seen within the floor or associated in the visible section of room.

AC-3 Floor 1: A pristine white clay floor was documented within the single coursing of stone which made up AC-3. This structure measured at least 2.10 m at its widest exposed point. No carbon could be recovered from the exposed floor but phytolith samples were able to be taken. The floor was extremely compact hard white clay. The top of the AC-3 and the AC-2 were roughly the same height, at 280 cmbd.

AC-2: At the base of Unit 11, AC-2 was a single-course wall constructed of finely dressed field stone (Figure 5.66). These stones were placed upright in a mud mortar, composed of granite, and are mostly uniform in height. Each of these stones had a height of 50-60 cm. A total of eight stones were exposed running east-west along the original profile wall of unit 11 (Figure 5.68). It was
this wall that prompted the expansion of Unit 11 to the north and west. The wall continues into the eastern profile of the unit but ends abruptly on the western end. It is possible part of this wall/structure was destroyed in order to build the AC-1 room.

Figure 5.64: AC-3 structure in relationship to the AC-5 room.

Figure 5.65: AC-3 room with clay floor. Retaining wall of AC-1 is on the left side of the photo.
Figure 5.66: Blue arrows pointing out the AC-2 linear wall.

Figure 5.67: Collection of stones which make-up the AC-2 linear wall. Apisanado can be seen at the base of the wall.

**AC-2 Floor:** Along the southern base of the wall was a prepared clay floor, which ran the width and length of the exposed unit surface area, but was broken in some points. This breaking of
the floor appeared associated with the filling of the room. This floor was constructed of light grey/brown clay, and had a smooth compact consistency (Figure 5.68).

Figure 5.68: The AC-2 wall with the rough floor and pristine section of floor marked by scale bar.

Though only the one partial wall was excavated, and dimensions could not be acquired for the size of the room, this structure was interpreted as a room due to the quality of stones, prepared floor “within” and hearth-like features associated (Figure 5.69-5.71). It appeared the western edge of the stone wall had been broken in antiquity, but as it stands in its current state, this one wall runs 2.80 m (broken on the western end, and continues into the eastern profile of Unit 11). The area the floor covers from the start of this wall to the corner of the unit where the hearth was documented ran 3.5 m north-south. Therefore, the minimum size of this structure taking these measurements into account is an area of 9.8 m, though the room is most likely larger if this hearth was centrally located.
Figure 5.69: Figure of the AC-2 hearth in the profile.

Figure 5.70: Black arrow points to the hearth located in the east and south profiles. Floor of AC-2 can be seen in the foreground.
Singular buried wall (AC-4): Continuing on to the west, also jutting out of the northern profile was a low, singular row of 6 exposed stones (Figure 5.72). The stones were uncovered at a lower level than the walls associated with AC-3 and AC-2 and were documented at a depth of 3.03 m below the datum. The relative shape of the wall was linear, and the exposed segment of wall had a length of 2 m. Though our excavations never reached further than the top of the first coursing of stone, this wall appeared to be constructed in a lower quality than the walls associated with AC-5, AC-3, AC-2, and AC-1, as the top of the exposed stones did not appear to be dressed or shaped for the purpose of construction.

AC-6: The top of the wall was documented just 30 cm below the floor (3.35 m below the datum) associated with AC-2. The western wall face continues down three coursings of stone up to 4 m below datum (Figure 5.73). This was not the end of the wall however, as it continued past the point at which excavations were terminated. Unfortunately, digging had to be abandoned due to time constraints and the physical inability to dig without expanding the sondage further. Like the singular wall documented within the northern profile of the unit, the stones and style used to construct this room were of lower quality than the other walls documented within the mound.
The masonry style consisted of unfinished stones approximately 15-25 cm in height and 30-50 cm in length. Because excavations could not continue deeper or further to the east to explore the deeper architecture, the size and depth of the room could not be determined. Unfortunately, no carbon samples were available for this lowest construction.

Figure 5.72: (Left) close-up of the AC-4 isolated wall. (Right) Wall in context with the retainment wall and AC-3 structure.

Figure 5.73: Overhead view of the sondage and AC-2 structure, facing east.
By placing the sondage in this broken patch of floor, it would give our team the opportunity to cross section the hearth as a feature, and gain knowledge into the construction of the floor. Strata 4 began at 3.08 meters below datum and was abandoned at 4.00 meters below datum. The test had to be abandoned before reaching sterile soil due to time constraints, and the presence of newly discovered architecture making it physically difficult to further fit into the sondage to excavate.

5.5.7 Acshipucoto Construction Sequence Based on Strata/Excavations.

**AC-6:** At approximately 335 cmbd, AC-6 is the earliest construction encountered in the mound to date. The wall documented in the sondage extends to 400 cmbd. The wall continues deeper, though excavations could not be completed due to the constraints of the sondage and time at the end of the season. No material was available for dating; however, the radiocarbon dates from stratum 5 (in AC-1) suggest that this wall was constructed some time before 2600-2700 BCE. Unfortunately, the depth and location of the wall near the southern profile prevented further exploration, but it is clear that this was the earliest construction uncovered to date. A thin clay capping stratum is visible over the wall which makes up AC-6. Additionally, it is covered by the floor of AC-2, indicating that it predates at least the AC-1, AC-2, AC-3, and AC-5 structures.
Figure 5.75: The rooms/architecture uncovered between 2014-2016 field seasons. Photo taken in 2016 at the end of excavations. Unfortunately without aerial photographs we were unable to take a photo of all the exposed structures in one shot. This compilation shows the rooms from different angles to understand the context/relationship between all the uncovered structures.

Figure 5.76: Architecture and Preceramic walls at Acshipucoto.
Figure 5.77: This image shows the eastern and southern profiles of the 2016 Unit 11. Alternating fill and clay levels can be seen in the preceramic strata. Additionally, the broken floor of AC-2 can be seen abutting the sondage which was dug that revealed the top of another structure (AC-6). A hearth in the profile corner was found in association with the broken floor level of AC-2.

Figure 5.78: Plan reconstruction of the architectural features documented at Acshipucoto after all excavations.
AC-4: The wall that was designated AC-4 was a linear wall (two meters in length) that continued into the western profile and into the room that was designated AC-3. We are not sure if the wall was destroyed when AC-3 was constructed, or simply filled. Either way, it predates AC-3. The carbon date associated with the filling of this wall dates to 4129 ± 30 RCYBP, making this structure older or at least as old as the associated fill. It was just above AC-4 where the cranial fragment was documented in the fill.

AC-3: AC-3 is a structure located just to the west of AC-2, and below AC-5. The construction sequence between AC-2 and AC-3 is less obvious. It appears that AC-2 and AC-3 were filled around the same time in order to construct the large platform for AC-1.

AC-2: AC-2 is a linear wall that continues into the eastern profile. On its western end, the wall appears to have been destroyed in antiquity by the AC-1 retaining wall. The destruction of this wall indicates that room AC-2 predated AC-1 and was not used contemporaneously with AC-1. AC-2 had been filled in the construction of the AC-1 platform.

Room AC-1, Retention Wall, and Platform: The large fill event which took place to cover the earlier AC-2 – AC-6 structures also was utilized for the construction of a platform which corresponded to the AC-1 room. The stairway documented within AC-1 in 2015 exits to the east and facing across from a small platform level which was broken in antiquity (Figure 5.81). AC-1 was constructed in association with a retaining wall, which had been packed with sterile clay. It appears the dressed field stone inside the AC-1 structure was then set into this clay in order to situate the room. The retaining wall may have also functioned as an upper “platform” level associated with the room, allowing individuals to walk on the outside of the structure, before entering from the entrance to the east.
5.5.8 Acshipucoto Interpretations. Excavations within the Acshipucoto mound have revealed that it originally functioned as an epicenter of Kotosh-Mito activity for the Cosma basin during the Late Preceramic. Eight dates from varying contexts place the Acshipucoto mound well within the Late Preceramic. Despite the limited scope of excavations, the sampling of at least 6 rooms within the mound all exhibit different sizes and shapes. This pattern is most reminiscent to site of Piruru, located in the Tantamayo river valley, in the department of Huánuco. At Piruru, 15 separate Mito rooms were excavated. These rooms ranged in size and shape and number of floors. Bonnier interpreted the differences between single floored structures and double floored structures as “Pre Mito” and “Mito” rooms respectively (Bonnier 1997). This was in part because at Piruru, the earliest dates were attributed to the single floored rooms. Twelve of the rooms at Piruru were categorized as “Pre Mito,” and of these twelve, two did not include central hearths. Bonnier’s earliest Pre-Mito architecture dated to 3960 ± 340 RCYBP (Bonnier 1987), while the traditional Mito phase structure was dated to 3370 ± 60 RCYBP, a date attributed into the Initial Period (Bonnier and Rosenberg 1988).

Bonnier ascribed the Mito tradition as a tradition specific to the Initial Period, evolving out of Late-Preceramic prototypes deemed “Pre-Mito.” At Acshipucoto, there is also variation between room style and size, and while only one room has been completely excavated to date, it can be surmised that at Acshipucoto there also is a discrepancy in regard to number of floors. The AC-2, while not fully excavated, does appear to only have a single floor level. The carbon date taken from within the AC-2 ash lens, while dated to the Late-Preceramic was returned later than the dates associated with the AC-1 structure, suggesting that it was utilized after the AC-1 room was. In fact, all structures at Acshipucoto, save for the later Late Intermediate Period activity on the top of the mound, dated well into the Late Preceramic.
I argue here that there was no Pre-Mito/Mito distinction in architecture, and that like at Piruru, the room variations at Acshipucoto are not the result of temporal differences in the evolution of a tradition, but can simply be attributed to stylistic variations by the local architects of each structure. The AC-1 structure exhibited many characteristics attributed to a Mito style temple: the split level floor, central hearth, single entryway, niches, and purposefully sterile fill associated with the sealing of the room. What was lacking according to Bonnier’s categorization, however, was a stone lined hearth, flue and ventilation system, the “special red clay inclusions” marking the sacrality of the floors, and plastered walls (Bonnier 1997).

Two points to make towards the missing ventilation system within the AC-1 can be cleared up here. First, during our 2015 excavations, our team hit what we believed at the time was bedrock and a sterile level of soil associated beneath the placement of the spondylus shell. During the 2016 season however, while excavating the sondage within the AC-2, this same stratum was dug through and located at least 12 cm above the last room documented. I believe that not only is there potential
to find a ventilation system had we excavated deeper in AC-1, but also the potential for older structures beneath AC-1. The deepest level reached within AC-1 was 3.33 m below datum, where the top of room #6 was recorded at 3.35 m below datum, and extended well below 4 m below datum before our excavations finished in 2016.

The potential second reason for a lack of ventilation system within the AC-1 is the possibility that, unlike the Mito style rooms at Kotosh and La Galgada, AC-1 was constructed as an open-air structure (Figure 5.79).

Figure 5.80: Isometric drawing of the AC-1 structure (by Jeisen Navarro Vega).

The accessibility of the narrow stairway, made of six steps, leading up to a compact clay platform attests to this theory. The retention wall present outside the northern side of the structure would have helped to stabilize the clay platform associated with the room. This platform could have
provided a viewing area for people standing around the structure. Additionally, no post holes or depressions were found anywhere within the room or the subsequent platform. Due to the height of the floor, post holes would have been needed to suspend a roof over the structure, making it tall enough for someone to stand inside. All of the other rooms excavated to date, save for the AC-5, also would have had to have been filled for the construction of the stairway and associated platform. This could account for the broken western section of AC-2 in antiquity.

Intrusive Activity on the Acshipucoto Mound: There was a hiatus between the abandonment and entombment of the Late Preceramic structures and the subsequent reuse of the Acshipucoto area. The looter’s holes excavated in 2014, and the looter’s back dirt pile associated with PH 1 that was excavated in 2016 most likely disturbed Late Intermediate Period tombs based on the presence of Casma and Chimú style pottery fragments at the surface. The human remains found within and surrounding these holes, as well as the large amount of decorated pottery, copper disks, the ceramic llama flute, and wooden diamond (broken, but most likely the head of a wooden staff) fragment, can be interpreted as an intrusive Late Intermediate Period burial event for at least one high-status individual. The large amounts of soot, loose soil, and decorated ceramic wares that littered the entirety of the mound top were associated with these burials. One radio carbon date taken from the upper strata in association with the later ceramic wares came back as 1382 ± 35 RCYBP (95% probability 646 to 766 cal CE). While this is early for Chimú activity, it does correspond temporally to the Casma polity. The capital of the Casma polity was at the site of El Purgatorio, in the Casma Valley, just to the south of Nepeña.

The intrusive use of high-status burials within the Acshipucoto mound top could have started then with the onset of Casma influences within the Cosma basin. Excavations on the Kunka ridge-line overlooking the Acshipucoto mound also show evidence for domestic activity associated
with Casma wares. By the Late Intermediate Period, and the onset of Chimú based influences, the use of the Acshipucoto mound continued to be utilized to house high-status burials. The remains of least two individuals were documented from the MNI, one of which was estimated to be associated with the remains of an adult male. Unfortunately, the second cluster of human remains (found in looter’s activity during the 2014 season) was too badly burned and fragmented to determine age and sex.

Despite the fact that the Kareycoto mound to the north is larger and more visually imposing, activity in the basin had shifted onto the southern Kunka ridge-line by the Middle Horizon and Late Intermediate Period. This could account for the lack of intrusive activity on the larger mound top, with a focus on these burials to the Acshipucoto mound, just a twenty-minute hike down the ridge from the later domestic sector.

5.6 Kareycoto Excavations

The Kareycoto mound is located at an elevation of 2500 masl, - 9° 2'8.75" south, - 78° 2'48.07" west. The largest of the mounds within the Cosma complex, Kareycoto (which in Quechua translates Karey to “gift” and coto “mound”) measures 18 m at its highest point. The mound proper is constructed on the northern end of a 250 m long man-made platform, which measures 3 m in height. Kareycoto is located within the modern day agricultural fields in the basin, surrounded by fields and prehistoric terraces to the east. The top of the mound proper is circular in shape, with a diameter of 20 m.

This upper level of the mound was purposefully built to have the circular appearance, as the remains of a single coursed circular wall surround the top of the platform. This top level was associated with exposed architecture, including the circular outer wall and several other architectural features exposed by looter’s pits and trenches. The Kareycoto mound was constructed in at least 4
Figure 5.81: The Kareycoto mound (facing northeast). Photo taken from the Achipucoto mound.

Figure 5.82: The Kareycoto mound, photo taken from the eastern ridge overlooking the mound. Area with heavy vegetation is part of the mound lower platform but, like the mound apron and mound top, has not been cleared.

The mound was constructed in separate building phases and resembles the shape of a tiered cake, with three separate terracing levels. These are broken up as follows: extended platform (lowest level), mound apron, (second level), tier 1 (third level), and mound top (final/top level). On average, the platform’s width measures 34 m, save for the southern portion associated with the apron and mound, where the apron measures 58 m east west, by 68 m north to south.

Once the mound was cleared, several looter’s pits were observed, including a large trench on
the north-central mound slope, and a gallery/tunnel which had been cleared out on the eastern mound slope.

On top of excavation test pits and units, two areas associated with the cleaning of looter’s activities were also realized, the first was a cleaned looter’s pit on the southwest quadrant of the mound which turned into a 1 x 1 m test pit, and the second was associated with the cleaning of the gallery/tunnel on the northeast slope of the mound. Units were placed along the mound top, slope, and apron, in order to determine building strategy, chronology, and association of the apron with the mound top.

Figure 5.83: Kareycoto mound top (and lower apron) showing the location of all 2014-2015 excavation units, trenches, and test pits, along with the originally documented looter’s holes and pits.
5.6.1 Unit Descriptions. This section describes the location of excavation units by their placement either on the mound top (1,6, Test Pit 1), mound slope (4, 7A, Gallery), or lower mound apron (2, 7B) (Figure 5.83). Descriptions of size and depth of each excavation unit are provided here.

Mound Top Unit Descriptions: Unit 1 was placed at the top center of the Kareycoto mound, abutting an exposed segment of wall. The justification was to place a unit in the center of the mound in order to understand as much about the internal mound characteristics and construction sequence of the platform as possible. This data would also allow us to understand the associated materials, while also establishing the relationship with the mound platform and other mound elements.

The UTM coordinates for Unit 1 were 824692.753 E and 8999767.661 N, and its dimensions were 4m North to South and 2m east-west, covering an area of 8meters squared. An associated datum was arbitrarily placed on a rock just to the east of the unit. This datum was decided due to its height—higher than any point within the unit—and was designated datum No.1. Its absolute height was 2.500.25masl. All excavations were conducted in natural, cultural levels, with a total of four strata documented for Unit 1.

Unit 6 was placed within the southwest quadrant of the mound top, abutting the 2014 Test Pit as well as Unit 1. Unit 6 initially was 6 m x 2 m (6 m north south and 2 m east to west, covering an area of 13 sq m) which was expanded to a 6.5 x 2.5 m by the end of the season. Unit 1, which had been backfilled the year before, was also re-opened in order to follow the architecture of the broken floor and circular wall from the 2014 season. Unit 6 was located at a UTM of 824690.000E and 8999767.496 N. Three extensions were placed to expand on the needs of the excavation process: one to the north (50 cm), one to the east (50 cm), and one to the southwest (1m). A datum was arbitrarily established on a large stone, which was part of the exposed outer circular platform wall, and one of the highest points on the mound top at a location of 2500.25 masl. This stone was
located to the northwest of the unit and labeled Datum 1 for the field season. Unit 6 was dug in
natural cultural levels and had a total of 7 documented strata.

Test Pit 1 was initiated during the clearing of a small looter’s hole on the southwest edge of
the mound. Located at UTM 824690.571E and 8999762.917N, test pit 1 started as a 1x1 unit, but
was expanded to a 3 x 1 m after a series of sub-adult burials were excavated in the original test pit.
Test Pit 1 was placed just to the west of a small looter’s hole, which was noted after the clearing of
the mound top. This looter’s hole which was irregular in shape, but had rough dimensions of 90 cm
east-west by 75 cm north-south, had a depth of 20 cm. As we cleaned the profiles, disturbed soil
from the bottom of the looter’s hole, a soft, ashy soil associated with sub-adult remains was quickly
made apparent. At this point, I decided to place HP 1 abutting the looter’s hole to the west, closest
to the concentration of darker soil and ash. Test Pit 1 ended up consisting of five distinct strata.

Mound Apron Unit Descriptions: Unit 2, dug in 2014, and the 2015 trench, specifically Unit
7B, both focused on understanding the construction sequence of the lower apron. Unit 2 was dug
on the southern side of the apron, while 7B was located on the northeast side; nevertheless, they
have been grouped together based on their location on the apron.

Unit 2: Unit 2 was located on the mound apron, at the base of the southeast slope of the
main mound. Located at a UTM of 824696.798E and 8999776.939N its dimensions are: 2.5m north-
to south and 2 m east to west, covering an area of 4.5 sq m. Because of its location on the lower
apron, Datum 2 was established in the NE corner of the unit at an elevation of 2,490.63 masl. The
purpose of Unit 2 was to better understand the characteristics and construction of the mound
apron, and whether it was in use/related to events which may have taken place on the mound top.

Unit 7B: Unit 7 was a large 20 x 2 m trench placed down the northeast slope of the main
mound top down to the mound apron. Located at UTM 824705.000E and 8999780.000 N, the total
size of the trench was 40 sq m. The northeastern end of the trench was located along the mound
apron, where a terrace/retention wall was originally constructed to reinforce the mound platform and apron. The trench was divided into two sections, separated by the location of the large retention wall which was utilized to construct the mound proper. Unit 7B was the bottom half, covering the trench downslope from the wall towards the northeast and mound apron. A datum was arbitrarily placed on a large stone located on the very top of the unit, the height of the datum was 2,507.016 masl. The purpose of Unit 7B was to understand the construction sequence of the platform and apron, and whether all elements of the mound were constructed at the same related times or at different stages. Unit 7B was dug in a series of five natural levels.

Mound Slope Unit Descriptions: The remaining units and areas of cleaning are discussed based on their location on the edge of the mound top, or along the mound slope. Units on the mound edge include Unit 3 and Unit 4, both dug in 2014. The units that were located on the slope include the top portion of the Unit 7 trench, specifically 7A, and the gallery cleaning, which occurred in 2014.

Unit 3 was located along the north-central mound top, angled down the slope of the mound. Located at a UTM of 824688.591E and 8999776.939N, its dimensions were 3 m north-south by 2 m east-west, comprising an area of 6 sq m. Datum 2 was established on the SE corner at the highest point, at an elevation of 2505.257 masl. The unit was placed along this slope for two main reasons. First, it was along a pre-existing looter’s trench which had exposed architecture within the mound. Second, our original interpretation was the architecture could have originally been part of a stairway leading to the top level of the mound.

Unit 3 was placed along the north-central mound slope, starting from within a portion of the looter’s trench. Unit 3 was dug in natural levels, and two total levels were documented. Much of the material was disturbed and intermixed due to the looter’s trench disturbance. Datum 3 was utilized, established on the southeast corner of the unit. Its elevation was 2505.257 masl.
Unit 4 was located on the eastern edge of the top mound platform. Located at a UTM of 824702.136E and 8999769, Unit 4 measured 4m east-west by 2m north-south, making up an area of 8m squared. Datum 4 was established on the southwest corner of the unit at an elevation of 2507.016masl.

The purpose of Unit 4 was to understand the construction of the final platform. After the discovery of the floor inside Unit 1, and the mapping of the large outer wall which shaped the top mound platform, it was decided to place Unit 4 on either side of the circular wall. This was in the hopes of cross-secting both the “inside” and “outside” of the platform construction in order to understand building sequence for the top platform. Unit 4 was placed along the eastern side of the mound, along an area of wall which had no disturbance in architecture. Digging was conducted in natural levels, and only two strata were documented before the abandonment of the unit. Datum 4 was established at the highest point of the wall, located in the central of the unit. Datum elevation was 2507.016 masl. The unit was placed specifically so the circular wall would cut through the center of the unit, and was divided into 4A (inside, or to the west of the wall) and 4B (outside or to the east of the wall).

Gallery Cleaning: On the northeast mound slope, approximately two third of the way up to the mound summit, a gallery, or tunnel was documented extending into the interior of the mound. This tunnel had been looted prior to our excavations, but it was decided to clear out the looter’s back fill in order to document any possible associated materials, ceramics, and map the exposed architecture.

The entrance to the gallery was originally inaccessible due to fallen/looted stones and back dirt. The fallen stones were removed, and the back dirt was excavated and screened. The gallery is oriented northeast to south-west in direction, and once cleared of the rubble, extended into the mound 6.80 m. This measurement however does not mark the end of the gallery, only the extent of
the disturbed activity before the tunnel tapers off into a level of rock fill. Once cleared, the gallery opening measured 1.35 m high and 80 cm wide. Two small steps were also documented descending from the gallery opening.

While back dirt and stones were cleared from the entranceway, a floor/base of the gallery was never documented. Unfortunately a cracked lintel stone at the entrance of the gallery prevented any major cleaning of the inside of the tunnel, due to the skeptical structural integrity posed by the entrance lintel. Soil within the gallery was a loose sandy brown soil. The entrance to the gallery opens with a width of 80 cm, but by the “end” of the tunnel, the width tapers to 40 cm. The height of the gallery also tapers, starting at the entrance at 1.30 m and descending at the middle in a stepped construction to a dimension of 1.10 m.

The entire gallery is constructed of field stone, with large flat stones facing the inner tunnel. The construction is in the “pachilla” style, which utilizes smaller, flat stones between larger stone coursings to fill in any gaps and level off the architecture. The gallery roof was constructed from long, flat, elongated stones which stretch across both walls. Because the floor was not documented, it is possible that the height may be tall enough to walk through the gallery, like those located within the temple at Chavín de Huántar. Materials recovered from the gallery cleanup included non-diagnostic ceramics and two rim sherds (one incised, and one with a ceramic mend hole). Lithics, and a fair amount of faunal remains were also collected.

**Unit 7:** Unit 7 was a large 20 x 2 m trench placed down the northeast slope of the main mound top down to the mound apron. Located at UTM 824705.000E and 8999780.000 N, the total size of the trench was 40 m². The southwestern edge of the trench was placed at the very top of the Kareycoto mound slope, at the outer base of the platform perimeter wall. The northeastern end of the trench was located along the mound apron, where a terrace/retention wall was originally constructed to reinforce the mound platform and apron. The trench was divided into two sections,
separated by the location of the large retainment wall, which was utilized to construct the mound proper. EU 7A was the half of the Unit from this wall leading up the mound top to the south. The purpose of Unit 7 was to understand the construction sequence of the platform, apron, and main mound, and whether all elements of the mound were constructed at the same related times, or at different stages. The description below focuses on the top half of the trench (Unit 7A), specifically for a clearer understanding of the final phases of mound use, and the Early Horizon activities which centered around the top platform of the mound.

Unit 7A (upper half): Unit 7A was the upper section of the trench. Due to time constraints, only the superficial stratum was cleaned in order to expose the top of any architecture associated with the construction of the mound top. This surface level was a dark brown organic soil, sandy loam mixed with small and medium sized rocks associated with wall collapse. Only the north face of a small wall was exposed within the top portion of the trench, as well as a mix of ceramic materials. These ceramic wares consisted of the same styles and patterns as those discussed above in Stratum 1 and 2 for the other units.

5.6.2 Excavations on the Mound Top. Stratum 1: Stratum 1 corresponds to the surface layer on the mound top. This soil was loose organic brown sandy loam (10yr 5/3), which had a thickness of 20-35 cm in depth (53 cmbd). This soil is disturbed in places due to the growth and removal of vegetation and consists of inclusions of small stones associated with architectural wall collapse. This stratum also included the remains of roots, grass, and shrubs. Stratum 1 contained a large number of ceramic sherds, mainly plainware undiagnostic fragments, as well as a mix of decorated and diagnostic rim sherds, handles, and bases. Decorations included incising, burnishing, and stamped circle and dots. Small lithic flakes, as well as broken pieces of panpipe fragments, ceramic disks (torteros), and spindle whorls were also recovered within Stratum 1. The southern half of the excavated stratum included several medium-large stones mixed within the strata, along with
three separate darker patches of loose soil. These patches were excavated separately in case they turned out to be more distinct features. Two turned out to be large ash lenses of very dark fine ash—labeled “Ash lens A” and “Ash lens B” respectively (Figure 5.84).

Ash lens B was located in the SW quadrant of Stratum 1 and contained a number of plain and decorated ceramic sherds, lithics, burnt faunal remains, and an isolated infant long bone. Ash lens A extended along the center of the southern profile of the excavations (Unit 1), and expanded north approximately 40 cm x 20 cm east-west.

This lens was almost black in color, extremely organic, and soft (Figure 5.85). Inside, numerous large rim sherds corresponding to several small bowls were collected, along with ceramic disks, and other isolated ceramic sherds. A carbon date (FS#180) and phytolith sample were taken.

Figure 5.84: The Early Horizon activity documented on the Kareycoto mound top shown above and association with test pit and units. Activity included the large vessels, sub-adult interments, ash lens, hearth, prepared floor and Early Horizon cultural materials.
from within Ash lens A, and the date was returned as 2404 ± 24 RCYBP (95% -540 to -379 cal BCE). Decorated sherds within Stratum 1 included line incisions, incised and stamped circles/dots, punctated, fabric impressing, polishing, and burnished sherds. In addition to the usual ceramics, lithics, and faunal remains recovered, several pieces of land snail and ocean shell fragments were documented within Stratum 1.

![Figure 5.85: 2015 excavation of Unit 6. This photo shows a line of rock and fill which was associated with Early Horizon materials. The yellow dotted line indicates the area which had previously been excavated as part of the 2014 test pit. Orange star shows the location of the hearth excavated in 2014 and associated with the child burials and floor level. The first of the large vessels can be seen on the left. While the northern half of the Stratum exhibited the same style of ceramics and other cultural materials, the percentage of artifacts recovered in this half of the Stratum was much smaller than the southern portion. A larger concentration of cultural activity took place in the southern quadrant of the Stratum. This pattern of activity (with smaller concentrations of ceramics in the northern quadrant) continued into Stratum 2, where juvenile remains and two large ceramic vessels were documented in the excavations. More detailed information will be provided on the specific analysis of the burials in Chapter 6, while data presented here is on the context of the burials in relationship to strata and other materials.](image-url)
Documented towards the bottom of Stratum 1 in the southern end of the excavations was a hearth feature, which was designated “feature 3” in the excavations. Feature 3 consisted of an ashy circular stratum of soil, with white mottled inclusions. The feature measured 38 x 40 cm wide and was found just to the west of a small clustering of rock fill. The feature itself only had a few small burnt bones and included no ceramics. Soil was very soft 10 yr 4/2 dark grayish brown loamy sand. The white mottled inclusions were 7.5 yr light pinkish gray. As the hearth was excavated and the rocks removed, it was revealed the hearth was laying directly on a prepared clay floor, as a gray hardened clay level was revealed beneath the excavated and collected ash (Figure 5.87-88). This lower floor level was extremely hard and compact and extended throughout the southern half of the excavation units on the mound top.

**Stratum 2A:** This stratum was located on the northern end of the mound excavations, and consisted of a hard compact brown soil of the same color of (10 yr 5/3) as Stratum 1, which also contained the small field stone inclusions. Soil was clayey loam and included numerous ceramic fragments. Decorated sherds included printed/stamped circles, incising, and burnishing. Additionally,
fragments from clay panpipes, and slate projectile points were also recovered. Faunal remains were prevalent within this layer, including camelid, deer, and guinea pig bones. Stratum 2 had a thickness of 20-30 cm bd, depending on its location within the units.

Figure 5.87: The burnt clay layer exposed after excavation of feature #3.

Figure 5.88: Facing north, exposed segment of floor exposed underneath Feature #3.

**Stratum 2B:** Stratum 2B was documented to the south and east of the mound top excavations. It was a prepared clay floor that consisted of a light brown color munselled as 7.5yr 7/2 (Pinkish gray)
(Figure 5.90). The floor was made of prepared clay mixed with sand, and when broken up, the inner paste was 7.5yr 6/2 (light brown). The floor started at 41.25 cmbd, and measured 10-12cm in depth. The floor was consistent in both the original 2014 test pit and 2015 Unit 1 expansion. Several broken areas were documented within the floor associated with young child interments (Figures 5.91-93). While the majority of the floor was light brown, a small portion of this floor was documented to have a white paint/plaster painted on part of the surface (Figure 5.94). The floor had been broken in several places in order to place two large vessels and several of the burials documented during excavation.

Figure 5.89: Facing north in Unit 6, green dotted line roughly illustrates the differentiation between Stratum 2A and 2B. Stratum 2A is located north of the dotted line.

The first of these burials, labeled “Burial #1,” consisted of the remains of a small perinate. Within the broken floor/pit feature were cuy bones as well as decorated ceramics. These ceramics consisted of incised lines, circles, and burnishing. Burial #1 was located just to the south of Feature 3/the hearth, and the remains were estimated at between a 38-40-week-old fetus (perinate, meaning
at the time of birth at most). Burial #1 was a bundle burial, most likely secondary, and because of this, the majority of bones were jumbled (Figure 5.95).

Figure 5.91: Exposed floor (Floor #1) in the 2014 test pit.

Figure 5.92: Floor exposed in 2014 test pit with broken segment. Within broken pit were the remains of two infants.
Figure 5.93: Excavations in Unit 6, 2015 in the Early Horizon cultural context. This photo shows the broken patches of floor (yellow) ash lenses (grey) and cluster of broken sherds (orange) associated with the sub-adult burials and ceramic vessels.

Isolated bones, including a partial parietal fragment, unidentified skull fragment, and left femur were not found with the individual, but found while excavating the hearth. The size and proximity of these isolated bones to Burial #1, as well as the same bones not accounted for with the actual burial, led us to believe they were associated with the same individual. Just 15 cm to the north of Burial #1 was a second burial, labeled Burial #4. Burial #4 was also a perinate estimated at 38-40 weeks. Another secondary bundle burial, Burial #4 was missing its crania, mandible, and several other bones (Figure 5.96). A lot of post-mortem damage was documented, and little of the individual remained intact. Burial #4 was also associated with the camelid and small rodent (possibly
cuy) remains. Stratum 1, and two of the lateral walls of the crypt can be seen from the surface (Figure 5.97-5.98) before expansion of the excavations were realized. The crypt tomb was open on the west side, and consisted of three large stones surrounding the burial as well as a flat stone for the base. Burial #3 was found without any cranial bones, but otherwise skeletally in-tact. Seated in a flexed position, facing towards the west and the opening of the crypt feature, Burial #3 was estimated at 1 year of age (+/- 6 months), and was also found in association with small rodent bones (possibly cuy). Like Burials #1 and #4, the crypt of Burial #3 was associated with the disturbed area of Floor #1, in association with Feature #4. Burials #5 and #10 respectively were also located in
association with the 1 Stratum 2B context (Figure 5.99). Burial #5 was a perinate buried in a fetal, or flexed, position based on the placement of its ribs and vertebra. This burial was facing roughly north-east, and the only associated ceramics were a small bone needle and lithic core. Burial #5 was also the only burial placed directly on the floor, and not in a stone crypt or pit beneath the floor level.

Burial #10, was an infant (40 weeks-1 year) located to the east of Feature #4 and had its remains scattered between Ash Lens A and the respective feature (Figure 5.100). The bones were
extremely disarticulated, possibly due to root growth or the destruction of the upper level of the large ceramic vessel to the west by the placement of the rock fill layer. This rock fill used to seal the vessel along with the erosional process most likely caused the upper levels of the pot to break off. An enormous number of vessel sherds were found, mostly to the east and south of the vessel, all associated with the larger rock fill. This could explain the breakage pattern and the disruption of the burial.

Finally, Burial #11 was the only adult burial (a young adult male, approximately 18-21 years in age) recovered in the Kareycoto excavations. Like Burials #1, #4, and #10, Burial #11 was placed within a pit broken into Floor 1. Unlike the other burials (save for #3), however, Burial #11 was a crypt burial, bundled within 4 large stones and sitting on a flat stone surface placed beneath the floor. These stones extended from level 1 and down into levels 2 and 3 (Figure 5.101-5.102). It appeared that he had been placed in a flexed/seated position. Within time his skull collapsed into the crypt, but was most likely facing to the east by the orientation of the rest of his body. Like the other burials, he was not found with any grave goods. An isolated infant long bone was found with the remains. None of the burials included grave goods, but they were located near, and in association with, decorated ceramics (burnished, punctate, incised, and highly polished wares), ceramic disks, spindle whorls, panpipe fragments, and lithic, as well as faunal remains.

**Stratum 2C**: Marked by rock fill, which included medium to large stones measuring 20 cm in depth (Figure 5.103). Soil associated with the fill was 10yr 6/4, light yellowish brown, sandy clay loam. As the excavations continued, the full top portion of a large vessel was exposed. It was decided at this point to excavate everything within the perimeter of the pot as “Feature 4.” Excavation of the vessels will be listed separately below. This fill stratum was associated with the covering of two large ceramic vessels within the excavations (Features #4 and 5 respectively) and several sub-adult burials.
Figure 5.99: Close-up of the location of the burials on the mound top, which appear to cluster on the southwest quadrant of the mound.
Figure 5.100: Location of entierros #5,8,10 and their relationship between themselves and the large vessel and ash lens.

Figure 5.101: Burial #11 inside the large stones which made its crypt during excavation. Floor #1 can be seen in background.
Figure 5.102: Burial #11 after removal of the outer crypt stones. (Left) oblique view, (right) overhead view. The floor can be seen destroyed from where the large crypt stones were placed.

Figure 5.103: Rock fill stratum (Facing west) in Unit 6.

**Feature 4:** Feature 4 was a large, thick walled ceramic vessel with a diameter of 1.10 meters. The top half of the vessel had been broken and fragmented due to the rock fill, which eventually would cover the pot. The measured depth of the vessel reached .84 cm. This vessel was set on a base
of flat rocks underneath a plaster-like mortar constructed into the pre-existing floor (this mortar was the same color and composition as the original floor construction) (Figure 5.104-107).

The top level of soil beneath the stratum of rock fill (Stratum 2C) was filled with mottled unfired clay clumps/inclusions. Within the vessel, guinea pig/rodent and camelid bones, ocean shell and bone beads, panpipe fragments, stone and ceramic spindle whorls, and incised ceramic sherds were recovered. Along with these items, towards the bottom of the vessel, three sub-adult burials (Burials #6, 8, and 9) were documented.

Figure 5.104: Facing north showing the exposed Early Horizon floor in context with burial #11 and the ceramic vessels. Yellow stars indicate location of 2015 burials which were removed prior to this photo being taken.

Figure 5.105: After the removal of the large ceramic vessel and subsequent mortar beneath it a rock level and small rock platform was found.
Figure 5.106: Showing the removal of the first vessel in context with the second vessel.

Figure 5.107: After removal of Vessel #1 a layer of mud mortar/plaster was documented beneath the vessel.
Towards the bottom of the vessel three separate sub-adults were documented. The bottom third of the vessel had been separated in the center by a single level rock wall. On the northern side, two separate fetus/perinates were recovered. These individuals appeared to be bundle burials (based on the jumbled placement of the bones), intermixed with cuy remains, and a few small decorated ceramic sherds (Figure 5.109).

Within the northern half of the vessel, a third sub-adult was uncovered (Burial #9). This burial was an extended burial, comingled with camelid long bones. Unique to Burial #9 was its purposeful “misplacement” of its remains during burial. For starters, the skull was completely missing (Figure 5.113). More peculiar was the fact that despite the bottom half of this individual being in correct anatomical position, the lower half of the body had been flipped upside down. The femoral heads were laying upside down and facing west, away from the rest of the body, with the tibia, fibula, and bones of the feet closest to the pelvic bones. At the very bottom of the vessel after the burials were removed was a hollow and polished bone bead (Figure 5.114).
Figure 5.109: Location of Burial #6 inside the large vessel (feature 4). Note the circle and dot/Early Horizon sherd in association.

Figure 5.110: Feature 4 vessel with stratum 7C rock fill. During excavation of infant burials within the vessel.
Figure 5.111: Black arrows indicate location of two infant burials in Feature #4. Black line shows the small wall separating the infants.

Figure 5.112: Burial #8, located towards the bottom of the vessel.
Figure 5.11: Burial #9 in the southern half of the vessel. Unlike the other urn burials, #9 was an extended burial missing its crania.

Figure 5.114: Bone bead found at the bottom of Feature #4 vessel after removal of the sub-adult burials.

**Feature 5:** During the course of expansion and excavation of Feature #4 and the 2C rock fill stratum, the western edge of a second larger vessel was uncovered. It had a diameter of 1.80 m and the width of the ceramic walls was 4 cm. More of Feature 5 was intact than Feature 4, with the depth inside the vessel reaching to 1.40 m. Feature 5 had also been capped with a stratum of 21 large rocks; however, unlike Feature #4, no burials, and minimal faunal remains, or decorated ceramics were found within the larger vessel (Figure 5.115). The first 20 cm included small rock fill with
fragments of domestic ceramics, the majority plain brown and red sherds, with very few exhibiting incised decorations or stamping (Figure 5.116). Below the initial 20 cm of fill were larger ceramic fragments, most likely associated with the walls of Feature 5. It has been interpreted that these ceramics broke off from the vessel during the process and pressure of filling with the larger rocks associated with the upper fill levels. Inside this filler, one sub-adult humerus was found as well as the scapula of a deer and deer ankle bone. The bottom portion of the vessel had been filled with small to medium sized stones and loose brown soil.

A radiocarbon sample taken from rock fill abutting the mortar that held Feature #4 upright was dated solidly within the initial period (1454-1285 Cal BCE). While this earlier date may simply be from an initial period floor that the vessel was dug into, we cannot rule out that it was made at this time as well, with later people coming back to re-use it as a burial chamber. Despite the fact that both features 4 and 5, were initially documented within Stratum 2, they both reached deeper depths. Feature 4 was dug well into Stratum 3, while Feature 5 went further into Stratum 4, resting on a Preceramic floor (Figure 5.122).
Figure 5.116: The two large vessels and their association with the Early Horizon Floor (listed as Floor 1). Ash lenses are marked with a grey outline, and the rock fill which was found between the two vessels is outlines in blue. A small rock fill layer can be seen exposed in the larger of the two vessels (foreground) while the smaller has been excavated, with the three burials interments already removed at the time this photo was taken.

Figure 5.117: Feature #5 with small rock fill layer.
Figure 5.118: Towards the end of excavation, feature #5 vessel.

Figure 5.119: Both vessels in context and relationship to each other.
Stratum 3: This stratum consisted of a fill level of light brown clay mixed with medium to large stones. This stratum was located below Floor 1 in the southwest quadrant of the mound top excavations (both in Unit 6 and Test Pit 1). It contained the same style ceramic fragments found in Stratum 2, but in smaller quantities. Some decorated with the same incised and stamped sherds found above the second floor level. Other materials included panpipe fragments, stone projectile points, and the skeletal long bones of camelids. This level was 55-65 cm thick and was most likely utilized as a fill level between Floor 1 (above) and Floor 2, which was found directly below it.
Figure 5.122: 3D image created in ArcScene representing the large vessels (orange) and their placement in context with the documented floors. Vessel #1 cuts into Floor #1, the Early Horizon Floor, whereas Vessel #2 is dug even deeper into the Preceramic levels (Floor #5). Scale bar represents 1 meter.

Figure 5.123: Stratum 3 in both the 2014 test pit (top) and 2014 Unit 1 excavations.

Stratum 3B: Below stratum 2 in the northeast quadrant of the mound top excavations, a level of rock fill was documented and designated Stratum 3B. Stratum 3B is made up of compact earth.
(10yr 5/3) mixed with small to medium sized rock fill (Figure 5.124). The soil in between the stones was loose in consistency. This stratum was associated with the top level of a circular stone wall (labeled Context 5 during excavation). Because of this, it was clear with the amount and size of the stones that they were purposefully placed as a fill level in association with the architecture. The Context 5 wall reached a length of 1.5 meters and appeared to be broken in antiquity (Figure 5.125). Both the rock stratum on the top of the stone wall were plan mapped and photographed before the rock fill level was removed. The fill was associated with fragments of shell and faunal remains; however, no ceramics were associated with this fill lens.

Figure 5.124: Stratum 3B (outlined in black) in Unit 1.

Figure 5.125: Curved wall of Context 5, note ash lens against the inside of wall.
**Stratum 4A:** This stratum, located at 75 cm below the surface level, was a light brown prepared clay floor (Floor 4). This floor, though badly broken, was found 45 cm below the head of the circular wall (context 5). This floor was very hard with some fiber inclusions. The exterior was classified as 2.5 6/4 (light yellowish brown), while the interior floor was documented as 7.5 3/4 (brown). The conservation state of the floor was not well preserved, as almost all of it was destroyed, only a few sections of the floor were still present along the base of the circular wall (Figure 5.126).

![Figure 5.126: Broken Floor #4 (outlined in black.) The area not outlined is what makes up Stratum 4B. Note the presence of fine soil and ash lens.](image)

**Stratum 4B:** Stratum 4B was also located at 75 cm below surface level and abutted the broken floor level. Stratum 4B was made up of very loose brown sandy loam soil, mixed with at least two fine ash lenses. It was munselled to be 10yr 5/4 yellowish brown, soft soil. Stratum 4B was dug out to 89 cm below datum in the center and 83 cm below datum in its NW extent. Cultural materials were minimal; however, a stone projectile point was recovered. Unlike the other points recovered at the site, which were flat slate blades dating to the Early Horizon Period (Daggett 1984), this point was a flaked stone point, similar to those recovered from Preceramic contexts (Izumi and Somo 1963). One final special artifact recovered from stratum 4B was a small polished black stone
(approximately a millimeter in diameter), which appeared to have been rounded, and was possibly a preform for an unfinished bead. Additional materials recovered included small lithic flakes and burnt faunal remains. Stratum 4B ended when an alluvial stratum was hit below, both within and outside of (to the east) of the broken curved wall (Context 5).

Figure 5.127: Chipped stone projectile point and black bead preform found in Stratum 4B ash lens during excavation.

**Stratum 4C:** Stratum 4C was located to the west of Stratum 4B and included a second circular wall, which had been covered by fill. This stratum was lacking in ceramic materials, but included an ash lens and associated faunal remains. During excavations and cleaning of the associated fill within the circular wall, a rough floor was documented. This floor was separated by a single coursed linear wall composed of 4 small stones, oriented east-west (Figure 128-130). Due to time constraints the wall and floor were not excavated, but the area within the small circular structure measured 1 m in diameter. Both the rough floor and linear wall reached a depth of 120 cm bd. The outer circular wall was located at a depth of 110 cm bd.

**Stratum 5:** Stratum 5 consisted of a false floor level, (labeled Floor 2) located directly below the fill level designated Stratum 3. Located 90 cm below the surface level, this “false floor” was an irregular stratum of compact light brown clay. The northern portion of the stratum had been broken due to looting activity. It is believed that this false floor was constructed over Stratum 6, a well
preserved floor, in order to protect the pristine floor before the fill stratum (Stratum 3) could be constructed.

Figure 5.128: From 2015 excavation. Curved wall (from figure above) from Unit 1 after Unit 6 excavations. Floors documented with associated Late Preclassic architecture.

Figure 5.129: Close up of the circular feature in Unit 6-1. This feature included a small linear wall and ash lens.
Figure 5.130: Plan map of circular room (right) and small circular structure with linear wall (left) and ash lens.

Figure 5.131: Black arrows pointing to floors #1 and #2.

Stratum 6: Stratum 6 was a pristine floor located a meter below the surface level between 4-8 cm below the protective floor level (stratum 5). This floor was light brown in color and stretched the
entire length of the open mound top excavations to the west and south (documented within the 2014 test pit, and 2015 unit 6).

A small sondage was dug once Feature 4 was removed to show that the floor continued under the large vessel. Stratum 6 did not continue into the eastern quadrant of the excavations, where the curved circular wall and ash lenses/rock fill were present. A carbon sample was taken from between strata 5 and strata 6 in an exposed ash lens between the false and real floor. This date came back to 3905 ± 29 RCYBP (2475-2147 cal BCE [2σ]), which places the burning activity on the floor as well within the Late Preceramic Period. Aside from a small ash lens burnt faunal remains and the carbon sample uncovered, no other materials were documented at this level.
Figure 5.133: Floor #3 in the 2014 test pit. Broken preceramic wall and ash protruding out of the east profile.

Figure 5.134: 2014 test pit western profile. Blue dotted line shows Floor #1 in the profile, black dotted line shows Floor #3 in profile.
Stratum 7: Stratum 7 was composed of a mixed stratum of brown soil and dark gray ash pockets, found 3-5 cm under Floor #3 (Stratum 6). This level was associated to the east of the broken circular wall and west of a larger wall exposed during excavations. It included a large ash lens, where ocean shells and burnt camelid bones were recovered. Excavations did not go further past stratum 7 due to time constraints. The level below stratum 7, however, appeared to be an apisanado/false floor mixed with several ash lenses. As with stratum 6, aside from the shells, burnt bones, and few lithic remains, no ceramics were recovered from inside Stratum 7.
Test Pit 1: Stratum 8: Stratum 8 was made up of soft 10yr 5/3 brown clay loam, intermixed with larger field stones. This level was coded in the munsell color chart as 10yr 4/4, dark yellowish brown, and was moist with a sticky consistency, and was only excavated within the 2014 test pit. Stratum 8 was sterile of cultural materials; however, a hearth feature was documented within this stratum, along with 3 distinct ash lenses and several unique artifacts. Specifically, ash lens C (Figure 5.138), which was documented along the eastern profile wall in association with stones associated with a broken wall, included a large stone blade. This blade measured over 10 cm in length and was covered in dark charcoal residue. Additionally, some burnt skeletal and faunal remains (the ankle bone of a deer was identified) were collected from this same ash lens. No cultural materials were recorded in ash lenses A and B, however, fish vertebrae and other small bones were collected from the excavation of feature 3, the hearth. Feature 3 measured 38 cm x 40 cm and was located abutting the northern profile wall of the test pit at a depth of 104 cm bd. The entire feature measured 6 cm in depth, and had an outer ring with a color of 7.5 yr, light pinkish gray; however, the interior of the fire pit was 10yr 4/2, a dark brown loamy sand. Just to the east of feature 3 was a collection of larger
stones. These stones would be associated with another fill stratum, which would make up stratum 9. This fill stratum was photographed and documented but not excavated. Due to time constraints and the depth and size of the test pit, we were physically unable to continue excavating past stratum 8 without further expansion. Excavations in the 2014 test pit ended at a depth of 1.90 mbd, at the onset of strata 9, the furthest dug into the mound top to date.

Figure 5.138: Inside 2014 Test Pit, level 8 with hearth feature just to the east of the north arrow.

Figure 5.139: Photo of 2014 test pit. A broken wall can be seen in the SW corner of the test pit associated with white ash deposits. The hearth feature (feature 3) can be seen on the bottom of the level in association with a larger stone.
5.6.3 Excavations on the Mound Apron. Stratum 1 corresponds to the superficial/surface level, which is composed of a dark brown organic soil, mixed with different sized field stones (most likely associated with wall collapse). Like stratum 1 on the mound top, small roots from cacti and shrubs were also documented in the level (Figure 5.139). Depth ranged between 50-60 cmbd. Because there was a large amount of large rock fall associated with this level in Unit 7B, a hand drawn map (drawn at a scale of 1:20) was made of each of the rocks before removal. A consistent amount of pottery was recovered from level 1, and those that were decorated exhibited the same themes as the wares found on the mound top (these ceramics included stamped and incised circles, incised lines, punctations, and burnishing.)

Two sub-adults were recovered from this stratum, in Unit 2 and Unit 7B, respectively. In the northeast corner of unit 2, Burial #2 was documented, while Burial #7 was recorded in the SW
quadrant of unit 7B. Burial #2 was not associated with any specific grave goods, but within the same strata, associated with an ash lens, a hefty amount of decorated sherds were found (Figure 5.143-146).

Additionally, the fragment of a slate projectile point, as well as deer, guinea pig, and camelid remains were recovered from this stratum in association with Burial #2. Several adult teeth (2 molars and 1 incisor) were found with the burial, and it was documented in a flexed/bundled position. Burial #2 was estimated at between 1-2 years of age, and no cranium or mandible were ever recovered in association with the individual. Interpretation was that the remains were secondary because of the jumbled nature of the bones. The second mound apron burial was located on the north-east boundary of the unit 7B trench and recorded within a small stone structure that abutted the large retention wall that held in the mound platform and apron (Figure 5.147).

![Figure 5.141: Unit 7 trench before excavation. The main retainment wall can be seen exposed in this photo. Photo taken facing west.](image-url)
Between these two walls (the smaller wall associated with strata 2 and the apron retaining wall) the remains of another juvenile were found. Designated “Burial #7,” these remains belonged to an individual estimated at 1-2 years old. The remains were placed inside a stone rectangular cubby, or “crypt,” created by the two walls and the placement of smaller perpendicular walls boxing in the remains (Figure 5.148). The crypt area measured 70-40 cm, and no burial goods were uncovered with the human remains. In the southern platform excavations, an ash lens was also documented within Unit 2. This lens measured a meter below datum and was approximately 80cm in length. The entirety of this level had a total depth of 65 cm in unit 2 (southern platform) and 1.50 meters in unit 7B (eastern side of platform). However, due to its depth in Unit 7B it was dug in arbitrary 20 cm levels to break up the excavations and better understand the materials coming out of the excavations.
Figure 5.143: Unit 7B, top of level 2, after the clearing of the rock collapse.

Figure 5.144: Unit 2, facing north with burial in context with the rest of the unit.
Stratum 3A: Stratum 3A corresponds to a stratum of loose light brown sandy soil with small to medium sized field stones. This stratum was only recorded on the south side of the platform in association with the unit 2 excavations (Figure 5.149). This soil is mixed with small gravel-like stones, and because it was never dug it has an indefinite thickness/depth.
Stratum 3B: Stratum 3B was located 305 cm below the top of the central wall, which divided the 7B unit. This stratum was composed of light brown compact soil with brown and gray mottling due to episodes of burning. It was only recorded on the eastern platform excavations (Figure 5.150).

![Figure 5.147](image)

Figure 5.147: Location of burial #7 in the apron trench, located between walls/small stone crypt.

This level was not a smooth/uniform stratum, and had a width of 1.50 meters from the base of the wall to where it was “destroyed” along the northeast section of the unit. This stratum had a depth of 40 cm (final depth at 1.90 cmbd). Towards the bottom of stratum 3B, a deep ash lens was documented along the retainment wall; sherds associated with two distinct vessels were collected (Figure 5.151).

Both of these vessels were highly polished, thin, fine walled ceramics with distinct burnishing patterns. Both bowls were roughly the same size, though one was brownish-red in color. The second was a polished blackware with several protuberances constructed into the ceramic walls (Figure 5.151).
Figure 5.148: Location of burial #7 on the eastern end of the 7B trench. A. illustrates its location within a stone enclosure, white lines show the angle/direction of the association walls. B. Close-up of burial #7 when it was first uncovered. C. During the excavation of Burial #7, after the removal of crania.

Figure 5.149: Unit 2, level 3 at the end of excavation (2014). The ceramic is reminiscent of the Tembladera/Cupisnique style of the north coast. Along with these fine ware ceramics, several ceramic disks and spindle whorls were recovered, along with
fragments of slate points, a polished stone decorated spindle whorl, and burnt camelid and deer bones. This ash lens has been interpreted as the remains of a small feasting midden associated with Early Horizon activity.

Figure 5.150: (Left) Close up of the retainment wall will the ash lens associated with strata 3 false floor documented during excavation. It was in association with the ash lens that the large quantity of fine ware Early Horizon sherds were recovered. These were the largest concentration of sherds recovered from the Kareycoto mound to date. (Right) Stratum 3, 7B, revealing a second terraced wall (foreground) below the main retainment wall (background.)

Figure 5.151: Sherds recovered from the highly burnished blackware ceramic vessel in ash pit located in Stratum 3B against the retainment wall.

Stratum 4: Stratum 4 was only found along the eastern platform excavations and was distinguished by a series of small stone walls (Figure 5.152). The walls were irregularly built, and
made up small rooms/corners (Figure 5.153). One of these rooms had a stone floor constructed of flat paving stones (Figure 5.154). A second room located to the north had a “pisanado” floor, or a poorly constructed floor feature. Where the walls crossed each other in a perpendicular pattern, an upright stone jutted out from the stratum below (Figure 5.155). Stratum 4 reached a depth of 300 cmbd.

Figure 5.152: Full extent of 7B trench, showing the retainment wall, lower terrace wall and an East-West wall which cut through the unit. A large rock protrudes out of the center of the unit (seen behind the photo board in this photo) in association with a concentration of rock fill.
Figure 5.15: Unit 7B trench facing southwest. This image points out several architectural features documented in level 4. Yellow line indicates the location of the ash lens. White lines outline the location of the small mound terrace wall. Blue lines point out walls associated with small rooms or structures. Red line outlines the protruding rock, while the grey filled area showcases the location of a small room with a floor made of paving stones.

Figure 5.154: Oblique view, facing towards the north, collection of stone walls, associated fill, and room with floor of paving stones in the unit 7B trench. Standing stone in the center of the walls.
Level 5.155: 7B trench taken from the top of the retainment wall, facing north.

Figure 5.156: Collection of Early Horizon walls (from photo above) in Unit 7B, trench, on lower apron (stratum 4). Drawing modified from Jeisen Navarro-Vega.
**Stratum 5**: Stratum 5 was documented in a sondage excavated at the base of the large stone retainment wall on the northern apron. The purpose of this sondage was to determine the depth of the wall (Figure 5.157-158). Soil was a dark brown organic material mixed with small stones and flecks of shell remains and burnt bones. Sterile soil was never reached, but the sondage had to be aborted due to the tight space within the unit made by the location of the architecture. Without expanding the trench further, the excavations had to be aborted within the sondage. The total measurable depth of the main retainment wall for the mound proper was 4 m, but it was clear this wall continued deeper into the apron (Figure 5.159-160).

![Figure 5.157: Sondage dug into Unit 7B](image-url)
Figure 5.158: Aerial imagery of the 7B trench. Left shows the sondage dug against the retention wall, while the right image shows the lower half of the trench, including the wall clusters, room with paving stones, and the sondage dug against the east-west running lower wall.

Figure 5.159: Profile drawing of southern profile, Unit 7B trench. Drawn by Jeisen Navarro-Vega.
Figure 5.160: Profile drawing (on western profile) of the retainment wall in Unit 7B after the sondage was dug. Drawn by Jeisen Navarro-Vega.

5.6.4 Excavations on the Mound Slope (Units 3, 4, 7A, & Gallery Cleaning).

**Stratum 1:** Like what was documented on the mound top, stratum 1 consisted of the surface level described above. The level was made of dark brown organic soil intermixed with fallen field stones and broken roots from the removed vegetation. On the northern slope, associated with an old looter’s pit, there was a higher concentration of stones and a deeper consistency to stratum 1. These stones are part of fallen architecture which was disturbed by the looter’s trench. This stratum ranged in depth of 1.20 m in the highest portion the northern slope excavations, and was shallowest at 30 cmbd on the north side of the excavations. This is due to the looter’s spill pile and natural sloping of the mound side (Figure 5.161-162).
Figure 5.161: Photo of the north side of the mound, taken facing south. The person is standing in Unit 3 along the mound slope. This photo shows the location of the unit in comparison to the mound top and lower apron.

Figure 5.162: Unit 3 prior to excavation (facing north.) Note presence of large rock fall.

For the eastern slope, the depth of stratum 1 ranged from 40-60 cmbd, and within this level, decorated ceramic sherds were recovered along with camelid remains. Sherds were incised, burnished, and punctated. Additionally, several “special artifacts,” including a clay stone figurine, and worked bone needles were collected from stratum 1 on the northern slope (Unit 3) (Figure
On the eastern side of excavations, a flat field stone wall ran through the excavations. The same soil consistency and materials existed both on the inside and outside of the wall, though there was a higher concentration of ceramics recovered within (to the west of) of the wall. At this point in the excavations, it was revealed the circular wall only consisted of one coursing of stones and did not extend deeper past stratum 1 (Figure 5.164.)

**Stratum 2A** is characterized by compact sandy light brown soil. This level corresponds to the original mound construction and was not disturbed by the looter’s trench. Stratum 2 was not excavated on the northern slope, but was exposed with the eastern slope excavations (Unit 7A) to a depth of 20 cm deep. This stratum was composed of a compact fill soil associated with exposed terrace walls in the Unit 7A excavations (Figure 5.165). Only a cleaning of this stratum was done to expose the architecture for photographs, but was not dug further than the exposed walls. Small amounts of plain ware ceramic sherds were documented during this cleanup. These were the only materials collected from stratum 2A.

Figure 5.163: Bone artifact with drill hole found in Strata 1, Unit 3.
Figure 5.164: Excavation of Unit 4, showing the circular platform wall during excavation. Rock fill stratum exposed to on either side of the wall.

Figure 5.165: Terrace wall exposed in Unit 7A trench. Photo taken facing west.
Stratum 2B: Stratum 2B was a deep fill stratum, located on both sides of the singular wall on the eastern slope. The fill consisted of medium to large rocks (15-30 cm for medium and 30-50 cm for large rocks) (Figure 5.166). The soil appears intrusive between the rocks, meaning that the rocks were the result of a single filling episode, with sediments later filling the gaps between rocks from a combination of aeolian and alluvial processes. This fill stratum was excavated to 1.20 m on the eastern slope; however, had to aborted at this depth because of the loose stone filling (Figure 5.167-168). Without expanding the unit and excavating the fill in a large trench-like fashion, the excavating of the fill was causing the integrity of the unit to cave in. No ceramics or other artifacts were recovered within this fill level.

Figure 5.166: Excavation of Unit 4, the start of the rock fill level.
Figure 5.167: Excavation Unit 4, fill stratum plan map. Drawn by Jeisen Navarro-Vega.

Figure 5.168: Excavation unit 4 northern profile. Drawn by Jeisen Navarro-Vega.
5.6.5 Preliminary Kareycoto Interpretations. Vegetation clearing and excavations within the Kareycoto mound have demonstrated that the majority of the mound was constructed during the Late Preclassic Period (approximately 17 m). The excavations have shown that both on the apron level and mound proper, the Early Horizon activity only occurs within the top meter. After this point, ceramics cease, while other cultural materials (worked bones and shells, beads, lithics, architecture, and purposeful episodes of filling) are still present in the deeper strata. The second (proper) floor documented on the mound top appears to be the “dividing line” between all ceramic and preceramic activities on the mound top and could be interpreted as a capping or fill level for the Preclassic architecture. Although one Initial Period date was documented on the very top of the mound (stratum 2), this date was associated with the destruction of the top floor level. This destruction occurred when the large ceramic vessels and infant and child interments were placed within the floors during the latter half of the Early Horizon. Initial Period ceramics similar to those of the Tembladera/Cupisnique style of the north coast have only been found within the mound apron. Save for the one disturbed date, these two vessels were the only documented Initial Period activity within the excavations to date.

Occupation 1: Occupation 1 is attributed to the later activity on the mound top and apron, dating to the latter half (500-200 BCE) of the Early Horizon. While no Early Horizon architecture was documented on the mound top, several walls and small rooms were excavated on the bottom apron level. The top meter of activity on the Kareycoto mound and lower apron show significant Early Horizon re-use of the earlier Preclassic monument. On the mound top, this Early Horizon activity is associated with a floor (Floor # 1) decorated ceramics and other diagnostic materials. During this time period, multiple infant, child, and one adult interments are either dug into a pre-existing floor, placed on top of the floor, or in associated stone crypts. None of these burials have associated grave-goods; however, they are all present within the same level, which includes the
smashing and burning of highly decorated ceramic bowls, animal bones, lithics, and the placement of very large ceramic vessels. Though possibly not intended as the final use episode of this mound, this peak in activity associated with the Early Horizon also happens to be the last. This Early Horizon activity has been interpreted as the 5th occupation at Kareycoto.

**Occupation 2:** Occupation 2 is associated with the Initial Period date on the mound top and earlier ceramic wares discovered on the mound apron. In addition to this date, a pattern of activity related to the Kotosh-Mito mound site of La Galgada was also noted. In the final use phases at La Galgada, specifically during the Initial Period, the small rooms associated with Kotosh-Mito activities were no longer constructed, and a shift in architectural patterns emerged. The final stages at La Galgada transformed the mound top to a large U-shaped platform, opening towards the north. A non-centralized fire feature was also present on a single level floor, which could accommodate up to fifty people (Grieder et al 1988).

This open platform was flanked on either end by filled mounded “wings,” and was interpreted as an open-air platform (Ibid 43). This change in construction covered the final phases of use at La Galgada (floors 20-14), and included the central courtyard, elevated surrounding platforms on three sides, and “unified the whole top of the mound around one enlarged firepit” (43). By floor level 13, the fire feature in the open plaza was removed entirely, and a stairway to another elevated platform with rectangular buildings was introduced. By Floor #10, the final form at La Galgada was realized, the open central platform was rectangular in shape, and a set of stairways led up to the elevated platform, and the north and south wings respectively. By 1500 BCE a small rectangular fire feature was added to the southeast corner of the elevated south wing of the mound, located inside a small rectangular chamber (44).
Though the extent of excavations at La Galgada exceeded those at Kareycoto, a similar construction could be occurring on the Kareycoto mound top. While there was looting activity documented on the mound top, the large dip attributed to a large looter’s trench which ran through the center of the northern quadrant of the Kareycoto mound may in actuality be the result of a similar building event occurring in the later stages at Kareycoto. In fact, Grieder et al (1988) make mention that they originally interpreted this area of activity to a “colonial looter’s trench.” This dipping is evident on the top of La Galgada now that the architecture has been exposed, but is also noted on the nearby Preceramic sites of Tirichugo Norte and the site of Condor Cerro A (Cardenas Martin, 2000 Reconocimiento Arqueologico en el Valle de Santa) to the east and west of La Galgada, respectively (Figure 5.170). Both Tirichugo Norte and Condor Cerro A have yet to be excavated, and like Kareycoto prior to excavation, they exhibit the same “dip” pattern on the mound top, which may be attributed to this series sunken U-shaped plazas with surrounding elevated wings and platforms (Figure 5.172).

During excavations on the Kareycoto mound, a broken circular structure filled with ash was excavated. This structure also included a single level coursed wall running through the center. While there was a portion of preserved floor documented inside the small circular structure, there was no
floor surrounding it on the same level. The non-centralized fire feature at La Galgada was raised off the floor and also included a ventilation shaft. It is possible the broken circular structure at Kareycoto is of similar design, and the single stone wall could be the remnants of a flue in use for ventilation.

Figure 5.170: (Top) La Galgada north mound. Yellow line indicates “dip” in the mound, originally interpreted as a colonial looter’s trench. This dip however was the cause of the Initial Period reconfiguration of the mound platform, with a lower open plaza and rooms/chambers to the left and right of the plaza space. (Bottom) The unexcavated mound of Tirichugo, also located in the Santa Valley, exhibiting the same dip in the mound center.

Figure 5.171: Kareycoto mound facing south during excavation. Dip highlighted in yellow may also be indicative of a similar construction pattern on the mound top.
By this approach, floor #1 (which is related to the Early Horizon activity) may be an earlier floor dating to Initial Period use of the mound. It may be part of a raised platform in the open courtyard like those described for occupation Floor 10 at La Galgada. This could account for the Initial Period carbon date and broken pits in the floor associated with several of the sub-adult burials and large vessels. Until excavations can be carried out on the raised lateral sides of the Kareycoto mound top (to the east and west) off where the excavations took place, this development cannot be confirmed, but the parallels in appearance prior to excavation and the location of the stand-alone hearth feature are intriguing.

**Occupation 3:** Occupation 3 is marked by the Preceramic floor (Floor #3) documented during the mound top excavations. This floor included several associated ash pockets, present within the Test Pit, Unit 1, and Unit 6. It is the current interpretation that Context #5, the broken circular wall with broken segment of floor, as well as the rock fill stratum associated with the broken segment of wall excavated in the SE corner of the Test Pit were all occupied and destroyed during this phase (circa 2300 BCE). This phase then is discernible by burning episodes taking place on the floor and at least two separate small-privatized structures.

**Occupation 4:** Occupation 4 is manifest by an apisanado, or false floor level, with two separate large ash lenses and at least one formalized hearth. The formalized hearth which was excavated 2mbd in the Test Pit was marked by a red clay rim and included the remains of marine life (crab claws and fish vertebrae). The broken wall in the southeast profile continues into this occupation, and interestingly a stratum of ashy rock fill is also present. This fill included a large level of soot and ash where a large stone blade and camelid remains were recovered. The other ash levels also included the burnt remnants of camelid and deer bones. The only architecture associated with this phase is the broken stone wall located in the southeast corner of the excavation area.
5.7 Kunka Excavations

Sector C was delimited as the southern ridge-line overlooking the Cosma basin. At its lowest and narrowest it is known locally to community members as “Kunka,” which stands for neck in Quechua. Three separate modified natural “mounds” are located on this lower saddle of the ridge. Though these are naturally occurring mounds of earth, they have all been purposefully modified, either through terracing or aproning in some way. Numerous built up walls, terraces, and aprons, were noted during excavations and on the surface. This sector is best known for the large number of domestic walls and worked stones and huancas.

![Image of the Kunka ridge-line](image)

Figure 5.172: The Kunka ridge-line (photograph taken facing south from Achipucoto mound).

Prior to the beginning of excavations, several days were spent clearing the overgrown vegetation which covered much of the Kunka ridge. This vegetation consisted of mostly thorn bushes, cacti, and small shrubs. Machetes, picks, and shovels were utilized to trim bushes and cut trees prior to the roots so as not to damage any associated exposed architectural features. Fallen
rocks were also photographed and cleared when necessary to place a unit and determine a compound’s shape and size (Figure 5.173). Excavations at Kunka included four units (Unit’s 9, 10, 12, and 13), which were determined in the field based on associated area on the ridge and exposed architecture. The units included two larger trenches (Units 9 and 13 were both 10 x 3 meters) and two smaller test pits (Units 10 and 12 were 3 x 2 m in size), respectively. In addition to the excavations in this sector, surface materials were collected and the worked stones and huancas were mapped and categorized. Excavations were dug in natural levels and placed in association with observed architecture.

**Unit 9:** Unit 9 was placed on top of what was originally believed to be a third man-made mound within the Cosma complex. The Unit 9 test pit, however, was able to disprove this theory, as it was quickly realized that the mounded area on the Kunka ridge was a natural protuberance that had been terraced and added to in order to create its present shape. Measuring 10 m north-south and 3 m east-west, Unit 9 covered an area of 30 square meters (Figure 5.175-176). A datum was placed on the tallest boulder near the unit, at a height of 2,640.183 masl.

---

Figure 5.173: Exposed rock collapse and overgrown vegetation on Kunka.
Figure 5.174: Kunka excavation unit locations, 2016.

Figure 5.175: Unit 9, facing north, prior to excavation.
The purpose of Unit 9 was to expose the construction sequence of the “mound,” but more specifically to understand the kind of architecture and ceramics present on the mound top. Unlike both Kareycoto and Acshipucoto, the majority of the Kunka ridge-line is covered with exposed stone walls and square room foundations. The 10 x 3 m unit was placed in one such structure, which appeared to contain three separate rooms. The unit was dug as “three smaller units” and materials were bagged separately. Unit 9A referred to the “outside” room to the north, Unit 9B was the central room, and Unit 9C was the outer room to the south. Unit 9 was also dug to understand the relationship with the architectural compounds and related ceramic materials.

**Unit 10:** Unit 10 was placed on a lower saddle area of the Kunka ridge, just to the east of Unit 9 and the natural mound. Located at a UTM of 824655.034 E and 8998813.628 N, its dimensions were 3 m east west by 2 m north south (for a total of 6m squared) (Figure 5.177). A datum was arbitrarily established for the lower saddle zone on a large elevated stone near the unit. This datum was found at a height of 2,634.569 masl. The purpose of Unit 10 was to understand the habitation and construction sequence of the lower saddle, and how it related to the elevated activity.
on the Kunka “mound.” Just like Unit 9, Unit 10 was determined due to the exposed architecture on the surface. Several exposed walls and surface ceramics were located within the lower saddle. Unit 10 was placed in conjunction with two exposed walls and where a significant amount of surface sherds had been documented (Figure 5.178).

Unit 12: Unit 12 is located on another natural high point on the Kunka ridge. Located at a UTM of UTM 824768.839 E and 8998767.209 N, its dimensions were 4 m north-south and 2 m east-west, for a total area of 8m squared. An arbitrary datum was placed on a larger elevated stone associated with a stone wall in the southwest corner of the unit. It was located at a height of 2,655.288 masl. The purpose of the unit was to understand all sections of the Kunka ridge, and their relationship with each other. Like Units 9 and 10, Unit 12 was established based on exposed architecture and surface ceramics.
Figure 5.178: Unit 12 prior to excavation, facing north.

**Unit 13:** Unit 13 was a long trench placed along the eastern slope of the natural mound, just to the east of Unit 9. Unit 13 covers the entirety of the mound slope, from mound top to the base, extending out and additional several meters from the mound base (Figure 5.179-180). Located at a UTM of 824647.457 E and 8998825.841 N, Unit 13 ran 8 m east-west, and 2 m north-south (covering an area of 16 m squared). An arbitrary datum was placed on a large prominent boulder located in the southwest corner of the unit. Its height was 2,637.607 masl.

The purpose of Unit 13 was to understand any construction sequence associated with the alteration of height and shape of the natural Kunka mound. Additionally for the purposes of understanding the relationship of architecture and materials recovered from the “mound top” and base. Due to its placement on the slope, there is a three-meter difference between the top and base of the trench.
Figure 5.179: Unit 13 prior to excavation, facing west.

Figure 5.180: Unit 13, prior to excavation, facing east down the hill slope.
Kunka Strata:

**Stratum 1:** Stratum 1 consisted of the surface level, which was composed of an organic dark brown soil. This level had the inclusion of small roots and rocks of different sizes, most likely associated with wall collapse (Figure 5.181-182). It was documented within all areas of the Kunka excavations (Unit 9-10, 12-13) in a similar depth/thickness. Numerous ceramic fragments were found within stratum 1. Decorated sherds consisted of stamped circles, notch appliques, and “gallinazo” or “goose-skinned” Casma-Chimu related wares. Numerous animal bones, charcoal, and the fragments of domestic ceramic sherds were also present. Additionally, documented within stratum 1 were intact grinding stone manos, or hand stones (collected from Unit 9 and 13 excavations). Stratum 1 was 15-20 cm deep and ended at the base of the walls, both on the inside and outside of the rooms in Unit 9 and 12. Unit 10 was dug down 35-50 cmbs and ended in natural sterile bedrock.

![Figure 5.181: Unit 12 during excavation of level stratum 1.](image-url)
For Unit 13, this stratum had a concentration of large stones, boulders, and a collapsed lintel stone. Additionally in Unit 13, cultural materials included ash/burning episodes, charcoal, and a significant amount of ceramic sherds. A larger concentration of rims, necks, handles, and body sherds were documented in this level. As in the other units, decorated sherds were similar to Casma-Chimú styles. In Unit 13, this stratum ranged in thickness from 10-40 cm, depending on the slope of the unit. During the excavation of stratum 1, a curved semicircular wall was documented at the base of the natural knoll (Figure 5.183-186). This wall was composed of large, worked standing field stones up to 70-80 cm in height.

Stratum 2 was the natural soil and bed-rock associated with the Kunka ridge-line in Unit 10. Composed of light gray course sand, gravely in texture, strata 2 was bare of all cultural materials.

The depth of Stratum 2B varied between units 9, 12, and 13, though the color and consistency was the same. It was made up of light-brown semi compact soil. For Unit 9, stratum 2B began at .80 cm below the datum in Unit 9. Within strata 2, in the northeast corner of Unit 9-B (the central “room”), the remains of a partial (and destroyed) floor were documented (Figure 5.187).
Figure 5.183: Photo of Unit 13 trench during excavation illustrating the purposeful terracing/shaping of the Kunka knoll.

Figure 5.184: The curved wall exposed in the lower half of Unit 13, Kunka. Associated with this wall was a stratum of ash and carbon towards the base.
Within this floor, several charcoal fragments associated with a burning lens were imbedded. No floor remains were documented within rooms A and C (Figure 5.188). Like stratum 1, ceramics included wares resembling Casma-Chimu ceramics (gallinazo skinned, circle stamping, rope appliques, etc.). Additional materials recovered included faunal bones and lithics. This level reached a depth of 12 cm and was constructed directly above the natural land formation/bed rock. For Unit 12, stratum 2B (Unit 12) was located 30 cm bd. It was a thin stratum and had a thickness of 3-5
The purpose of this stratum was to construct a pisano, or crudely constructed floor (Figure 5.189). The majority of this level was destroyed, or stood in a poor state of preservation.

Figure 5.187: Broken segment of floor documented in the northeast corner of Unit 9B excavations. Left shows floor in context with the corner, right is a zoomed in picture of same floor.

Figure 5.188: Unit 9 during excavation, prior to the start of strata 2. Top photo taken facing south, showing unit 9A. Bottom photo taken facing north, showing unit 9B (background) and 9C (foreground). Yellow circle indicates the same rock making up a portion of a wall between 9A and 9B for perspective.
Stratum 2B in Unit 13 was documented in the lower half of the unit, starting at the curved semicircular wall. Composed of light brown soil, this stratum was 10 cm in depth and included a deep ash lens in the northwest corner of the unit at the base of the circular wall. This lens was associated with charcoal and burnt faunal remains.

Stratum 3 was only documented within the central room (B) of Unit 9. It was decided within this structure to make a cut in order to reveal more information about the natural land formation. This stratum was a soft loose gravely soil, intermixed with small sand and pebble-like inclusions. No cultural material was recorded in this level, and the test was aborted after 10 cm. This stratum was also documented in Unit 12 at 35 cmbd (Figure 190-191). Stratum 3B was a compact level, similar to a poorly constructed floor, most likely prepared over the natural bedrock located on the mound saddle, though the floor was in a poor state of preservation and destroyed in numerous places. Along the southern and eastern profiles of the unit, a number of painted and kaolin sherds were collected. These sherds were concentrated in this zone, and while natural levels were reached in the western quadrant of the unit, natural sterile soil was never reached in this area by the end of season.
Figure 5.190: Unit 9 sondage dug into sterile/bedrock stratum at the top of Kunka knoll. Yellow arrow points to exposed bedrock stratum.

Figure 5.191: Unit 9 plan map after excavation. Sondage indicated by light grey color. Drawing by Jeisen Navarro-Vega.
Stratum 4 was a brown sandy loam with no cultural remains. Stratum 4 was only documented in Unit 13 and was not excavated due to time constraints at the end of the project (Figure 5.194-195).

Figure 5.192: Unit 9 profile map after excavation, facing east. Drawing by Jeisen Navarro-Vega.

Figure 5.193: Apisanado stratum against base of curved wall in Unit 13.
Figure 5.194: Unit 13 plan map after excavation. Drawing by Jeisen Navarro-Vega.

Figure 5.195: Unit 13 profile map, southern profile after excavation. Drawing by Jeisen Navarro-Vega.
5.7.1 Kunka Preliminary Interpretations. Unit 9 preliminary interpretation: Excavations within Unit 9 revealed an area of domestic activity focused around two separate structures. Broken up into 9A (northern), 9B (central), and 9C (southern) based on the location of small surface walls, it appears that walls associated with 9A and 9C may have in fact been two small household units. The activity that took place within 9B appears to have been a corridor or outdoor patio space separating the two smaller rooms. 9A included three small walls open to the north in a U shape. It is possible that at one point there was another wall which is now destroyed, or this structure was always open in some capacity as an entrance into the small structure. Measuring internally 2 x 1 m, our excavations revealed a small pisanado, or makeshift floor level inside these three walls. The walls were built with medium-sized edged stones and joined with a level of mud mortar. Currently, the height of the walls reach 50 cm high and other architectural elements. The floor has not been preserved either, due to the collection of stones and rock fall on the surface of these structures. However, in the shallowest levels of the excavation, intermixed with the rock fall, ash, and charcoal, faunal remains and utilitarian wares were documented within the pisanado floor, suggesting the domestic function of the small enclosure.

9B was located just to the south of structure A. This area encompassed a larger area and was bordered on both sides with a small wall to the north and the south. Along the base of the wall that makes up structure A were the remains of a partially destroyed floor. On and in association with this floor was a level of ash and charcoal. Area B also had a larger amount of associated ceramics and materials than both A and C, suggesting that this was a shared use space between the two structures. The floor would suggest some element of planned use as well.

Immediately to the south of this central area, Area C is located. Like Area A, Area C is also flanked on three sides by low level walls. The wall separating Area B and C is 50 cm wide and built
with large edged stones joined with clay mortar. This wall extends southeast -northwest. The floor within this area was not located, and while ash, faunal remains, and some ceramic fragments were recovered, occupation within this structure was shallow/superficial at best.

Through a preliminary analysis of the excavation of this unit it appears that this area was of a residential character—two small rooms with a shared patio or open use space between them. The presence of household wastes, like the remains of ash, charcoal, ceramic fragments, a fragment of hand grinding of Stone, and bone remains of various animals, reinforce this idea. Chronologically, by the presence of Casma-Akillpo ceramics, this area has been interpreted as a domestic area in use during the Late Intermediate Period (1000-1471 CE).

**Unit 10 Interpretations:** Like Unit 9, Unit 10 has been interpreted as a small domestic structure. Flanked on either side of the unit by two small walls, a floor within this structure was never documented. Domestic/utilitarian Casma-Akillpo wares and the faunal remains of large mammals (camelid or deer) were documented within this unit.

**Unit 12 Interpretations:** Unit 12, like Unit 10, was the location for another small domestic structure. This structure included two distinct rooms, or chambers, a small 2 m x 1.5 m structure to the south, and 1.5 m x 1 m chamber to the north. Both structures shared a wall, and like the other walls documented on Kunka, all walls were double faced with irregularly sized stones and mud mortar inlay. Also like the other walls, they only reached 50 cm in height and consisted of up to two coursings of stone. Domestic ceramic wares, as well as ash, charcoal, and a portion of a mano/grinding stone, along with faunal remains were recovered.

**Unit 13 Interpretations:** While the other three units on the Kunka ridge-line appear to be mostly domestic in function, Unit 13 had a higher frequency of high-quality ceramic wares, projectile points, and ceramic disks. Unit 13 was a long trench which revealed at least three different walls. The two upper walls were built along the slope of the natural mound, in essence constructed to
build up and extend the top of the mound platform. These two walls were single rowed and three
coursings of stone high, reaching 70 cm in height. Their purpose functioned as retaining walls for
small terraces built to reinforce the upper mound platform extension. Small amounts of surface
ceramics and rock fall were associated with the upper level of the trench.

For the lower portion of the trench, the third wall documented was the only curved/circular
wall documented on the Kunka ridge. This wall, which measured 2.5 m wide (before disappearing
into the northern profile of the unit), consisted of single level flat faced stones, some up to a meter
in height. In stratum 1 alone, eleven bags of ceramics were collected. 236 of those sherds were
diagnostic. Like the rest of Kunka, the majority of the materials included Casma-Chimú wares;
however, along the southern profile in strata 3, several kaolin painted sherds were collected (Figure
5.196). Kaolin ceramics are a diagnostic, non-local variety composed of white clay. Kaolin in the
central highlands is associated with the Recuay culture, which was centered in the neighboring
Callejón de Huaylas during the Early Intermediate Period (200-600 CE).

Recuay communities were often established on defensible ridge-tops, preferring areas above
2700 masl. Along with the sherds found in strata 3 of Unit 13, several more kaolin sherds were
documented on the Kunka ridge-line during pedestrian survey. Additionally, a Kaolin faced mortar

Figure 5.196: Selection of decorated and diagnostic ceramics from Unit 13. (Left) Early
Intermediate Period painted/Kaolin wares. (Right) Late Intermediate Period Casma styles.
was reported to our team by a local community member, who found the item another 1000 meters up on the Kunka ridge, near the site known as Watsi. One nearly complete Recuay vessel was also reported to us by a local farmer, who found the item in a sandstone cave opened up during the construction of the road into town (Figure xx).

While the Kunka ridge does not exhibit characteristics of a Recuay site, it is possible that Recuay communities inhabited the Kunka ridge-line farther up to the east, where several sites (Watsi, Inka-Nani, Cesurhirka, Atunhirka) have been reported to our crew. Pedestrian survey has been conducted at a couple of these sites (Watsi, Cesurhirka), where large walls in excess of 3 m have been documented. Vegetation, however, is extremely overgrown, and any measurements or surface artifact collections were hard to realize. See section below on surface survey for specific information on these sites, and several others, located within the basin.

Unit 13 is the only unit where wares earlier than Casma-Chimú were documented on the Kunka ridge. The Casma polity however does have some contemporary overlap with Recuay groups towards the end of the Early Intermediate Period or start of the Middle Horizon. The two carbon dates recovered from the Kunka ridge and Casma-Chimú activity on the Acshipucoto mound also seem to corroborate these earlier dates for the Casma activity at Cosma. Unit 13 is also the only unit on Kunka where bedrock was not reached before excavations were aborted. It is the current interpretation that domestic activity was established on Kunka during the Early Intermediate Period and continued through to the Late Intermediate.

The unique shape of the circular wall, and its construction using larger, flat faced, meter-high stones, signifies a slightly different activity taking place in this area at the base of the mound. At least one large boulder was removed from this unit during excavations, and several collapsed lintel stones and other worked stones were documented just to the outside of our unit boundaries. Whether the
activity on this part of the mound signified a location for ritual activity at the base of the mound, or the residence of a higher-status individual, the excavations cannot yet answer that question without expanding on our units in this area. The number of higher quality ceramic wares, and the condition of the wall and associated lintels, is suggestive of activity differing from the other domestic structures excavated on the ridge.
CHAPTER 6: MATERIAL DESCRIPTIONS AND CHRONOLOGY/CERAMIC TYPES

This chapter analyzes the materials collected from excavation and survey at Cosma. It provides material descriptions, drawings, and photographs, as well as interpretations of ceramic style counts, lithic, human burials and faunal remains analyzed. Additionally, when applicable, special artifacts will be discussed. These artifacts included diagnostic ceramic styles, worked bones, or projectile points that were found in situ during excavation (not in excavation screens), exotic types or materials documented while excavating, or diagnostics found in unique features or contexts. Materials are still ongoing analysis (specifically from the 2014 pilot season); however, those diagnostic ceramics (from the 2015-2016 seasons) that were analyzed will be discussed here. While photographs and drawings exist for the special artifacts recovered during the 2014 season, only the quantitative data from the 2015 ceramics will be discussed below due to the more complete analysis of diagnostics.

Diagnostic pottery materials refer here to fragments exhibiting features that allow for the reconstruction of vessel shape and decorative types including rims, bases, handles, and/or any sherds with visible surface treatment or decoration. At Cosma, the most common types of pottery decorations include appliqués, painting, incising, burnishing, and stamping. Following the descriptions of material remains, the second part of this chapter focuses on excavation contexts and associations of the artifacts recovered. Finally, the context of what the presence of these items means for Cosma’s chronology and occupation sequence, as well as long distance trade and interactions will be discussed.

Paired with the carbon dates presented in Chapter 5, the analysis of material remains allows for the conclusion of at least five separate temporal episodes within the basin (Table 6.1). The first episode flourished during the Late Preceramic at the Acshipucoto and Kareycoto mounds and was determined through at least 9 radiometric dates as well as architectural components and a pattern of
fill. The second major site-use occupation occurred during the Early Horizon and focused on the Kareycoto mound. This occupation was distinguished through radiometric dates and relative ceramic styles present in association with each other and juvenile burials on the mound top and lower apron. The third use phase occurred on the Acshipucoto mound and Kunka ridgeline during the Middle Horizon-Late Intermediate Periods. This use was affirmed through radiocarbon dates and ceramic analysis. Finally, a later occupation was attributed to the Late Horizon/Colonial era.

6.1 Methodology

All accessible materials from the Cosma excavations were transported to Samanco at the end of excavations for analysis. Due to the rudimentary nature of our field laboratory facilities, only very preliminary analyses were done in Cosma, including photographs and some drawings. Hence, following field activities, materials were transported to a better equipped house laboratory in the town of Samanco. Bags were weighed and all materials turned in to the Ministerio de Cultura’s storage facilities at the Museo Regional Max Uhle de Sechín, along with inventory lists.

Ceramic analysis was the most detailed and focused on morphometric and stylistic traits, as well as basic colors of pastes, paints, and slips. Several examples of sherds for each style and trait was measured and drawn. Ceramic remains were the most common artifacts collected. They include fragments of pottery, disks, spindle-whorls, and panpipes. In total, 2373 diagnostic sherds were analyzed, with the largest percentage of ceramics recovered from Kareycoto (n=1402, 59.08%). Acshipucoto ceramics accounted for 22.08% of the sample (n=524), and Kunka’s excavations recovered 18.84% of the sample for analysis (n=447).
Table 6.1: Table of all AMS carbon dates for the Cosma basin, Sectors A, B, and C.

<table>
<thead>
<tr>
<th>Lab Code</th>
<th>FS#</th>
<th>Sector</th>
<th>RCYBP</th>
<th>cal. (1σ)</th>
<th>cal. (2σ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRI-14-108-71</td>
<td>71</td>
<td>Acshi</td>
<td>4230 ± 29</td>
<td>2884 - 2855 BC (15 %)</td>
<td>2892 - 2833 BC (24 %)</td>
</tr>
<tr>
<td>D-AMS 021271</td>
<td>479</td>
<td>Acshi</td>
<td>4154 ± 30</td>
<td>2849 - 2812 BC (18 %)</td>
<td>2866 - 2804 BC (21 %)</td>
</tr>
<tr>
<td>D-AMS 014375</td>
<td>397</td>
<td>Acshi</td>
<td>4144 ± 28</td>
<td>2849 - 2813 BC (16 %)</td>
<td>2866 - 2804 BC (21 %)</td>
</tr>
<tr>
<td>D-AMS 014376</td>
<td>399</td>
<td>Acshi</td>
<td>4149 ± 27</td>
<td>2850 - 2813 BC (17 %)</td>
<td>2864 - 2806 BC (18 %)</td>
</tr>
<tr>
<td>D-AMS 021270</td>
<td>480</td>
<td>Acshi</td>
<td>4129 ± 30</td>
<td>2849 - 2814 BC (12 %)</td>
<td>2864 - 2806 BC (18 %)</td>
</tr>
<tr>
<td>Beta - 423709</td>
<td>401</td>
<td>Acshi</td>
<td>4100 ± 30</td>
<td>2850 - 2820 BC (5 %)</td>
<td>2850 - 2812 BC (9 %)</td>
</tr>
<tr>
<td>Beta - 423708</td>
<td>398</td>
<td>Acshi</td>
<td>4050 ± 29</td>
<td>2850 - 2820 BC (5 %)</td>
<td>2850 - 2812 BC (9 %)</td>
</tr>
<tr>
<td>D-AMS 021269</td>
<td>462</td>
<td>Acshi</td>
<td>3976 ± 32</td>
<td>2484 - 2394 BC (48 %)</td>
<td>2496 - 2296 BC (88 %)</td>
</tr>
<tr>
<td>D-AMS014374</td>
<td>247</td>
<td>Carey</td>
<td>3905 ± 29</td>
<td>2455 - 2418 BC (15 %)</td>
<td>2464 - 2272 BC (82 %)</td>
</tr>
<tr>
<td>D-AMS 014371</td>
<td>186</td>
<td>Carey</td>
<td>3164 ± 27</td>
<td>1434 - 1382 BC (44 %)</td>
<td>1454 - 1286 BC (95 %)</td>
</tr>
<tr>
<td>D-AMS 014372</td>
<td>189</td>
<td>Carey</td>
<td>2424 ± 27</td>
<td>506 - 502 BC (3 %)</td>
<td>730 - 692 BC (6 %)</td>
</tr>
<tr>
<td>D-AMS 014373</td>
<td>180</td>
<td>Carey</td>
<td>2404 ± 24</td>
<td>481 - 441 BC (24 %)</td>
<td>540 - 379 BC (95 %)</td>
</tr>
<tr>
<td>D-AMS 021268</td>
<td>458</td>
<td>Acshi</td>
<td>1382 ± 35</td>
<td>650 - 684 AD (47 %)</td>
<td>646 - 766 AD (95 %)</td>
</tr>
<tr>
<td>D-AMS 021267</td>
<td>455</td>
<td>Kunka</td>
<td>1339 ± 25</td>
<td>678 - 692 AD (14 %)</td>
<td>667 - 770 AD (95 %)</td>
</tr>
<tr>
<td>D-AMS 025617</td>
<td>496</td>
<td>Kunka</td>
<td>356 ± 18</td>
<td>1508 - 1525 AD (15 %)</td>
<td>1498 - 1598 AD (79 %)</td>
</tr>
<tr>
<td>D-AMS 021266</td>
<td>470</td>
<td>Kunka</td>
<td>280 ± 28</td>
<td>1630 - 1670 AD (58 %)</td>
<td>1511 - 1550 AD (9 %)</td>
</tr>
</tbody>
</table>

COSMA CARBON DATES (ALL)
Diagnostic sherds were analyzed by two categories (1) plainware fragments, which include sherds that are plain in decoration but are rims, handles, or bases, and (2) decorated styles. Some sherds allow for the reconstruction of both vessel shape and decoration. Following analyses, ceramics were categorized roughly by style, as opposed to by “ware,” which has been previously defined as “pottery whose members share similar technology, fabric and surface treatment” (Rice 1987: 245). Styles then are broader and are “generally considered visual representations, specific to particular contexts of time and place… They are culturally constructed or ‘standardized’ in some senses: their components are selected from within a relatively narrow body of interrelated technical,
thematic, and aesthetic alternatives and combined by a set of rules. All of these are, by group consensus, peculiar to a given cultural system” (Rice 1987; 245). These ceramic types were organized by their external color, finish, form, and decoration. These were then compared to analysis from other sites, specifically in the neighboring regions and valley in order to determine a relative ceramic chronology for the basin. Seven ceramic varieties fitting six broader, classified types were categorized. The specific types are representative of distinct periods, including: Initial Period, Early Horizon, Kaolin-Painted Early Intermediate Period, Middle Horizon, Late Intermediate Period, Akillpo-Colonial.

For non-ceramic artifacts, methodology was similar to analyzing ceramic styles, including cleaning, classifying, photographing or drawing. For bones and lithics, only artifacts classified as “special” (ie. Slate points or worked bones) were drawn. Shells were not drawn but photographed and weighed. There were 28 Number of Individual Specimen (NISP) shells collected and analyzed from all contexts. A total of 1041 NISP lithics were analyzed. Bones were bagged, and sorted into broad categories: isolated human bones, worked bones, faunal bones, and burnt faunal bones. A total of 136 bags of bones were classified into these four rough categories, and when applicable, vertebrates were classified (ie, presence of deer phalanges in a sample, which is distinguishable from camelids and other large mammals in Peru). Worked bones were further analyzed into classification (ie, bone bead verse bone needle or point).

6.2. Ceramics: The Early Horizon Occupation

At the Kareycoto mound, ceramics found within excavations, save for 16 painted sherds (Figure 6.2), all date to the Early Horizon. At Kareycoto, 1336 diagnostic sherds were analyzed in total for units 6 and 7, respectively. Of these diagnostics, 897 came from Unit 7B (a surface area of 24 sq meters and total volume of 213 cubic meters), down on the platform portion of the trench, while
434 were excavated from Unit 6 and its extensions (a total surface area of 16.25 square meters) and a total volume of 12.18 cubic meters) (Table 6.3). Finally, 254 separate special artifacts were analyzed, including 181 separate ceramics, 38 lithic, 12 bones, 10 metal artifacts, 10 shells, 1 organic (wool), and 1 piece of wood.

Table 6.2: Special artifact counts broken up by Unit/Test Pit and material category.

<table>
<thead>
<tr>
<th>Location</th>
<th>Bead</th>
<th>Bone</th>
<th>Ceramic</th>
<th>Lithic</th>
<th>metal</th>
<th>Shell</th>
<th>Textile</th>
<th>Wood</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looter's 3</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Looter's 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Test Pit 1</td>
<td></td>
<td></td>
<td>12</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Unit 1</td>
<td>1</td>
<td></td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Unit 11</td>
<td></td>
<td>2</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Unit 13</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Unit 2</td>
<td>1</td>
<td>6</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Unit 3</td>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Unit 6</td>
<td>6</td>
<td>52</td>
<td>7</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>71</td>
</tr>
<tr>
<td>Unit 7B</td>
<td>2</td>
<td>86</td>
<td>16</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>107</td>
</tr>
<tr>
<td>Unit 8</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Unit 9B</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>1</strong></td>
<td><strong>12</strong></td>
<td><strong>178</strong></td>
<td><strong>38</strong></td>
<td><strong>1</strong></td>
<td><strong>10</strong></td>
<td><strong>1</strong></td>
<td><strong>1</strong></td>
<td><strong>242</strong></td>
</tr>
</tbody>
</table>

Figure 6.2: Collection of painted ceramic sherds from disturbed area of Unit 6 (2015). A-B are the front and back of the same sherd, which is painted on the front and has a red slip on the back. C. Is a handle with two white painted lines. D. Is a small kaolin sherd with three painted brownish red lines. E. Includes a white patina/slip and thick brown painted line. F. is a plain kaolin sherd with no evidence of additional painting.
Materials found both on the mound top (Unit 6) and mound apron (Unit 7) consisted of the same forms and styles, the majority of which were small bowls or cuencos (n=390 or 16.43% of the total diagnostic ceramic sample) and neckless pots (n = 352 or 17.78%). Plates followed by 2.95% of the total excavated sample (n=70), followed by panpipe fragments (2.32% of sample, n=55), and pitcher fragments at 1.94% or n=46. Necked pots accounted for 1.60% of the sample (n=38) and ceramic disks (n=28) accounted for 1.18% of the total sample (Table 6.3).

Table 6.2: General materials chart by unit. All numbers account for counts of specific artifacts, except for bones. *Bone counts are for bag quantities and not specific samples. Surface ceramics collected are not included in chart materials from 2015-2016.

<table>
<thead>
<tr>
<th></th>
<th>Ceramics</th>
<th>Lithics</th>
<th>Bone*</th>
<th>Shell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kareycoto</td>
<td>1341</td>
<td>994</td>
<td>52</td>
<td>42</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>434</td>
<td>779</td>
<td>42</td>
<td>32</td>
</tr>
<tr>
<td>7A</td>
<td>5</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7B</td>
<td>897</td>
<td>215</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Acshipucoto</td>
<td>447</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>101</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>346</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Kunka</td>
<td>382</td>
<td>19</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>122</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>24</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>236</td>
<td>15</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>2170</td>
<td>1014</td>
<td>69</td>
<td>43</td>
</tr>
</tbody>
</table>

Vessel forms were further broken up into subcategories based on shape, size, and rim angle (Table 6.4). For example, bowls found at Kareycoto were further categorized into seven separate subgroups. Subgroup A is a shallow bowl with slightly thickened rim which is round in cross-section. Subgroup B is a deep bowl with slightly concave sides. Subgroup C is Semi globular bowl with slightly constricted rim, the lip is beveled. Subgroup D is a Semi globular bowl thickened rim – lip beveled on the interior. Subgroup E is a bowl with angular shoulder and constricted mouth. Subgroup F is a bowl with convex sides, slight thickening of the rim, lip is rounded. Finally,
Subgroup G is a bowl with vertical sides, rim is thickened lip is rounded (See Appendix C for vessel forms).

Table 6.3: Counts for ceramic forms, Kareycoto excavations

<table>
<thead>
<tr>
<th>Vessel Form</th>
<th>Sum of Count</th>
<th>% of total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kareycoto (EH)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bowl (cuenco)</td>
<td>390</td>
<td>16.43%</td>
</tr>
<tr>
<td>Neckless pot (olla sin cuello)</td>
<td>352</td>
<td>14.83%</td>
</tr>
<tr>
<td>Plate</td>
<td>70</td>
<td>2.95%</td>
</tr>
<tr>
<td>Panpipe (antara)</td>
<td>55</td>
<td>2.32%</td>
</tr>
<tr>
<td>Pitcher (Cántaro)</td>
<td>46</td>
<td>1.94%</td>
</tr>
<tr>
<td>Pot with Neck (Olla con cuello)</td>
<td>38</td>
<td>1.60%</td>
</tr>
<tr>
<td>Ceramic disk (Tortero)</td>
<td>28</td>
<td>1.18%</td>
</tr>
<tr>
<td>Flute</td>
<td>1</td>
<td>0.04%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>422</td>
<td>17.78%</td>
</tr>
<tr>
<td><strong>Kareycoto Totals:</strong></td>
<td><strong>1402</strong></td>
<td><strong>59.08%</strong></td>
</tr>
</tbody>
</table>

Early Horizon styles at Kareycoto also included two plate forms, or A. One plate with a beveled rim, and B. a shallow bowl with a gently outward sloping sides and slightly thickened rim, bottom estimated to be flat.

Pots (or jars) were broken up into nine separate subgroups, which included necked and neckless varieties. Necked Jars: Subgroup A was a globular jar with a short flaring neck, and rim which bulges outward. Group B exhibited four separate variations (2A-2D). Subgroup B1 was a large rounded jar with short mostly flared neck. Subgroup B2 was a round short necked jar with flaring neck. Subgroup B3 was a jar with vertical short neck and unthickened rim. Subgroup B4 was a large rounded jar with a longer, vertical, slightly flaring neck. Subgroup C was a short necked jar with a flared opening and excursive lip. Subgroup D was a large short necked jar with outward flaring rim which is S curved.
Table 6.4: Table illustrating vessel counts and forms separated by rim shape and angle.

<table>
<thead>
<tr>
<th>Form</th>
<th>Rim Angle</th>
<th>Count of Count</th>
<th>Count of Count2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowl (cuenco)</td>
<td>Direct</td>
<td>228</td>
<td>16.26%</td>
</tr>
<tr>
<td></td>
<td>Converging</td>
<td>117</td>
<td>8.35%</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>18</td>
<td>1.28%</td>
</tr>
<tr>
<td></td>
<td>Thickened</td>
<td>23</td>
<td>1.64%</td>
</tr>
<tr>
<td></td>
<td>Indeterminate</td>
<td>4</td>
<td>0.29%</td>
</tr>
<tr>
<td>Bowl (cuenco) Total</td>
<td></td>
<td>390</td>
<td>27.82%</td>
</tr>
<tr>
<td>Neckless pot (olla sin cuello)</td>
<td>Direct</td>
<td>139</td>
<td>9.91%</td>
</tr>
<tr>
<td></td>
<td>Converging</td>
<td>142</td>
<td>10.13%</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>54</td>
<td>3.85%</td>
</tr>
<tr>
<td></td>
<td>Thickened</td>
<td>17</td>
<td>1.21%</td>
</tr>
<tr>
<td>Neckless pot (olla sin cuello) Total</td>
<td></td>
<td>352</td>
<td>25.11%</td>
</tr>
<tr>
<td>Plate</td>
<td>Direct</td>
<td>42</td>
<td>3.00%</td>
</tr>
<tr>
<td></td>
<td>Converging</td>
<td>15</td>
<td>1.07%</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>13</td>
<td>0.93%</td>
</tr>
<tr>
<td>Plate Total</td>
<td></td>
<td>70</td>
<td>4.99%</td>
</tr>
<tr>
<td>Pitcher (Cántaro)</td>
<td>Direct</td>
<td>41</td>
<td>2.92%</td>
</tr>
<tr>
<td></td>
<td>Converging</td>
<td>4</td>
<td>0.29%</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>1</td>
<td>0.07%</td>
</tr>
<tr>
<td>Pitcher (Cántaro) Total</td>
<td></td>
<td>46</td>
<td>3.28%</td>
</tr>
<tr>
<td>Pot with Neck (Olla con cuello)</td>
<td>Direct</td>
<td>10</td>
<td>0.71%</td>
</tr>
<tr>
<td></td>
<td>Converging</td>
<td>10</td>
<td>0.71%</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>18</td>
<td>1.28%</td>
</tr>
<tr>
<td>Pot with Neck (Olla con cuello) Total</td>
<td></td>
<td>38</td>
<td>2.71%</td>
</tr>
<tr>
<td>Panpipe (antara)</td>
<td>N/A</td>
<td>55</td>
<td>3.57%</td>
</tr>
<tr>
<td>Panpipe (antara) Total</td>
<td></td>
<td>55</td>
<td>3.92%</td>
</tr>
<tr>
<td>Flute</td>
<td>N/A</td>
<td>1</td>
<td>0.07%</td>
</tr>
<tr>
<td>Flute Total</td>
<td></td>
<td>1</td>
<td>0.07%</td>
</tr>
<tr>
<td>Ceramic disk (Tortero)</td>
<td>N/A</td>
<td>28</td>
<td>2.00%</td>
</tr>
<tr>
<td>Ceramic disk (Tortero) Total</td>
<td></td>
<td>28</td>
<td>2.00%</td>
</tr>
<tr>
<td>Indeterminate Vessel Forms</td>
<td>Direct</td>
<td>164</td>
<td>11.70%</td>
</tr>
<tr>
<td></td>
<td>Converging</td>
<td>41</td>
<td>2.92%</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>21</td>
<td>1.50%</td>
</tr>
<tr>
<td></td>
<td>Indeterminate</td>
<td>10</td>
<td>0.71%</td>
</tr>
<tr>
<td></td>
<td>Thickened</td>
<td>3</td>
<td>0.21%</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>183</td>
<td>13.05%</td>
</tr>
<tr>
<td>Indeterminate Total</td>
<td></td>
<td>422</td>
<td>30.10%</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td></td>
<td>1402</td>
<td>100%</td>
</tr>
</tbody>
</table>
Neckless Jars: Subgroup E was a globular jar with the exterior rim bulging and interior rim beveled. Subgroup F was a neckless globular jar, wall expanding in thickness at the rim. Subgroup G was a globular neckless jar with a flattened angular lip. Subgroup H was a neckless jar with an unthickened rim and no pronounced thickness change in the walls. Finally, Subgroup I was a rounded neckless jar with a slightly angular shoulder and thickened rim.

Out of the 1402 diagnostic sherds excavated from Kareycoto, 1203 were lacking in any external decorations. One hundred ninety-nine decorated sherds were analyzed from the Early Horizon contexts, with the highest number of decorations incised lines or dots. Of the incised sherds, 3.24% (n=77) of the total sample were incised with punctations, while 2.87% (n=68) were plain incised, two sherds had appliques and incisions (.08%), and 1 sherd (.04%) was incised and fabric impressed. Following this, eight sherds included appliques (.34%), six sherds had simple punctation holes (.25%) and ten sherds showed evidence for drill holes (.42%) (Table 6.4).

Table 6.5: Table of Kareycoto style designs.

<table>
<thead>
<tr>
<th>Decorated Sherds</th>
<th>Sum of Count</th>
<th>% of Decorated Sherds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kareycoto</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incised/Punctate</td>
<td>77</td>
<td>42.54%</td>
</tr>
<tr>
<td>Incised</td>
<td>68</td>
<td>37.57%</td>
</tr>
<tr>
<td>Drilled</td>
<td>10</td>
<td>5.52%</td>
</tr>
<tr>
<td>Applique</td>
<td>8</td>
<td>4.42%</td>
</tr>
<tr>
<td>Modeled</td>
<td>8</td>
<td>4.42%</td>
</tr>
<tr>
<td>Punctuation</td>
<td>6</td>
<td>3.31%</td>
</tr>
<tr>
<td>Applique/Incised</td>
<td>2</td>
<td>1.10%</td>
</tr>
<tr>
<td>Impressed</td>
<td>1</td>
<td>.55%</td>
</tr>
<tr>
<td>Incised/Impressed</td>
<td>1</td>
<td>.55%</td>
</tr>
<tr>
<td></td>
<td><strong>181</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

These designs specifically incorporated circle and dots, incised straight lines with alternating dots, incised curved or “serpentine” lines with alternating dots, and zoned incised triangles with
punctations inside each triangle (Figure 6.3). The same designs appeared on bowls, neckless and necked jars, and plates. All ceramics were modeled, and external colors were mainly red, dark reddish brown, and reddish brown, with the most common finishing techniques including finishing and burnishing (Table 6.6).

Table 6.6: Kareycoto external colors

<table>
<thead>
<tr>
<th>External Surface Color</th>
<th>Sum of Count</th>
<th>% of total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>783</td>
<td>33.00%</td>
</tr>
<tr>
<td>Dark reddish brown</td>
<td>367</td>
<td>15.47%</td>
</tr>
<tr>
<td>Reddish brown</td>
<td>46</td>
<td>1.94%</td>
</tr>
<tr>
<td>Strong brown</td>
<td>27</td>
<td>1.14%</td>
</tr>
<tr>
<td>Very dark grey</td>
<td>22</td>
<td>0.93%</td>
</tr>
<tr>
<td>Grey</td>
<td>20</td>
<td>0.84%</td>
</tr>
<tr>
<td>Yellowish red</td>
<td>14</td>
<td>0.59%</td>
</tr>
<tr>
<td>Black</td>
<td>11</td>
<td>0.46%</td>
</tr>
<tr>
<td>Dark red</td>
<td>8</td>
<td>0.34%</td>
</tr>
<tr>
<td>Brown</td>
<td>8</td>
<td>0.34%</td>
</tr>
<tr>
<td>Dark brown</td>
<td>2</td>
<td>0.08%</td>
</tr>
<tr>
<td>Pale brown</td>
<td>2</td>
<td>0.08%</td>
</tr>
<tr>
<td>Pale yellow</td>
<td>2</td>
<td>0.08%</td>
</tr>
<tr>
<td>Pink</td>
<td>2</td>
<td>0.08%</td>
</tr>
<tr>
<td>Dark reddish grey</td>
<td>1</td>
<td>0.04%</td>
</tr>
<tr>
<td>Light red</td>
<td>1</td>
<td>0.04%</td>
</tr>
<tr>
<td>Light yellowish brown</td>
<td>1</td>
<td>0.04%</td>
</tr>
<tr>
<td>Unclassified</td>
<td>79</td>
<td>3.33%</td>
</tr>
<tr>
<td>Kareycoto – Total Sherds</td>
<td>1402</td>
<td>59.08%</td>
</tr>
</tbody>
</table>

Figure 6.3: Drawing of sampling of Early Horizon sherds and decorated ceramic pirurus.
6.2 The Early Intermediate Period & Middle Horizon

At the Acshipucoto mound, ceramics were found only on the upper two levels (0-40 cmbs) of all excavations. These materials came from a surface area of 111.25 sq meters and volume of 55.63 cubic meters (Table 6.2). All of these ceramics included Middle Horizon to Late Intermediate Period sherds which resemble Casma-Chimu coastal styles. Most of the ceramics appear to have been associated with intrusive burials of this late phase, as human and other bones were found disarticulated by looters on the top of the mound. Other associated materials included silver disks, a broken wooden “scepter” head in the shape of a diamond, and a llama head whistle, in addition to the large number of diagnostic and decorated sherds, intermixed with layers of ash.

Ceramics at Acshipucoto made up 22.08% of the total ceramics analyzed (n=524 sherds.) Of these, 304 were indeterminate for form/shape. While the Early Horizon styles were most represented by bowls, neckless pots had the largest presence in the later varieties at 3.75% of the sample (n=89). This was followed by bowls at 1.69% (n=40), pitchers at 1.35% (n=32), necked pots at 1.01% (n=24), plates at .88% (n=21), ceramic disks at .29% (n=7), large jars at .17% (n=4), and 1 panpipe fragment (.04%) (Table 6.7).

<table>
<thead>
<tr>
<th>Acshipucoto Styles</th>
<th>Count</th>
<th>% of total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neckless pot (olla sin cuello)</td>
<td>89</td>
<td>3.75%</td>
</tr>
<tr>
<td>Bowl (cuenco)</td>
<td>40</td>
<td>1.69%</td>
</tr>
<tr>
<td>Pitcher (Cántaro)</td>
<td>32</td>
<td>1.35%</td>
</tr>
<tr>
<td>Pot with Neck (Olla con cuello)</td>
<td>24</td>
<td>1.01%</td>
</tr>
<tr>
<td>Plate</td>
<td>21</td>
<td>0.88%</td>
</tr>
<tr>
<td>Ceramic disk (Tortero)</td>
<td>7</td>
<td>0.29%</td>
</tr>
<tr>
<td>Large Jar (Tinaja)</td>
<td>4</td>
<td>0.17%</td>
</tr>
<tr>
<td>Whistle</td>
<td>2</td>
<td>0.08%</td>
</tr>
<tr>
<td>Panpipe (antara)</td>
<td>1</td>
<td>0.04%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>304</td>
<td>12.81%</td>
</tr>
<tr>
<td><strong>Grand Totals</strong></td>
<td><strong>524</strong></td>
<td><strong>22.08%</strong></td>
</tr>
</tbody>
</table>
**Neckless jars:** Neckless jars were classified into three subcategories. Subgroup A: Neckless pot with straight rim, including three lip forms (beveled, flat, and rounded) and a spherical body with concave walls. Subgroup B: Neckless jar with a convergent rim, lips which are beveled, straight or rounded, and a spherical body. Subgroup C is a flaring rim, with rim form either beveled, straight, or rounded. Spherical in shape.

**Necked jars:** Three separate subgroups were classified for necked jars. Subgroup A has a straight rim, either flat or rounded, and a flaring neck. Subgroup B is a converging rim, either beveled, flat, or rounded. The neck is also flared. Subgroup C is a diverging rim, either straight or rounded, and flaring neck opening.

**Plates:** Plates were categorized in three separate subgroups. Subgroup A is straight (either beveled or rounded lip) and a rounded body with flaring walls. Subgroup B has a convergent rim, either beveled or rounded, rounded body and flaring walls. Subgroup C was a diverging vessel form, rounded lip, and diverging wall.

**Pitchers:** (Or cantaros) were categorized with one form, which included diverging necks. Pitchers included divergent, straight, or converging rim angles, and consisted of flat, beveled, and rounded rim forms.

Bows also included three separate varieties. Subgroup A is a globular bowl with a straight rim, and either a rounded, straight, or beveled lip. The rim is straight at the vessel opening. Subgroup B converges inward at the bowl opening, and includes rounded or beveled lips. The vessel is globular in shape. Subtype C flares at the opening, and includes straight and rounded rims. Body shape is rounded or globular.

Neckless jars were categorized into two subgroups. Group one consists of a straight rim wall with a rounded lip. These jars were globular in shape. Subgroup B is a spherical shaped neckless jar with
either a straight or round lip, converging inward at the opening. Out of the 524 diagnostic ceramics only 213 had external decorations. Of these, appliques (2.36%, n=56) and appliques with incisions (1.52%, n=36) were the most common. This was followed by sherds that included both incisions and punctations (2.02%, n=48), simple incisions (1.18% n=28%), appliques with punctations (.59%, n=14), sherds with modeling (.51%, n=12), sherds with simple punctations (.46%, n=11), incised and modeled sherds (.25%, n=6), and painted and applique/modeled both accounting for 1 sherd each, or .04% of the sample (Table 6.9).

There were less varieties in color for the later period styles, with the majority consisting of a red external paste (11.08%, n=263). Following this were dark reddish brown sherds (n=135, 5.69%), strong brown (n=69, 2.91%), with smaller numbers of grey (n=35), very dark grey (n=5), light red (n=1) and yellowish red (n=1) (Table 6.10). Designs specifically included “goose skin,” applique “paw” designs, raised incisions, applique-nubbin, press-molded, punctations, cane stamped circles and modeled sherds (Figure 6.4).

At least six sherds included iconography of people and animals, such as a llama, pelican, frog or lizard, iguana or shark, and at least two different people. Additionally, plants like corn and peanuts were also represented in the sample (Figure 6.5-6.7).

Excavations in the Kunka sector primarily focused on a roughly 100 m portion of the ridge-line between the two modified knolls. Cultural deposits were not deeply stratified, but there does appear to be some separation in the ceramics from the upper and lower deposits, specifically in Unit 13, where excavations were able to continue deeper than 50 cm without hitting bedrock.
Table 6.8: Table of Acshipucuto and Kunka ceramic forms and rim angles.

<table>
<thead>
<tr>
<th>Form</th>
<th>Rim Angle</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neckless pot (olla sin cuello)</td>
<td>Converging</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Thickened</td>
<td>11</td>
</tr>
<tr>
<td>Neckless pot (olla sin cuello) Total</td>
<td></td>
<td><strong>116</strong></td>
</tr>
<tr>
<td>Pitcher (Cántaro)</td>
<td>Converging</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Thickened</td>
<td>2</td>
</tr>
<tr>
<td>Pitcher (Cántaro) Total</td>
<td></td>
<td><strong>80</strong></td>
</tr>
<tr>
<td>Bowl (cuenco)</td>
<td>Converging</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Thickened</td>
<td>2</td>
</tr>
<tr>
<td>Bowl (cuenco) Total</td>
<td></td>
<td><strong>73</strong></td>
</tr>
<tr>
<td>Plate</td>
<td>Converging</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>4</td>
</tr>
<tr>
<td>Plate Total</td>
<td></td>
<td><strong>44</strong></td>
</tr>
<tr>
<td>Pot with Neck (Olla con cuello)</td>
<td>Converging</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>2</td>
</tr>
<tr>
<td>Pot with Neck (Olla con cuello) Total</td>
<td></td>
<td><strong>27</strong></td>
</tr>
<tr>
<td>Large Jar (Tinaja)</td>
<td>Converging</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>6</td>
</tr>
<tr>
<td>Large Jar (Tinaja) Total</td>
<td></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>Ceramic disk (Tortero)</td>
<td>N/A</td>
<td>12</td>
</tr>
<tr>
<td>Ceramic disk (Tortero) Total</td>
<td></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td>Panpipe (antara)</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>Panpipe (antara) Total</td>
<td></td>
<td><strong>1</strong></td>
</tr>
<tr>
<td>Whistle</td>
<td>N/A</td>
<td>2</td>
</tr>
<tr>
<td>Whistle Total</td>
<td></td>
<td><strong>2</strong></td>
</tr>
<tr>
<td>Indeterminate</td>
<td>Converging</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Direct</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Divergent</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Indeterminate</td>
<td>399</td>
</tr>
<tr>
<td></td>
<td>Thickened</td>
<td>1</td>
</tr>
<tr>
<td>Indeterminate Total</td>
<td></td>
<td><strong>465</strong></td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td><strong>829</strong></td>
</tr>
</tbody>
</table>
Table 6.9: Table of Acshipucoto sherd decoration categories.

<table>
<thead>
<tr>
<th>Acshipucoto Styles</th>
<th>Counts</th>
<th>% of Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applique</td>
<td>56</td>
<td>2.36%</td>
</tr>
<tr>
<td>Incised/Punctate</td>
<td>48</td>
<td>2.02%</td>
</tr>
<tr>
<td>Applique/Incised</td>
<td>36</td>
<td>1.52%</td>
</tr>
<tr>
<td>Incised</td>
<td>28</td>
<td>1.18%</td>
</tr>
<tr>
<td>Applique/Punctate</td>
<td>14</td>
<td>0.59%</td>
</tr>
<tr>
<td>Modeled</td>
<td>12</td>
<td>0.51%</td>
</tr>
<tr>
<td>Punctuation</td>
<td>11</td>
<td>0.46%</td>
</tr>
<tr>
<td>Incised/Modeled</td>
<td>6</td>
<td>0.25%</td>
</tr>
<tr>
<td>Applique/Modeled</td>
<td>1</td>
<td>0.04%</td>
</tr>
<tr>
<td>Painted</td>
<td>1</td>
<td>0.04%</td>
</tr>
<tr>
<td>Not Decorated</td>
<td>311</td>
<td>13.11%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>524</strong></td>
<td><strong>22.08%</strong></td>
</tr>
</tbody>
</table>

Table 6.10: Acshipucoto external colors

<table>
<thead>
<tr>
<th>Acshipucoto External Colors</th>
<th>Ceramic Counts</th>
<th>% Of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>263</td>
<td>50.19%</td>
</tr>
<tr>
<td>Dark Reddish Brown</td>
<td>135</td>
<td>25.76%</td>
</tr>
<tr>
<td>Strong Brown</td>
<td>69</td>
<td>13.17%</td>
</tr>
<tr>
<td>Grey</td>
<td>35</td>
<td>6.68%</td>
</tr>
<tr>
<td>Very Dark Grey</td>
<td>5</td>
<td>.95%</td>
</tr>
<tr>
<td>Light Red</td>
<td>1</td>
<td>.19%</td>
</tr>
<tr>
<td>Yellowish Red</td>
<td>1</td>
<td>.19%</td>
</tr>
<tr>
<td>(Blank)</td>
<td>15</td>
<td>2.86%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>524</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Figure 6.4: Photograph of a sampling of decorated sherds at Acshipucoto. Left plate includes press-molded, punctate, stamped cane circles, and one modeled-sculpted hand. Right plate consists of “paw” appliques and raised incisions.
Figure 6.5 Photograph example of anthropomorphic elements on ceramic sherds, photo on the left shows similarities with Moche style.

Figure 6.6: Photograph of a llama figurine found in Acshipucoto Stratum 1, similar in style to Castillo modeled, Gallinazo style.

Figure 6.7: Anthropomorphic and botanical iconography. Top and bottom left include a possible shark or iguana mouth and frog/lizard. Left center sherd is a pelican design. Right center sherd represents a peanut. Final right sherd exhibits a corn cob.

The ceramics on Kunka are divided between a few EIP/kaolin sherds and the Casma-Chimu phase at Cosma (MH-LIP). As discussed in Chapter 5, there are three varieties of walls which were
exposed during our excavations on Kunka: the double-faced square walls, which form a type of small room; a double-faced line of rocks that may form an exterior wall (or may be a larger room whose corners were outside the limits of excavations; and finally, a single course of large rocks with the interior side finished. This last type of room was discovered in Unit 13 and may form the perimeter of a circular plaza. As discussed in the ceramic evidence below, it appears that most of the double faced walls and square structures date to the Middle Horizon-Late Intermediate Period; however, kaolin sherds are present in the deeper layers of Unit 13 and may indicate use of the circular structure earlier in the occupation. As mentioned in the excavation section, sterile soil was not reached in Unit 13, and an earlier occupation may be present in this part of Kunka. This can be corroborated by the Early Intermediate Period date documented.

Diagnostic sherds were collected from units 9, 10, and 13 (unit 12 did not yield any diagnostic sherds), measuring 52 meters square with a total volume of 90.78 meters cubed. This area provided 447 diagnostic sherds to be analyzed. From these, 200 sherds could be determined for shape/form. The most prevalent forms being pitchers (2.65% n=63), bowls (2.19%, n=52), neckless ollas (1.77% n=42), and plates (1.10%, n=26%). Smaller numbers of ceramic disks (n=7), large jars (n=7), and pots with necks (n=3) were recovered (Table 6.11).

Table 6.11: Counts for ceramic forms, Kunka excavations.

<table>
<thead>
<tr>
<th>Kunka</th>
<th>Counts</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pitcher (Cántaro)</td>
<td>63</td>
<td>2.65%</td>
</tr>
<tr>
<td>Bowl (cuenco)</td>
<td>52</td>
<td>2.19%</td>
</tr>
<tr>
<td>Neckless pot (olla sin cuello)</td>
<td>42</td>
<td>1.77%</td>
</tr>
<tr>
<td>Plate</td>
<td>26</td>
<td>1.10%</td>
</tr>
<tr>
<td>Ceramic disk (Tortero)</td>
<td>7</td>
<td>0.29%</td>
</tr>
<tr>
<td>Large Jar (Tinaja)</td>
<td>7</td>
<td>0.29%</td>
</tr>
<tr>
<td>Pot with Neck (Olla con cuello)</td>
<td>3</td>
<td>0.13%</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>247</td>
<td>10.41%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>447</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>
Only 107 sherds from the Kunka sample showed signs of decoration, with the most prevalent designs including appliques and incising. Specifically, 22 sherds showed signs of appliques, while 20 were incised with punctations, 18 were modeled, 16 were incised, and 14 were incised with an applique. Smaller numbers of painted sherds (n=7), applique punctated (n=4), simple punctated (n=2), impressed (n=2), applique modeled (n=1), and painted with an applique (n=1) (Table 6.12). Like the ceramics analyzed for Acshipucoto, paste colors were less varied than Kareycoto, with the majority (8.47% n=201) of sherds dark reddish brown, followed by (6.45% n=153) red sherds. Grey (2.53% n=60) sherds were also common followed by very dark grey (.34% n=8), strong brown (.25% n=6), and finally light red (.04% n=1) (Table 6.13).

<table>
<thead>
<tr>
<th>Kunka</th>
<th>Count</th>
<th>% of Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applique</td>
<td>22</td>
<td>0.93%</td>
</tr>
<tr>
<td>Incised/Punctate</td>
<td>20</td>
<td>0.84%</td>
</tr>
<tr>
<td>Modeled</td>
<td>18</td>
<td>0.76%</td>
</tr>
<tr>
<td>Incised</td>
<td>16</td>
<td>0.67%</td>
</tr>
<tr>
<td>Applique/Incised</td>
<td>14</td>
<td>0.59%</td>
</tr>
<tr>
<td>Painted</td>
<td>7</td>
<td>0.29%</td>
</tr>
<tr>
<td>Applique/Punctate</td>
<td>4</td>
<td>0.17%</td>
</tr>
<tr>
<td>Impressed</td>
<td>2</td>
<td>0.08%</td>
</tr>
<tr>
<td>Punctuation</td>
<td>2</td>
<td>0.08%</td>
</tr>
<tr>
<td>Applique/Modeled</td>
<td>1</td>
<td>0.04%</td>
</tr>
<tr>
<td>Painted/Applique</td>
<td>1</td>
<td>0.04%</td>
</tr>
<tr>
<td>Not Decorated</td>
<td>340</td>
<td>14.33%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>447</strong></td>
<td><strong>18.84%</strong></td>
</tr>
</tbody>
</table>

6.3 Ceramics – Non-vessels

Other ceramic fragments were attributed to non-vessel forms. These included pirurus or spindle whorls, torteros or ceramic disks, panpipes, whistles or flutes (Figures 6.7-6.9). Pirurus and torteros were found within all sectors of excavation (Table 6.14); however, the Kareycoto excavations yielded the highest quantities, specifically in the upper levels of excavation (strata 1-2). These numbers were
similar on both the mound top and lower apron. Like ceramic disks, panpipes were also found in higher quantities on the Kareycoto mound (Figure 6.13), and while also recorded at Acshipucoto, no panpipes were collected from the Kunka excavations. Panpipes were also mostly recovered from the top two strata of Kareycoto excavations, and only within the first layer of Acshipucoto. In addition to the 1 panpipe fragment present in the Acshipucoto excavations, one additional whistle and one flute fragment were also collected from the top layers in Acshipucoto.

Table 6.13: Counts for external sherd colors, Kunka excavations.

<table>
<thead>
<tr>
<th>Kunka</th>
<th>Count</th>
<th>% of Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark Reddish Brown</td>
<td>201</td>
<td>8.47%</td>
</tr>
<tr>
<td>Red</td>
<td>153</td>
<td>6.45%</td>
</tr>
<tr>
<td>Grey</td>
<td>60</td>
<td>2.53%</td>
</tr>
<tr>
<td>Very Dark Grey</td>
<td>8</td>
<td>0.34%</td>
</tr>
<tr>
<td>Strong Brown</td>
<td>6</td>
<td>0.25%</td>
</tr>
<tr>
<td>Light Red</td>
<td>1</td>
<td>0.04%</td>
</tr>
<tr>
<td>Not Classified</td>
<td>18</td>
<td>0.76%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>447</td>
<td><strong>18.84%</strong></td>
</tr>
</tbody>
</table>

For Kunka, 7 ceramic disks were collected from within the excavations—4 from unit 13, and 3 from unit 9. At Kareycoto, 55 separate panpipe fragments were analyzed from the mound top and lower apron. On the mound top, 29 of these were collected from stratum 1 (n=19), stratum 2
(n=10). In addition to these fragments, at least one almost complete panpipe was collected in association with the 2014 test pit, upper layer. For the lower apron, 26 separate panpipe fragments were analyzed, from strata 1 (n=2), 2 (n=22), and 3 (n=22).

Table 6.15: Panpipes and ceramic disks from Kareycoto, broken up by unit and stratum.

<table>
<thead>
<tr>
<th>Non Vessel Ceramics (Kareycoto)</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit 6</strong></td>
<td>40</td>
</tr>
<tr>
<td>Panpipe (antara)</td>
<td>29</td>
</tr>
<tr>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Piruru/Ceramic disk</td>
<td>11</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Unit 7B</strong></td>
<td>42</td>
</tr>
<tr>
<td>Panpipe (antara)</td>
<td>26</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Piruru/Ceramic disk</td>
<td>16</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>83</td>
</tr>
</tbody>
</table>

Figure 6.8 Large clay panpipe fragment recovered from the Kareycoto test pit on the mound top (Stratum 1).
Figure 6.9: Collection of panpipe fragments (top left), ceramic disks, and spindle whorls from excavations. Top right spindle whorl and tortero came from Kunka excavations, left and bottom right are samples from Kareycoto.

Figure 6.10: (Top) Panpipe fragment from Kareycoto mound excavations. (Bottom) Two decorated spindle whorls from Kareycoto mound top excavations.

6.4 Lithics

Lithic materials analyzed accounted for 1,055 separate elements coming from 5 separate excavation units and 2 areas of general surface survey. Lithic materials were recovered from all sectors of excavation, with 97.73% (n=1031) of the sample coming from the Kareycoto excavations.
From the Preceramic contexts in the Kareycoto mound, 32 lithics were analyzed, including 1 projectile point, 1 stone blade, 1 stone bead/pendant, 5 flakes, 4 scrapers, 10 debitage fragments, and 10 lithic chips which were unidentifiable or too small for analysis. The one point analyzed is a flaked projectile point matching others from archaic contexts, such as at Kotosh (Izumi and Sono 1963: 148). The large blade was smoothed and shaped out of a slate material and covered in an ash residue. The bead was carved in what has been interpreted as a “llama head,” with a drill hole marking the location of the eye (Figure 6.11). The stone is a pale pink/purple in color, possibly of a steatite (soapstone) or opal variety.

Early Horizon contexts at Kareycoto (including mound top and apron excavations) yielded 993 lithics analyzed. From this sample 468 were flakes, 214 were scrapers, there were 166 pieces of lithic debitage, 16 cores, 4 manos, and 39 listed as “other” (either stone pirurus, smoothing stones, etc, or stone tablets), and 86 lithics that were too small or unidentifiable. Two of the lithics classified
as “other” included “tabletas” or stone tablets (Figure 6.12). These artifacts were smoothed on all sides, making a square “tablet” shape, and appeared to be made of granite. One of these was excavated from within feature 4 (the first large vessel), and the other in association with Burial #7 on the mound apron. Sixteen separate lithics analyzed included slate projectile points of varying sizes, two of which had drill holes at the top (for possible use as a pendant) (Figure 6.8-6.9).

Figure 6.12: Sampling of lithic artifacts from Kareycoto Early Horizon contexts.

Only two lithics were recovered from the Acshipucoto excavations, specifically in the Unit 8 excavation of 2015. One small flake was recovered from within the sterile fill layer in level 5. Interestingly, the second lithic recovered from the Preclassic layers in Acshipucoto was the broken rim of a stone mortar/bowl (Figure 6.14). This bowl fragment had been left inside of the northeast niche in the room, laying flat within the niche, intermixed with rockfill. Though no decorations were present on the bowl fragment, its material, shape, and smoothness share similarities with the stone bowl found in the lower valley site of Punkuri, which also dated to the Preclassic.
Figure 6.13: Drawing of sampling of lithic remains analyzed for Kareycoto. Including slate blade, smoothing stone, and incised stone spindle whorl.

Figure 6.14: Stone mortar fragment found in Late Preceramic context within AC-1 niche.

Figure 6.15: Stone mortar fragment found in Late Intermediate Period context/looted tomb in the Ashipucoto mound top.
Lithics recovered in Kunka were only found in units 9 and 13 (associated with the modified mound top and architecture). Lithics included 6 pieces of debitage, 1 broken point, 11 flakes and 1 core. Four separate manos were also recovered (1 from Unit 9 and 3 from Unit 13). An additional smoothing stone and a stone spindle-whorl from were excavated from Units 13 and 9 respectively (Figure 6.16).

Figure 6.16: (top) Collection of lithics recovered from Kunka, including manos, a stone piruru with white paint, and a river cobble/smoothing stone. (Bottom) Sampling of lithic flakes recovered from Kunka excavations.
6.5 Faunal Remains

Time and budget constraints did not allow for a proper/thorough analysis of all faunal remains. Although worked bones such as bone needles, awls, spatulas, or beads were counted, noted, and photographed, specific numbers on species’ counts for all other faunal specimens have not taken place (Figure 6.17). Some of the species noted during excavations were cuy remains, camelid long bones, deer coffin bones (the third phalanx), and the vertebra of ocean fish and crab claws (Figure 6.18). Ocean fish and crab remains were specific to the Preceramic layers in Kareycoto (Unit 1 and the Test Pit #1). Interestingly, test pit #1, Unit 1, and Unit 6 accounted for 68.99% of the total faunal remains recovered in all excavations.

Table 6.16: Faunal remain bag counts by sector.

<table>
<thead>
<tr>
<th>Bone Artifacts</th>
<th># of Bags</th>
<th>Count of Weight/Peso</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kareycoto</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone</td>
<td>112</td>
<td>64</td>
</tr>
<tr>
<td>Burnt Bone</td>
<td>98</td>
<td>60</td>
</tr>
<tr>
<td>Isolated Human Bone</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Worked Bone</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td><strong>Acshipucoto</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Isolated Human Bone</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Worked Bone</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Kunka</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>136</td>
<td>70</td>
</tr>
</tbody>
</table>

Of the observed “worked bones” recovered from the excavations, which were separated out and categorized as “special artifacts,” the majority were collected from contexts on the Kareycoto mound top (n=7) and apron (n = 2). Of those recovered from the mound top contexts, a bone needle came from strata 1 and 2. Layer 3 also had two bone needles, and one hollow bone bead (found at the bottom of feature 4), and a bone spatula. A flattened piece of bone broken into two fragments was recovered from level 5. All these were part of the Early Horizon activity, and
associated with ceramics and/or the young child interments. Within the lower apron, the two worked bone artifacts recovered were a polished burnt bone point, as well as a polished black bone needle. Both these artifacts were found in stratum 3. Worked bones were also documented within Test Pit 1 level 1 (Kareycoto), and Unit 11, level 2 (Acshipucoto) respectively.

![Figure 6.17: Selection of worked bone artifacts from Kareycoto, including bone awl/needle (bottom left), bone “pendant,” (bottom left) bead (top left), knife (center), and flattened bone spoon or spatula (right).](image)

![Figure 6.18: Crab claw recovered from Kareycoto excavation on the mound top.](image)

Burnt bones were sampled within Kareycoto mound tops, Strata 3 and 4, and and the Acshipucoto mound, within Stratum 1. These bags of burnt bone were associated with ash lenses and burning episodes on Kareycoto, and in association with the looted tomb activity on the Acshipucoto mound top.
**Shell Analysis:** A total of 43 shells were analyzed from the 2015-2016 sample. Of the 43 analyzed pieces of shell, 32 were recovered from the Kareycoto mound top in Early Horizon contexts. Of the shells recovered on the mound top, 12 were collected from strata 3. These fragments belonged to common land snails, or *Scutalus proteus*, a common and local animal in the region.

Table 6.17: Shells recovered from Cosma excavations. Unidentifiable fragments were fragments too small to identify.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land snail</td>
<td><em>Scutalus Proteus</em></td>
<td>20</td>
</tr>
<tr>
<td>Chorus Mussel</td>
<td><em>Chormitylas Chorus</em></td>
<td>10</td>
</tr>
<tr>
<td>Ribben muscle</td>
<td><em>Aulacomya ater</em></td>
<td>2</td>
</tr>
<tr>
<td>Saltwater clam</td>
<td><em>Mesodesma donacium</em></td>
<td>1</td>
</tr>
<tr>
<td>Loco/Chilean Abalone</td>
<td><em>Concholepas concholepas</em></td>
<td>2</td>
</tr>
<tr>
<td>Black Mussel</td>
<td><em>Chormitylas meridionalis</em></td>
<td>1</td>
</tr>
<tr>
<td>Spondylus &amp; (bead)</td>
<td><em>Spondylus limbatus</em></td>
<td>1</td>
</tr>
<tr>
<td>UID</td>
<td>UID</td>
<td>6</td>
</tr>
</tbody>
</table>

Stratum 4 had a sample of 16, which included seven fragments of chorus mussel (*Chormitylas choris*), two fragments of ribbed mussel (*Aulacomya ater*), one fragment from what is locally referred to as “Loco” or the Chilean abalone (*Concholepas concholepas*), and one black mussel (*Chormitylas meridionalis*). Additionally five fragments from the common land snail were also recovered from stratum four. Aside from the land snail fragments, all other fragments are from non-local species, coming from over 60 km away in the Pacific Ocean (Figure 6.19).  

Stratum 5 had three shell fragments, two of which belonged to the chorus mussel (*Chormitylas choris*). One fragment was unidentifiable to the species, but it was attributed to a thin brown ocean shell, shiny in color. Stratum 6 also had one identifiable specimen, which was attributed to the loco, or Chilean abalone. The mound apron yielded 10 fragments of shells, all from the deeper levels of the unit (Strata 5-6). Stratum 5 had five unidentifiable fragments of the same brown shiny ocean shell recorded on the mound top, as well as one fragment of Chorus (or Choro)
mussel, three fragments of land snail and one fragment attributed to the saltwater clam, or *Mesodesma donacium*.

Figure 6.19: Shells recovered from the bottom of Unit 6, in an ash lens.

At the Acshipucoto mound two shell specimens were collected. Both were found in relation to each other and in the final level/sondage of Unit 8 inside AC-1. The western cut, made just to the west of the central hearth (and located inside the sunken floor), illuminated half of a *Spondylus limbatus* and an associated worked shell bead (Figure 6.20). Only one half of the spondylus was recovered, and the top spines had been removed. This species has a broad distribution from the outer coast of Baja California, into the Gulf of California and down to the Tumbes region of Peru. *Spondylus limbatus* typically has a fair amount of red on the outside and a purple and/or orange band on the inside rim of the shell (Figure 6.21). The shell had been worked to the point where all spines had been removed and the top portion of the bivalve was smooth. Though we recovered a complete half of the bivalve, it had been broken into 6 different fragments. This was most likely a result of the large rocks placed over the specimen during the original filling episode of the room.
Figure 6.20: Spondylus shell excavated at the base of the AC-1 room in Acshipucoto. Note the worked bead in the upper right corner.

6.21: Close-up of Spondylus fragment still exhibiting original reddish color on shell.

6.6 Human Remains

Bio-archaeologists Rachel Witt and Shaina Molano analyzed the human remains from the excavations at Cosma. A total of 10 subadults and 3 adults were recovered from excavations and subsequently analyzed. Witt analyzed the subadults while Molano analyzed the three adult individuals. Skeletal remains were measured with sliding calipers, and those measurements were
compared to the standards provided by Fazekas and Kosa (1978), who provided the standard in fetal osteology aging estimates. Additionally, the morphology, size, and appearance of bones, as well as fusion of ossification centers were compared to illustrations, photographs, and descriptions provided by Schaefer et al. (2009). Dental eruption rates (Ubelaker 1979) were also utilized for age estimation, taking note of enamel caps and deciduous teeth when present. Eruption rates are a standard tool for estimating sub-adult ages. Finally, the relative age-at-death estimates were conducted for incomplete samples and were matched to the illustrations provided by Baker et al (2005) for the actual approximate age size comparisons.

This analysis was conducted for two purposes, first to estimate the age of death of each individual, and second to record any evidence for pathologies or trauma, which may have been a cause for death. These age categories were then referenced to the age-of-death standards set by Baker et al. (2005), Lewis (2007), and Schaefer et al (2009). For juveniles (or sub-adults), the age ranges are listed as: Fetus (less than 37 weeks); Perinate (shortly before or after birth, 38-41 weeks), Infant (birth to 1 year), and Early Childhood (older than 1 year to 5 years, also referred to as “young children.”)

Table 6.18: Age of death profile table of juveniles found in Kareycoto, Early Horizon contexts. Based off table compiled by Rachel Witt.

<table>
<thead>
<tr>
<th>Burial</th>
<th>Age Range</th>
<th>&quot;Average&quot; Age</th>
<th>Age Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burial 1</td>
<td>38-40 weeks in utero</td>
<td>39 weeks</td>
<td>Perinate</td>
</tr>
<tr>
<td>Burial 2</td>
<td>1-3 years</td>
<td>2 years</td>
<td>Early Childhood</td>
</tr>
<tr>
<td>Burial 3</td>
<td>6 months - 18 months</td>
<td>1 year</td>
<td>Infant</td>
</tr>
<tr>
<td>Burial 4</td>
<td>40 weeks in utero</td>
<td>40 weeks</td>
<td>Perinate</td>
</tr>
<tr>
<td>Burial 5</td>
<td>37-41 weeks in utero</td>
<td>40 weeks</td>
<td>Perinate</td>
</tr>
<tr>
<td>Burial 6</td>
<td>38-41 weeks in utero*</td>
<td>40 weeks</td>
<td>Perinate</td>
</tr>
<tr>
<td>Burial 7</td>
<td>1-2 years</td>
<td>18 months</td>
<td>Early Childhood</td>
</tr>
<tr>
<td>Burial 8</td>
<td>28-32 weeks in utero</td>
<td>30 weeks</td>
<td>Fetus</td>
</tr>
<tr>
<td>Burial 9</td>
<td>1.5-2 years</td>
<td>21 months</td>
<td>Early Childhood</td>
</tr>
<tr>
<td>Burial 10</td>
<td>40 weeks-1 year*</td>
<td>6 months</td>
<td>Infant</td>
</tr>
</tbody>
</table>

*Post-mortem damage to long bones limit number of measurements taken to estimate age.
For the adult individuals, measurements were also taken using a sliding caliper and compared to the standards set by Buikstra and Ubelaker (1994). One adult (Burial #11) was recovered from the excavations at the Kareycoto mound. Like the sub-adults, this burial was associated with the Early Horizon materials. Burial #11 was a male individual, estimated to be between 18-20 years old. Although Burial #11 was the only adult individual fully recovered, several isolated bones attributed to other juveniles and human adults were intermixed with 6 of the burials. Burials #1 and 3 were found with the isolated remains of other juveniles. Isolated adult bones or dentition were found with Burials #2, 4, and 6. Additionally, an infant long bone was recovered in association with the adult Burial #11.

At Acshipucoto the remains of at least two individuals were recovered. Unfortunately, burnt human bones recovered from the looted context in Looter’s Hole #3 were so badly fragmented they could not be assessed for age, sex, or MNI. The individual recovered from Unit 11 stratum 1, and the blackware ceramic fragments, silver disks, and wooden scepter head, was estimated to be an adult male of an unspecified age.

6.7 Chronology and Carbon Measurements

Results from our excavations at Kareycoto, Acshipucoto, and Kunka place the ceramics found to date in Cosma into three main time periods: Early Horizon, Early Intermediate Period, and Middle Horizon-Late Intermediate Period. While there is evidence at the complex for Inca stone works at the ridge-top site of Cajarumi, no Late Horizon sherds were found in any of the excavations. This section presents the carbon dates from Cosma, as well as descriptions of the different ceramics styles/phases analyzed from our excavations.

A total of 16 carbon samples were sent in for dating of different contexts (Table 6.1). All samples were charcoal, taken from either hearths, ash lenses, or charcoal imbedded in clay floors. Of
these, nine range within the Late Preceramic (eight from Acshipucoto, and one associated with the Kareycoto Preceramic floor activity). One radiocarbon date at Kareycoto concomitant with the broken floor (Floor #1) dated into the Initial Period. The two samples associated with the burials, circle and dot styles, and the large ceramic vessels on the Kareycoto mound were returned to the Early Horizon. The intrusive activity on Acshipucoto related to the ash lenses, pits, and burials, and the domestic activity on the Kunka ridge (Unit 9) were dated to the Early Intermediate Period. Finally, 2 later dates recovered from Kunka domestic activities were dated into the Late Horizon/Colonial Period.

6.7.1 Early Horizon Styles (circa 731-391). As mentioned in the materials section above, all Early Horizon styles were documented within the top 100 cm of the Kareycoto mound top and mound apron. These styles fit into the category that Richard Daggett had originally classified as “Early Horizon Phase I” wares, which he classified for the upper middle valley through to the Jimbe area (Daggett, 1984: 134). Like Daggett’s Phase I ceramics, these types include small bowls, neckless and necked jars. Like those classified in Daggett’s Early Horizon Phase I, those found at Kareycoto are primarily shades of reddish brown, and include incising, stamping and punctations. Decorated sherds are polished, with a smaller percentage burnished. Motifs include incised straight and curved lines, stamped circle and dots, and triangle zone punctations.

For the lower valley, the Kareycoto Phase 2 Styles show similarities to those described for Huaca Partida and Cerro Blanco by Shibata. These ceramics share similarities with the Nepeña and Samanco phase sherds described at the sites of Cerro Blanco and Huaca Partida (2008). They can also be compared to Chicoine’s Huambacho Ware D Group, specifically in design (Chicoine 2006; xxvii.) Bowls, neckless pots, and plates were the most common forms found associated with Kareycoto types. These sherds are also similar in shape and design to ceramics found at the highland
Table 6.19: Chronological chart with Cosma’s absolute dates corresponding to the general Andean sequences for the region.

<table>
<thead>
<tr>
<th>General Andean Sequence</th>
<th>Cosma</th>
<th>North Coast</th>
<th>Lower/Mid Nupena Valley</th>
<th>Cosma Basin</th>
<th>Central Highlands</th>
<th>Chavin de Huantar</th>
<th>Huanuco/Kotosh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lanning, 3967</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Froehle, 1915</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shibata, 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cosma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Coast</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower/Mid Nupena Valley</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cosma Basin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Highlands</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chavin de Huantar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Huanuco/Kotosh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proctor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kembeke</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burgos</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3000</td>
<td>Late Preclassic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cerro Sayon (500-1000 BCE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1800</td>
<td>Initial Period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Las Huillas Phase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Early Guanoche</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Huambayoc (1000-1000 BCE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chavayan/La Guango (1250-1500 BCE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>900</td>
<td>Early Horizon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pucio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kusma-Wasi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Huambayoc (1000-700 BCE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cerro Pampa (1000-700 BCE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>La Pampa Phase/Early Capilla</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>Early Horizon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Camacdira</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Samnarro Phase (500-250 BCE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Late Capilla</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>Early Horizon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Camacdira/Señora</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Samnarro Phase (500-250 BCE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Late Capilla</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recostalization at End to Building</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jawsana</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kotosh-Seca (600 BCE-CE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
site of Kotosh, specifically the “Kotosh Chocolate Brown,” “Kotosh Well Polished,” “Kotosh Zoned Unpainted,” and “Kotosh Red Polished” varieties. Akillpo (also spelled Aquilpo) ceramics are a broad category of Late Intermediate Period local wares found throughout highland Ancash before the Inca occupation. Typically, these wares consist of coarse red pastes and a coarser pattern of surface treatments, which include simple burnishing, monochrome slips, and simple decorations like circle and dot punctuations, nubbins, and linear incisions, while painted designs are basic and include red and black coloring (Lau, 2016).
Akillpo ceramics share a parallel development in time (mid to late Middle Horizon) and style to the coastal Casma wares, and their similarities suggest an almost “constant interaction” between the two styles (Herrera 2005; Lanning 1965; Lau 2001). Spanish colonial pottery has also been found in the highlands with Akillpo decorations, suggesting that the local Akillpo style thrived after the Inca presence in the area (Herrera 2005).

Figure 6.22: Plate includes sampling of Early Horizon styles recovered at Kareycoto. Designs include incised circle and dots, incised lines, and zone punctations.

**6.7.2 Middle Horizon – Late Intermediate Period Styles.** The later styles in the Cosma sample, specifically those collected from the Kunka ridge-line fall in line with Akillpo ceramics, though there is overlap in similarities with Casma wares of the coast. Both ceramic styles exhibit thicker/coarser pastes, incisions, and simple appliques as well as the raised circle and dot designs. Numerous ceramics however fall in line with Casma ceramics, specifically those with serpentine appliques (Figure 6.28).

Along with the presence of Akillpo-Casma ceramics, Chimu styles also made up a portion of the sample (Figure 6.29). Chimu related sherds were found in the top strata of the Acchipucoto mound (specifically associated with the looted burial), and the top two strata of Unit 13 on Kunka. Akillpo-Casma sherds were found in all lots of the surface collection (save for those associated with
the Kareycoto mound top and apron) and along the Kunka, Watsi, and Iglesia Hirka ridges. The presence of these finer blackware sherds associated with 1) Later intrusive burials on the Acshipucoto mound and 2) Top levels of Unit 13 and the curved wall at the base of the Kunca modified mound, lead to an interpretation that the Akillpo-Casma similar styles functioned in domestic/utilitarian contexts, while the finer blackware ceramics may have served a non-utilitarian function.

Figure 6.23: Bowl and jar rim angles (left), as well as well drawings of designs on Early Horizon sherds.
Figure 6.24 Early Horizon decorative styles, including incising, punctations, zone punctate, stamping, and cross hatching. (Right) Example of base and necked jar forms.

Figure 6.25: Incised and polished ceramic face found in Stratum 2, Unit 7B. Face appears to share similarities with the Templadera figurines of the north coast.

Figure 6.26: Burnished and incised rime fragment recovered from Stratum 2, Unit 7B on the Kareycoto mound apron.
Figure 6.27 (left): Highly polished Early Horizon styles from Kareycoto. (Bottom): Plate sample of Early Horizon incised jar (top) and polished and burnished bowls (bottom) from the Kareycoto excavations.

Table 6.21: Cosma Basin relative chronology. Carbon dates represented by 2 Sigma (2σ) reporting.

<table>
<thead>
<tr>
<th>Chronological Period</th>
<th>Time Period</th>
<th>Architectural/Ceramic Affiliation</th>
<th>Local Cosma Phase</th>
<th>Affiliated C14 Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Late Preceramic</td>
<td>3000-1800 BCE</td>
<td>Kotosh-Mito</td>
<td>Acshipucoto Phase</td>
<td>2892-2207 calBCE</td>
</tr>
<tr>
<td>Initial Period</td>
<td>1800-900 BCE</td>
<td>Kotosh-Mito/Cerro Blanco Phase</td>
<td>Kareycoto Phase 1</td>
<td>1493-1259 calBCE</td>
</tr>
<tr>
<td>Early Horizon</td>
<td>900-200 BCE</td>
<td>Cerro Blanco Phase/Early Horizon Phase I/Huambacho Ware D</td>
<td>Kareycoto Phase 2</td>
<td>728-391 calBCE</td>
</tr>
<tr>
<td>Early Intermediate</td>
<td>200-600 CE</td>
<td>Moche/Recuay</td>
<td>Kunka Phase 1</td>
<td>594-689 calAD</td>
</tr>
<tr>
<td>Middle Horizon</td>
<td>600-1000 CE</td>
<td>Casma</td>
<td>Kunka Phase 2</td>
<td>646-764 calAD</td>
</tr>
<tr>
<td>Late Horizon/Colonial</td>
<td>1450-1551 CE</td>
<td>Akillpo/Inka</td>
<td>Cajarumi Phase</td>
<td>1460-1632 calAD</td>
</tr>
<tr>
<td>Colonial/Republican</td>
<td>1531-1821 CE</td>
<td>Colonial</td>
<td>Cosma Phase</td>
<td>1514-1794 calAD</td>
</tr>
</tbody>
</table>
6.8 Summation of Human Occupation in the Cosma Basin

The excavations and analysis of materials from this study have revealed a large multi-component center with a number of occupations, events, and site-use-functions recorded throughout the basin. While this research primarily focused on the larger/ceremonial monuments within the basin and the domestic use on the Kunka ridge-line, thanks to observation and surface survey, we now have a broader understanding of the occupational sequence and different functions/utilization of areas within this small valley.
6.8.1 Cosma & the Late Preceramic. The earliest use of the Cosma basin recorded took place during the Late Preceramic. At this time a large Kotosh-Mito ritual complex emerged over time in two separate locales: the Kareycoto and Acshipucoto mounds respectively. These mounds would have started as small, privatized rooms that over time were repeatedly renovated, sealed, and built over through the process of ritual entombment. This process slowly caused these centers to gain height and monumentality over a 500-year period (as measured through our span of radiocarbon dates.) While the majority of our understanding of the Late Preceramic elements in the basin come from the Acshipucoto mound, one test pit and unit reached Late Preceramic layers in the Kareycoto mound. These earlier layers included walls, ash, hearths, and floors associated with the Late Preceramic. While the rooms in Acshipucoto had been sealed/filled in a specific manner, of small sterile rock fill, capped by a thick clay level, the fill layers uncovered in the top meters of Kareycoto lacked this clay capping. The rocks utilized to fill rooms at Kareycoto were larger, less unified in size, and often jumbled with layers of fine powdery ash and burnt animal bones.

In total our excavations at Kareycoto exposed five separate floor phases. Only three of these floors were associated with the base of any exposed architecture. The walls that were exposed and related to floors, however, indicated a tradition of circular wall constructions. Like the Acshipucoto mound, these walls were associated with a Late Preceramic date $3905 \pm 29$ (2464 - 2272 BCE (82 %) cal. ($2\sigma$)). All exposed walls had been destroyed in antiquity and were associated with burning episodes. These episodes included not only fine ash, but also the remnants of burnt bones, shells, and lithics. Zoological materials included rodent, cameld, and marine remains.

At Kareycoto, at least one formal hearth was identified (Test Pit 1 - Stratum 8) in association with a poorly constructed floor. In the same test pit, an ash pocket related to a broken wall produced burnt bones, lithics, and a large stone blade. This ash pocket was associated with the
remnants of a broken stone wall that was exposed in the south-east corner of our test pit (Figure 6.30). Both the ash lens and hearth were located in the Preceramic context; however, a small llama head bead (or pendant) and stone blade were recovered from inside the area of ash. This llama bead was carved out of a pale purple soapstone, not local to the area, and is recognizable by its distinct pink/purple hue. The interpretation of these offerings and burning episodes is that they were likely left purposefully in this burned pocket as a Kotosh-Mito offering, as is the pattern with many Kotosh-Mito hearths.

The deeper strata of Units 1 and 6 exposed the upper levels of Late Preceramic activity on the mound top, exposing two walls and three floors. All of the exposed walls were circular, and broken in antiquity. Large rock fill did cover the walls; however, as stated above, the consistency of the fill was different from the fill found in Acshipucoto (lacking the deep level of clay capping). This fill also was not as clean as the Acshipucoto fill and was intermixed with ash and occasional burnt/fragmented bones or lithic. For example, the black polished stone bead preform and chert projectile point collected from an ash lens in Unit 1. Unlike the other points recovered in the excavations, this point was made of chipped chert (all others were flat slate points). Similar points have been recovered within the Preceramic layers at Kotosh.

One of the distinctions in this fill was the presence of large amounts of a fine powdery ash and the remains of burnt animal bones intermixed with the rock fill. At the type site of Kotosh, Izumi and Terada describe the presence of ash and soot under Kotosh period floors. Typically, this ash layer would be “several meters in diameter (1972; 304).” Several of these ash deposits were also located under floor levels and fit into the pattern described by Izumi and Terada. The remnants of broken or partial walls, and presence of at least two preceramic floors has exposed at least four Late Preceramic structures on the Kareycoto mound. All of these structures were located within the main
mound top, above the apron and platform levels. From the pattern recognized at other Late Preceramic sites it can be surmised that more rooms are present beneath the layers exposed by our excavations. Considering the rooms/walls exposed are located very shallow into the mound top (2-3 meters into an 18-meter mound), and that most Kotosh-Mito structures are built on top of platforms, and constructed over earlier rooms, we can surmise that the earliest construction of these temples are closer to the lower platform level of Kareycoto (Bonnier 1997; Izumi & Terada, 1972; Onuki 2016).

Figure 6.30: Preceramic circular room features in the Kareycoto mound.

The first Preceramic floor is located at 125 cmbd, and the only Preceramic carbon date at Kareycoto was attained from an ash lens imbedded between two layers of this floor (Figure 6.x). It was a 6 cm deep multi-layered floor, consisting of a rough top floor layer and finer lower layer. The carbon sample was collected between both layers of floor. Multi-layered floors are a Kotosh-Mito pattern also documented at the type site of Kotosh (Izumi and Terada, 1972). While pristine in color
and consistency, this floor could also not be counted out as a “capping layer” for the sealing of structures which may be located beneath it.

![Image](image.jpg)

Figure 6.31: Facing South in unit 6. Image shows the multi-layered Preclassic floor where the carbon sample was taken.

The gallery located on the northeast side of the mound slope also illustrates connections to another large Kotosh-Mito center, La Galgada (Figure 6.32-6.33). At La Galgada, gallery tombs were constructed after the sealing of old Kotosh-Mito chambers, when the hallways between them were roofed over with large stone slabs and human interments were placed inside (Grieder et al 1988; 60). The gallery at Kareycoto had been previously dug by looters, so no human remains were documented by our team during excavation. Its construction, however, appears to align in function with gallery tombs, rather than the labyrinth style tombs seen under the temples of Chavín de Huántar. A curved wall exposed in the Unit 1-6 expansion shares a similar construction technique and height to the southern interior wall composing part of the gallery.

If these are in fact part of the same curved structure, this room would measure approximately 10 m in diameter, and could in fact be another Kotosh-Mito structure higher up on the main mound top.
Figure 6.32: Gallery inside the Kareycoto mound. Right photo shows the steps leading down inside the gallery.

Figure 6.33: Profile map of the gallery inside the Kareycoto mound, drawing made by Jeisen Navarro-Vega.

It is the current interpretation that the Kareycoto mound was first erected during the Late Preceramic, during the construction of small privatized rooms. These structures were then maintained and eventually entombed before new structures were built over during a period of at least 500 years. It was this process of ritual entombment of numerous Kotosh-Mito temples which caused the Kareycoto mound to gain the majority of its height (at least 16 meters of the 18-meter mound top). These rooms would have been utilized for the gathering of individuals to burn ritual offerings in a central hearth (Burger and Salazar Burger 1980; 1985). The majority of walls and
associated floors documented in the Kareycoto mound excavations date to the Late Preclassic. The 2015 trench never exposed the base of the large retaining wall for the main mound, and no dates were recovered from the platform or terrace area. The main retention wall extends to a height of 15 meters. The following 3 meters were constructed in at least two separate building phases. The first subsequent phase includes the construction of the mound’s exposed gallery. The final phase includes the top of the main mound platform. Of these three phases, the bottom two are most likely entirely Preclassic building episodes, with the final addition occurring after the introduction of ceramics to the site. This final phase most likely corresponds to the conscious construction of the mound apron, creating a wide inclusive platform for related Early Horizon activities.

Based on the wall construction, depth, and presence of the Late Preclassic structures within the area surrounded by the final platform, the interpretation dates to the same time period as the earlier constructions (Figure 6.34 of Kareycoto “room” outlines). As Bria (2017) notes, however, at the site of Hualcayan an alternate interpretation may be that the large retainment wall is a later remodeling of an earlier wall. Like the retainment wall at Hualcayan’s Perolcoto mound, the construction technique of the Kareycoto retention wall is “cruder” (188) than several constructions noted inside the Kareycoto mound during the Preclassic.

The construction of this large outer wall effort mimics a pattern seen at La Galgada during the Initial Period. At this time in La Galgada, the tradition changes from the smaller, privatized chambers associated with the Late Preclassic to larger, more inclusive spaces by the Initial Period and into the Early Horizon. At La Galgada’s North Mound, the top of the mound platform was converted into one large U-shaped plaza, with a surrounding revetment wall (Grieder et al 1998; 44). Despite only two small circular chambers being confirmed in our Preclassic occupations, and no Initial Period or Early Horizon architecture recorded on the mound top, the excavations on the
mound top have exposed a similar reconfiguration of plaza and space use at Kareycoto, which fits into the broader pattern of public ritual space use at the time.

Figure 6.34: Location and outline of Preclassic walls (orange) on the Kareycoto mound uncovered during excavation.

Figure 6.35: Later restructuring of the La Galgada North mound during the Initial Period phases. Image from Grieder and Mendoza 1987.
While Kareycoto and Acshipucoto were both established during the Late Preclassic, their sequences follow divergent paths after Kotosh-Mito ritual activities ceased within the Cosma basin. The Acshipucoto mound, the smaller of the two, measures 10 m in height and is located a half kilometer across the ravine, due south of Kareycoto. Our excavations revealed at least six separate Kotosh-Mito structures, three of which have carbon dates corresponding to the Late Preclassic. The largest of these structures, AC-1, was a large circular room, 6 m in diameter, located on the SW quadrant of the mound top. Architectural elements included those classified for contemporaneous Kotosh-Mito structures, such as the wall niches, a split level floor, and a central hearth. Moreover, several additional features were present in the room not found at other traditional Kotosh-Mito sites. These included two pony, or half walls, which flanked the entrance; an elevated platform directly across the entrance to the west; and unlike several Mito structures, the entrance into the room was through a platform and 6 steps which sunk down into the structure.

Additionally, AC-1 was constructed in a circular shape, a pattern reminiscent of coastal traditions at the time, unlike the majority of Mito temples, which are either square or rectangular with rounded corners. In contrast, the stairway into the room is similar to those stairways seen in the sunken circular plaza styles on the central coast—for example, at the contemporaneous sites of Caral and Sechín Bajo. A patron to the room would have to enter from a level above, stepping down into the structure, which is not the case at other Kotosh/Mito sites (though Grieder did report on some of the rooms in La Galgada exhibiting this feature). Finally, the entranceway is flanked by two half, or pony walls, which lead someone entering into the room directly onto the sunken floor. Similar pony walls have been noted for the earliest construction of the circular plaza at Sechín Bajo, which is coeval to the AC-1 room. Only one additional Mito structure has been documented containing “pony walls.” This room, excavated by Daniel Contreras (2010) at Chavín de Huántar, however has been dated well into the Early Horizon.
The five carbon dates taken from the upper and lower floors of AC-1 place the room well within the late Late Preceramic, with the calibrated ranges falling between $4230 \pm 29$ (2819 - 2662 BCE (70 %) cal. (2σ)) and $4050 \pm 30$ (2623 - 2462 BCE (95 %) (2σ)). The room had been ritually sealed, first with large to medium sized rocks, then capped with a layer of clean sun-dried clay. The only artifacts found within the structure were a large spondylus shell placed on the floor just to the west of the circular hearth and a stone bowl rim fragment, which had been left in one of the niches. Walls and floors associated with an additional 5 rooms were also excavated within Acshipucoto. At Acshipucoto, like Piruru, there is a variation between room style and size, and while only one room has been completely excavated to date, it can be interpolated that several of these rooms (and the two exposed in Kareycoto) have single floor levels. The second largest structure was rectangular in shape, while the others were ellipses. No artifacts were found in any of the Acshipucoto rooms, and like the larger circular room, they had been filled with rock fill and capped with a layer of sun-dried clay. Carbon dates from a hearth and charcoal imbedded in floors in three of these structures also dated well into the Late Preceramic.

Figure 6.36: Kotosh-Mito structure from Chavin de Huantar. Photo (from Contreras 2010) shows the presence of a “pony” or half wall on the upper floor level.
Unlike the rooms at Piruru, where there was a distinction between floor levels in the Initial Period and Late Preceramic, all dated structures at Acshipucoto were utilized during the Late Preceramic. The AC-1 room meets the majority of Bonnier’s criteria for Mito architecture, which Bonnier attributes specifically to an Initial Period phenomenon. The dating of AC-1, however, pushes this tradition well into the Late Preceramic. I argue that based on the dates and structures excavated in Cosma, that there was no Pre-Mito/Mito distinction in architectural trend, and unlike at Piruru, the room variations at Acshipucoto are not the result of temporal differences in the evolution of a tradition, but can simply be attributed to stylistic variations by the local architects of each structure. The AC-1 structure exhibited many characteristics attributed to a Mito style temple: the split level floor, central hearth, single entryway, niches, and purposefully sterile fill associated with the sealing of the room. Additionally, like the Mito structures at La Galgada, this room was lacking a stone lined hearth, flue and ventilation system, and the “special red clay inclusions” marking the sacrality of the floors and plastered walls (Bonnier 1997: 127).

I suggest that one of the reasons for the lack of ventilation system within the AC-1 is the possibility that unlike the Mito style rooms at Kotosh and La Galgada, AC-1 was constructed as an open-air structure, like those described at Huaricoto. The accessibility of the narrow stairway, made of 6 steps, leading up to a compact clay platform attests to this theory. The retainment wall present outside the northern side of the structure would have helped to stabilize the clay platform associated with the room. This platform could have provided a viewing area for people standing around the structure. Additionally, no post holes or depressions were found anywhere within the room or the subsequent platform. Due to the height of the floor, post holes would have been needed to suspend a roof over the structure, making it tall enough for someone to stand inside.

While Bonnier ascribed the Mito tradition as a tradition specific to the Initial Period, evolving out of Late-Preceramic prototypes she designated “Pre-Mito,” this was not the case for the
Cosma complex. Here, the variation in floor numbers date to the Preceramic. Number of floors, shape of corners (rounded or square), and other accoutrements such as niches and flues may in fact then represent localized variations as opposed to temporal trends (what Bonnier (1987) refers to as a representation of “a new liturgy” at the site of Piruru (129)).

6.8.2 Kareycoto, Initial Period & the Early Horizon. Based partially on two ceramic vessels recovered in the deepest layers of excavation and the refiguring of the Kareycoto mound top, the earliest documented occupation of the mound apron relates to the Initial Period. In addition to the Initial Period vessels, one ceramic face found in the 7B unit trench shows similarities to Templadera figurines of the north coast. These figurines are often related to the Cupisnique tradition, and have been dated to between 1500-500 BCE (Burtenshaw-Zumstein 2013: 128). Templadera figurines often show imagery related to music, specifically flutes, and are sometimes constructed as ocarinas (123).

Unfortunately, because of the stall in the excavations, we do not have knowledge of any Preceramic activity within the apron level. If the Kareycoto mound continues to parallel the sites of La Galgada and Kotosh, numerous Kotosh-Mito structures could be documented along the base of the main mound. Through the process of ritual entombment, this could have been the way in which the original levels of the apron were constructed. As Izumi and Terada (1972) have described, the Kotosh-Mito structures at the type site of Kotosh were all built on a platform.

The Initial Period presence is not entirely confirmed. Early Horizon use, however, specifically during the latter half of the Early Horizon, is noteworthy. This Early Horizon activity was documented in the top levels of the apron (strata 1-2 in Unit 2 and strata 1-5 in Unit 7B) as well as the first 100 meters of the mound top. In both of these areas, large quantities of Early Horizon styles, which include stamped, incised, burnished, and punctate ceramic vessels, were collected.
Additionally, panpipe fragments, pirurus, worked bone needles, ceramic remains, and faunal remains of deer, camelid, and cuy were also collected from within excavations.

Early Horizon activity in the Cosma basin was documented solely on the Kareycoto mound, both on the lower apron and mound top. On the apron, at least five separate walls were exposed/cross-sectioned during excavation. These can be broken up into at least four separate building phases. Excavations were unfortunately aborted before reaching the end of the large retaining wall, which was constructed for the purpose of building up the mound top. Because it continues deeper than the platform activities documented in our excavation, it can be surmised that this large wall was built prior to the expansive mound apron. It should be noted that the entirety of this retainment wall goes around the full circumference of the mound in a circular shape.

Carbon dates from the main mound platform taken from stratum 3, and associated with the floor (Floor #1), dated the Early Horizon activity to between 700-300 BCE. The first date was taken from ash and carbon recovered from inside the first of the over-sized vessels (Feature 4), and the second date was taken from ash just to the south of Feature 4, in association with burnt ceramics. These dates were calibrated 95.4% probability 538-381 BCE and 730-392 BCE respectively. Both 1 sigma ranges (68.2%) fall between 433-393 BCE and 490-400 BCE.

While no architecture is associated with the Early Horizon activity on the top of the mound, several small walls and rooms were exposed in the trench on the mound apron. These walls were associated with Kareycoto Phase II ceramic wares, specifically polished, burnished, and sherds, which included stamping or incisions. It is the current interpretation that the Early Horizon activity associated with the Kareycoto mound took place within a relatively large “open” plaza. The presence of the prepared clay floor (Floor #1) located throughout the majority of the mound top excavations, not in conjunction with architecture, may corroborate this theory. The relatively shallow level of the outside platform wall, though not associated with a floor in our test Unit (Unit 4), could correspond
to its functional use to outline the shape of the final platform (similar to the revetment wall at La Galgada).

Table 6.22: Preceramic architecture and associated features, artifacts, and floors from the Kareycoto and Acshipucoto excavations.

<table>
<thead>
<tr>
<th>Structure Name</th>
<th>Mound &amp; Location</th>
<th>Size</th>
<th>Shape</th>
<th>Floors</th>
<th>Features</th>
<th>Artifacts</th>
<th>Carbon Date</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1</td>
<td>Acoto - Unit 5-8-11</td>
<td>cmeter</td>
<td>Circular</td>
<td>*</td>
<td>mes, split level floor, pony walls, small platform</td>
<td>durlus, shell bead, stone bowl rim fragment</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>C-2</td>
<td>Acoto- Unit 11</td>
<td>area*</td>
<td>rectangular</td>
<td></td>
<td>re stone wall, possible bench?</td>
<td>s</td>
<td>32</td>
<td>N/A</td>
</tr>
<tr>
<td>C-3</td>
<td>Acoto - Unit 11</td>
<td>cmeter</td>
<td>rounded corners</td>
<td></td>
<td>e couring of stone</td>
<td>o</td>
<td>30</td>
<td>lan crania associated with above level fill</td>
</tr>
<tr>
<td>C-4</td>
<td>Acoto - Unit 11</td>
<td>/A</td>
<td>determined</td>
<td>A</td>
<td>o top of 1 wall recorded</td>
<td>o</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>C-5</td>
<td>Acoto - Unit 11</td>
<td>cmeter</td>
<td>rounded corners</td>
<td></td>
<td>e couring of stone</td>
<td>A</td>
<td>30</td>
<td>BP</td>
</tr>
<tr>
<td>C-6</td>
<td>Acoto - Unit 1</td>
<td>/A</td>
<td>Rounded</td>
<td>A</td>
<td>y outer wall documented</td>
<td>A</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>A-1</td>
<td>Ooto- Unit 1</td>
<td>cmeter</td>
<td>ind/Circular</td>
<td></td>
<td>oken in antiquity lens</td>
<td>oad preform, projectile point, burnt faunal remains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-2</td>
<td>Ooto- Test Pit 1</td>
<td>cmeter</td>
<td>determined</td>
<td></td>
<td>oken in antiquity lens</td>
<td>oad/pendant, stone blade, burnt faunal remains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-3</td>
<td>Ooto - Unit 1-6</td>
<td>cmeter</td>
<td>ind/Circular</td>
<td></td>
<td>ll stone wall separating floor levels</td>
<td>yen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-4</td>
<td>Ooto - Unit 1 ext.</td>
<td>cmeter*</td>
<td>ind/Circular</td>
<td>A</td>
<td>y outer wall documented</td>
<td>A</td>
<td>30</td>
<td>unal remains, ocean shells.*</td>
</tr>
</tbody>
</table>

The wall wraps around the entirety of the mound top, save for the northern extent, where the large looter’s trench present on the mound leaves a gap in our understanding of the original wall’s placement. It is possible that this wall continued to complete the circle or, like Galgada, was purposefully constructed in a U-shaped plaza with an opening towards the north. The activities taking place in this space during the Early Horizon corresponds to its final use period (between 700-300 BCE). At this time, the mound is capped in this ritual activity associated with sub-adults burials,
the smashing of ceramic vessel offerings, and ritual paraphernalia such as panpipes, slate points, pirurus, and ceramic disks. This phase is marked by a large feasting event(s) associated with large storage containers and sub-adults dug into the pre-existing floors.

Additionally, the highly polished and decorated sherds aligned with a larger variety in external colors (compared to the Middle Horizon-Late Intermediate Period) on the Early Horizon vessels lead to the probable interpretation that there were ceramic vessels being brought in from outside of the basin (see Table 6.5). Compared to the later styles, which are mostly utilitarian/domestic use ceramics, the Kareycoto mound has 18 distinct external ceramic colors (versus the seven for Acshipucoto and six for Kunka). While the majority of ceramics in Cosma are dark-reddish brown in color, suggesting this is the localized ceramic clay source, the larger variety in colors indicates access to additional non-local sources. This variation in ceramic design and color could point to a neutral ground/pilgrimage model, if people came from outside the Cosma area to leave ceramic offerings, young children, and other paraphernalia on the mound top.

6.8.3 Interpretation of the Juvenile Burials at Kareycoto. In addition to the ceramic, faunal, and lithic material remains, 10 infants, fetuses, or perinates were documented within our excavations in the mound top. The burials were either placed on or dug into Floor #1, placed in stone crypts, or buried inside the smaller of the two over-sized vessels (Feature #4). The sub-adults ranged from 37 weeks in utero to three years in age. Unfortunately for all of the individuals, cause of death could not be determined.

Eight of the ten burials were extremely disarticulated and comingled, meaning that burial of these specific sub-adults happened during the process of decomposition, or after the individual had already skeletonized. This typically indicates that burial of the individual did not happen immediately after death and signifies these may be secondary burials. Only burials #7 and #8 were in relatively
correct anatomic position, which indicates that both of these interments were most likely primary. Individual #7 was located in the stone wall/crypt feature in the apron trench, and #8 was the burial placed in the north half of the vessel.

The secondary burials also included comingled remains (i.e. Adult molars found with burial #2, or comingled hand/foot phalanges) from other individuals. Additionally, several isolated sub-adult remains were found outside of burial contexts, specifically in stratum 2 on the mound top. This may indicate that these burials were moved from a place where the bones were previously comingled, either by being buried alongside other individuals, such as a machay, or within a gallery tomb.

Burial #8 had been purposefully disarticulated. In addition to being buried without its head, the individual’s femora were placed not only upside down, but the proximal ends were positioned away from the ribs and the rest of the vertebral column. While not common during the Early Horizon, rearranging or disarticulating human remains after death has been noted in the Andes, specifically in regards to the Moche culture of the north coast, during the Early Intermediate Period (Verano, 2001). Although the cause of death for the individuals at Kareycoto could not be determined, at least two sub-adults had had their heads removed (one at or around the time of death.) Finally, only one non juvenile was found on the Kareycoto mound top. Known as Entierro, or Burial #11, this individual was found buried into floor #1 in a stone crypt. Seated in a flexed position, this adult male was estimated to be a young adult (approximately 18-21 years old). An isolated infant long bone was found associated with the remains, but like the infants, no grave goods were documented with Burial #11.

Infant burials in the Andes have been previously recorded for the Early Horizon, though not
in the number of individuals excavated at Kareycoto. For example, an infant in a vessel was also recorded at the site of San Diego, in the Casma valley. For the case of San Diego burial (dated by Thompson to between 750-400 BCE), the infant recovered was also buried in association with a large olla, or ceramic vessel (Pozorski and Pozorski, 1987; Thompson 1961). The infant was found in a seated position within the olla, which reached the size of 50 cm in diameter and, like those in Cosma, was not buried with any grave goods (Pozorski and Pozorski 1987; 56). Long bone measurements for the San Diego burial estimate the child was between 6-12 months at time of death.

At the coastal site of Samanco in Nepeña, several infant/child remains associated with the Samanco “Early Phase” of construction (a time period which corresponds to the Early Horizon) were also documented (Helmer 2015). At least one infant and three children were excavated at the site. While these children were not buried in ceramic vessels, they were wrapped in willow branches, and only one was buried in association with any burial offerings (Helmer 2014; 91-92).

For the highlands, at least one infant was buried in association with a large ceramic vessel at the site of Hualcayan, located in the Callejón de Huaylas. This infant was found in the Perolocoto mound, a mound constructed in a similar pattern to Kareycoto. Like Kareycoto, the floor layers at the Perolcoto mound included the remains of infants and children, which were also interred as both primary and secondary burials. Bría (2017) speculates that these burials may have been unintentionally displaced during rebuilding episodes, or that these burials may have been brought from earlier burial contexts specifically for the re-flooring events (Ibid 500). The infant and child remains were found in association with Janabarriu, or Chavín style wares during the Early Horizon, and did not include any burial offerings. One child (known as burial PC-G1) was described in further detail because of its burial position and treatment. For starters, this interment was placed in a flexed, face-down position and included several burial goods, including bone and shell beads, and
three separate spoons. Like many of the burials in Cosma, this interment appears to have been left to decompose for a period of time before it was ultimately covered with a fill layer composed of rocks (Bria 2017: 258). Bria also interprets that offerings were left with this specific child possibly because of shamanistic rituals, and that the child may have been a priest in training at the time of death (Bria 2017: 500). After the burial of this individual, it was covered with a layer of rock fill, and ash, and eventually a pit was dug on top for the placement of a large ceramic vessel. Bria interprets the presence of the infants and children, large ceramic vessels, ash floors, and storage pits as a form of renewal for the Hualcayan community through “the birth and death of its members” (501).

Turning to historical documents, Irene Silverblatt (1987) references colonial manuscripts that describe the treatment of infants or fetuses who died through miscarriage or who, shortly after time of birth, were given to fertility shrines as offerings. “Although they have their own huacas… they all hold the Rayo to be their principal huaca, to whom they dedicate all their fetuses produced by miscarriage, breech-births, and those born two in one belly [twins]” (Silverblatt, 1987; 67 from Hernandez Principe (1621) 1923:65).

Bettcher also refers to historical documents for the specific treatment of infants and fetuses, especially those born under unique circumstances. For example, following Arriaga’s 17th century writings, “the bodies of infants who had died shortly after an unusual birth such as twins or children born feet first were considered sacred objects and were placed in ollas which were kept in the house. These children were considered as conopas, sacred objects relating to the household, and they were taken care of by the household heads. They received the same veneration as the malquis or bodies of the ancient ancestors, but these latter individuals were considered as pertaining to the community or ayllu” (Arriaga 1968 [1621]:203-205, 215, from Bettcher, 2001.) Bettcher goes on to discuss Hernandez Principe’s [1622] colonial descriptions in the town of Recuay (located in the nearby Callejon de Huaylas) where spontaneously aborted fetuses were considered “minor idols.”
Infant burials have also been found at the Preceramic site of Paloma, where they were found separated from the other burials at the site (Quilter 1989). Quilter describes these burials as pertaining to the community, due to their location outside of the household, and based on the known treatment of infants by the Inca, they may have functioned to embody concepts of fertility (Quilter 1989; 67). According to Bettcher (2001), however, and her analysis of historical documents referring to the fetus and infant burials, she interprets the burials at La Paloma, and their separation from household contexts as having regenerative roles, roles that for the Inca were typically reserved for adult male ancestors.

Both in the case of Cosma and Hualcayan, the mounds are surrounded by agricultural fields and terraces. Hualcayan especially has evidence of prehistoric canals which surround the mound, suggesting that the agricultural fields functioned in much the same way that they do today (Bria 2017). At Cosma, prehistoric terraces are present on the hillslope just to the east of the Kareycoto mound. This is suggestive of these areas functioning as agricultural fields consistently for an extended period of time.

Based on Bettcher and Silverblatt’s analysis of historical documents, as well as archaeological evidence of young children at other Early Horizon and Preceramic sites, I believe that the infant and fetal burials in Cosma were utilized in a fertility rite for the mound. The lack of burial items associated with the burials, specifically at Cosma is suggestive that these individuals were the object of sacred offering to the mound, or for an offering for a productive upcoming harvest. The filling of the large vessel with infants and fetuses especially may be suggestive of a reciprocal “full plate of food” in return for a full bounty during the next harvest.

Additionally, the secondary nature of some of the interments at the site suggests transport from outside the Cosma basin. Perhaps Cosma’s association with the headwaters of the Nepeña River had been recognized and revisited during the turbulent times at the end of the Early Horizon
as a principal huaca for the region. As Silverblatt describes from Príncipe’s colonial writing, even though individuals had their own huacas, “Rayo” was the principal huaca where these individuals brought their still births and twin births. This could account for the secondary nature of several of the burials and the comingling of other human remains.

**6.8.4 Explaining the Oversized Vessel Tradition at Kareycoto.** Related to the Early Horizon and sub-adult burial activity are the two over-sized vessels, which were uncovered in the southwest quadrant of Unit 6. Their association with Early Horizon ceramics, the juvenile burials, and the other activities associated with the destruction of the floor place these vessels well within the Early Horizon. Although the upper ½ to 1/3 of both vessels were destroyed, these pots share similarities to those previously described by George Ephraim Squire in the lower Nepeña valley site of Motochacy (PV-48) (Squire 1877; 209). Vessels were also similarly described by Hugo Ikehara at the Early Horizon center of Kushipampa—also located in the middle valley (Ikehara 2015) (Figure 6.24). Additionally, Richard Daggett had previously reported on “large underground storage jars” in the middle valley site of Huancarpon in his 1984 dissertation. Daggett suggests that the large storage containers came into use during his Early Horizon III Phase, coeval with white on red ceramics—after the Janabarriu type fell into disuse. Without radiometric dates at any of these sites it is difficult to assess the temporal components based on surface collections alone. The series of large vessels at Huancarpon in the Moro pocket were also associated with burials, although the human remains were placed in stone-lined cists, rather than in the vessels themselves. One final Nepeña valley vessel was reported by Gambini in his 1975 monograph. The image shows a large ceramic pot resting against a home in the upper valley community of Cochapeti (Figure 6.25).

Similar vessels (with infant interments) were recovered from San Diego in the Casma valley (Pozorski and Pozorski 1987), and at the highland site of Kotosh, contemporaneous vessels of similar dimensions were also found in excavations relating to later layers (Izumi and Terada, 1972;
183). Daggett and Ikehara have both suggested that based on the location of these large jars within non-domestic settings, they were most likely utilized for the storing of “ceremonial sustenance” (Daggett 1984; Ikehara 2015). Similar vessels have also been documented to the north of the Nepeña Valley in Viru and to the south in the Pisco valley, as well as near Paracas (Figure 6.26). All of these large jars were also dated to the end of the Early Horizon. Large Early Horizon vessels were also reported at Huacaloma in Cajamarca, the Casma site of Chanquillo, and La Pampa in the Corongo province of Ancash (Kazuo 1979, 1982; Terada and Onuki 1982.)

Figure 6.37: Examples of other large Early Horizon vessels in Nepeña (left) From Ikehara 2015. (Right) From Squier 1877.

Figure 6.38: From Gambini 1975, large ceramic vessel resting against a home in Cochapeti, upper Nepeña Valley.
Figure 6.39: Large ceramic vessel from Pisco Valley. Photo snippet from the newspaper Editora ITALPERU (1969).

Large vessels were also excavated at the site of Sajara-patac in Huanuco. Residue analysis in these vessels were positive for the remains of corn beer. These large ollas were placed in “circular structures” which dated to phase 1-3 at the site (approximately 525-350 BCE) (Matsumotoa 2009:150). The circular molds were used to stabilize the large pots with the intention of serving chicha during feasting activities (Ibid: 150).

For Cosma, the vessels are especially intriguing, not only due to their large size, but their association with the sub-adult interments and burning episodes on the mound top. The placement of the two vessels within the main mound platform was obviously destructive to the floor which was already in place. Early Horizon ceramics are found in the strata associated both above and below this floor level. These styles are similar to those described by Ikehara as “Ware 1,” and include incised, highly burnished, and polished circle and dot sherds. Ikehara attributes “Ware 1” sherds as belonging to the “late Formative” (Early Horizon) in the middle valley. This Late Formative date corresponds to the Early Horizon carbon dates associated with the burials at Kareycoto.
These burials accompanied the large feasting vessels, and the remains of burning events. A high concentration of ash lenses, and burnt animal remains were focused on the southern side of the mound top excavations. Here, just to the southeast of Feature #4 (Vessel 1), and in association with Burial #10, a deep black ash pit was uncovered, with the highest concentration of decorated ceramic sherds (associated with large ceramic fragments, most likely attributed to the large vessel, and several half bowl fragments) were also collected from this location.

Figure 6.40: Plan map of Unit 6 during excavations of infant burials and large vessels. Blue Xs mark the burials, brown lines represent the exposed portion of the large vessels with associated rock fill. Note the dark presence of an ash lens and orange concentration representing ceramic sherd clustering between the ash lens and Feature #4.

6.8.5 Activities on the Kareycoto Mound Apron. Two infant burials were also excavated from the apron level in the Early Horizon strata, with ceramic styles corresponding to the same episode of use associated on the mound top (Figure 6x). Like the mound top, neckless jars and small bowls were the most frequent ceramic vessels recovered; however, plates had a higher use on the mound apron.
Figure 6.41: Ceramic sherds recovered from Unit 2, strata 2 in association with Burial #2 on the mound’s apron. Decorations include stamped circle dots, zone punctate, and cross-hatched burnishing.

The collection of small perpendicular walls and rooms uncovered on the apron is still poorly understood; however, we now know that like the mound top, activities were taking place on the mound, which included the burning and leaving of smashed ritual offerings. The same style ceramics, as well as sub-adult burials, were present, mimicking the activity on the top of the mound. At least one large ash lens located against the main retainment wall on a pisanado, or poorly constructed floor, was documented. It was in this area, in strata 2, where the largest concentration of artifacts, specifically ceramics, were recovered in Unit 7B (594 diagnostic sherds, or 66% of the 7B sample).

The dominant forms in Unit 6 were cuencos, or small bowls, and neckless jars. The pattern of small bowl sizes varies when compared to Unit 7B down on the apron. For the units on the mound platform, there is far more variety in vessel size in regards to bowls. For Unit 7B however, 63.23% of the small bowl sample falls between 12-18 cm in diameter. The sample size of small bowls for Unit 7B is also larger—179 separate bowl fragments when compared to 42 for Unit 6.
This pattern suggests that the number of people participating on activities on the mound platform was more restricted when compared to the events taking place on the apron. Bowls on the bottom platform area were more uniform in regards to “personal size” or single person use vessels.

It is the current interpretation that ritual activities conducted on the mound apron were related to those taking place on the mound top. These activities include the offering and burning of ceramic vessels and animal remains, musical instruments, and children, for what could have been fertility or renewal rites, considering the mounds location surrounded by agricultural fields. While at the time this final use event may not have been intended to be the last major use period of the Kareycoto mound, it appears after 300 BCE, no more constructions, remodeling, or large public offerings took place on the Kareycoto mound. Activities on both the platform and the apron were similar, involving the burning and offering of sub-adults, ceramic feasting vessels, panpipes, and other paraphernalia. While similar activities were taking place on the mound top and apron, the top was more restrictive, to a select few, due to space constraints. The nature of the secondary burials and at least three different burial traditions (ie. Flexed, bundle, extended, in crypts, etc.), are suggestive of the regional power and importance of the Kareycoto mound during the Early Horizon for people outside of the Cosma basin. While there is some evidence for later period styles (six Early Intermediate Period sherds) on Kareycoto, it is evidenced by our excavations that after 300 BCE, activities within the basin shifted to the ridge-lines and Kareycoto ceased to be utilized in any additional public ceremonies.

The reuse of a preceramic temple complex to inter infants and children as the last phase in mound construction before shifting activity from the basin to the ridgeline may indicate the effort of the prehistoric Cosma community to retain and return to previously established localized and whilom traditions. The linking of the Kunka mound with the earlier mound constructions may show
a conscious collective effort to revitalize a community while jointly paying homage to the sacred landscape of the ancestors. One note for the activity on the mound top is a minimal amount of Early Intermediate Period painted sherds discovered in stratum 1 of the north quadrant of excavations in Unit 6. At least six painted/kaolin sherds were recovered from this area (Figure 6.42), however it should be noted that the very northern edge of unit 6’s first two levels had been previously disturbed by the large looter’s trench.

![Figure 6.42: Example of kaolin sherd collected from stratum 1 during excavations.](image)

Unlike the site of Hualcayan in the adjacent Callejón de Huaylas valley, activity on the ritual mound and within the basin ceased after this point, as activities shifted to the surrounding ridge-lines. At Hualcayan, transitional Huaylas to Recuay activities continued on and around the ceremonial core of the site, a pattern not documented at Kareycoto.

**6.8.6 Cosma and the Middle Horizon-Late Intermediate Periods.** After the Late Preceramic occupation at Acshipucoto, the mound was left relatively abandoned until the Middle Horizon-Late Intermediate Period. At this time, people settled on the Kunka ridge, where domestic activities have been documented, and utilized the Acshipucoto mound top for the purpose of burying important individuals. Looting activity on the mound exposed three separate stone lined tombs. Looted remains associated with these structures included burnt human and faunal remains and a large percentage of late style ceramics, specifically, Casma-Akillpo styles and several blackware
Chimu related styles. The human remains recovered were associated with large amounts of ash and soot throughout the top levels of the Acshipucoto excavations, and several ash pits were recorded in the profile. A carbon date taken from an ash lens in stratum 2 of the excavations dates to 1382+/135, or between 646 and 844 cal CE. This date marks the activity to the end of the Early Intermediate Period – early Middle Horizon. In addition to this date, several of the styles recovered are associated with the Late Intermediate Period. This indicates that the Acshipucoto mound was a center for the burial of elite individuals for at least a few millennia, specifically in association with Casma sherds through Chimu related sherds (Figure 6.43).

Four separate areas were excavated on the Kunka ridge, all but one appearing to being utilized for domestic activities. The domestic constructions were small rooms with square foundations that included 1-2 coursings of stone. They were associated with a relatively shallow (20-50 cm) strata of ceramic activity before sterile bedrock was reached in all the domestic Kunka excavations. Unlike at Acshipucoto and Kareycoto, several manos, matates, and grinding stones were also documented on the surface and within excavations at Kunka (Figure 6.44). Surface survey of the northern slope of the ridge revealed several small terraced occupations with shallow walls and large grinding stones. Surface ceramics in these areas were also thick utilitarian styles with heavy pastes.

The use of the area excavating for Unit 13 follows a different pattern than the other areas excavated at Kunka. This area, has attributes of an associated plaza space for the related domestic activities on the Kunka ridge. Unit 13 accounted for a higher percentage of ceramics, specifically styles that were finer and included more decorations and appliques. In fact, Unit 13 yielded 61.78% of the Kunka excavation ceramic samples. Compared to the ceramic styles in Kareycoto, where only 10% of the ceramics were pitchers, pitchers made up 18% of the entire unit 13 sample. Among
ceramics and faunal remains, the special artifacts included a worked quartz point and associated quartz flake, a slate point, and a slate pendant.

Figure 6.43: Chimu style ceramic vessel and other artifacts including a ceramic llama whistle, copper/silver artifacts, and a wooden scepter head. Artifacts were associated with the human remains recovered from the looter’s activity outside a looted tomb on the Acshipucoto mound. The complete ceramic vessel belongs to a local community member in Cosma who claimed to have looted said tomb previously.

Figure 6.44: Example of large grinding stone recorded on Kunka ridge.

Unit 13 was also deeper than the other units on Kunka, and bedrock was never hit. In the deeper layers Early Intermediate Period sherds were recovered (Recuay/kaolin painted sherds).
Additionally, the curved wall which abutted the natural mound/knoll had a different construction pattern than the surrounding structures. These rocks were tall, and highly polished on their inside face. A pisanado was found related to level three of the unit and towards the base of this floor was a thick ash lens. Unit 13 ceramics also included more blackware related styles rather than the average domestic ceramics found within the other excavation units. It’s the current interpretation that while the remainder of the excavated portions in Kunka may have functioned for daily domestic activities, the curved wall on the Kunka apron, which abutted the knoll was an arena for non-daily uses.

The presence of several huanca stones on the Kunka ridge also indicates that other activities taking place outside of the domestic sphere may have taken place on the Kunka ridge-line. Several huanca and pecked stones were recorded in this area, and it is possible some of these stones may have been used as a territorial marker, or for the marking of ritual activities. The pecked stones specifically are poorly understood, as only a few have been documented and reported on throughout the Nepeña valley.

One final note based on surface survey and information gathered from local looters and informants in Cosma is the possibility of a larger Early Intermediate Period occupation within the basin. In addition to the several kaolin/painted sherds recovered during our surface survey and excavations on Kunka and Kareycoto, two Recuay style artifacts were shown to us by separate local informants. The first, a Recuay faced stone bowl carved out of dark granite, was found on the eastern hillside bordering the Cosma basin, near the site of Watsi. This bowl has the same face carved 4 times around the bowl, though some sides are more worn than others (Figure 6.45). To date, it is the only Recuay style stone carving known in the Cosma basin, though similar bowls were reported to me while I was on survey near the town of Rayan. The Recuay, based out of the Callejón de Huaylas, are known for their intricate rock statues or carvings, especially portraying figures.
perceived to be “ancestors.” No ceramics or other items were recovered with the bowl, and nothing similar was spotted during our inspection of the Watsi site, though it is extremely overgrown with vegetation.

Figure 6.45: Stone mortar owned by community member in Cosma. This bowl was recovered from the surface of the Watsi site, located on the southern ridgetop which overlooks the Cosma basin (approximately a three hour hike from the Cosma community).

A painted kaolin vessel was also recovered from within the Cosma basin by a local community member. This elaborate jar was constructed as an anthropomorphized feline with a snarling mouth and red applique eyes resting on its elbows. The vessel was allegedly recovered from when the road was constructed in the 1970s. According to the owner of the vessel, when the road was being dug, a large “open cache” was exposed on the mountain slope near Collique. Inside this cache were several white/kaolin vessels, and the men working on the road all split the vessels up amongst themselves. The feline vessel is all that remains of the ceramics recovered from within the cache, as the others were sold off or given to people as gifts.

While the monumental constructions were built during the Late Preceramic and modified throughout the Early Horizon, the Kunka ridgeline was the center of domestic life in the Cosma basin from the Middle Horizon-Late Horizon. Domestic units and ceramics were recorded along the
northern slope as well as the top of the ridge. The southwest end of the Kunka ridge was especially modified through terracing and a retainment wall in order to build up and flatten out more surface area off the ridge-line. While monumental constructions, especially those related to ceremonial activities appear to disappear at this time, at least three separate locations were utilized for burial and non-domestic activities. The first of these would be the mound top of Acshipucoto, where intrusive burials were uncovered within and in association with small stone-lined tombs on the mound. These burials were accompanied by burning episodes and the remnants of large amounts of Middle-Hoizon ceramics, many burnt and covered and ash. The second area is the collection of machays and other tombs located throughout the Cosma hillslopes. Finally, the third concentration of later period non-domestic use is located on the Kunka ridge in association with huanca and pecked stones, and the curved wall exposed in Unit 13.

Figure 6.46: Kaolin vessel shown to team by a Cosma local who helped construct the road in the 1970s when the ceramic cache was found.

6.9 Summary of Human Occupation at Cosma: Persistence & Pilgrimage in the Basin

We now know that the majority of mound use within the basin was during the late Preceramic, with a significant mortuary re-use between 700-300 BCE. This includes the burial of at least 10 infants,
children, or neonates, one adult, and large burning episodes related to a number of smashed ceramic offerings. It is the current interpretation that after this final occupation of the Karecoto mound, the use of the mounds within the basin were abandoned as people settled on the surrounding ridges. Although a small Early Intermediate Period presence was documented through kaolin surface ceramics, and a limited number of sherds excavated in the top levels of the Kunka and Kareycoto excavations, not much can be said currently for this period of use in the basin until more research is conducted.

During the first millennium BCE, highland-coastal interactions in Ancash were structured by the development of the Chavin, Cupisnique and Sechín phenomena based in the Callejón de Conchucos, Cupisnique and Chicama drainages and Casma Valley, respectively (Burger 1992; Lumbreras 1974; Pozorski and Pozorski 2005; Rick and Kembel 2008; Rick et al. 2011; Thompson 1962). The data from Cosma has shown that after the Early Horizon, Cosma continued to function as a small, localized center of importance. While other Chavin related sites like Punkuri and Huaca Partida are abandoned in the Nepeña Valley at this time, the landscape and cultural features established in the Cosma basin were able to maintain their importance through emplacement.

At Cosma, emplacement takes place early on in the site’s use and history. First with the successive constructions of multiple Kotosh-Mito chambers, followed by evidence for the burial of children and offerings during the Early Horizon. By the Early Intermediate Period, Middle Horizon, and Late Intermediate Period, our excavations have shown that while settlements moved to the ridge-lines, burials, large stone carvings, and huanca stones were still being erected in site of the earlier monuments. Additionally, at least two high-status individuals and late ceramic styles were found interred within the earlier Acshipucoto mound. As this chapter has shown, these are all elements of emplacement within the basin.
In Ancash, multi-storied platform mounds with underground galleries belong to an architectural style traditionally associated with highland groups, mainly in and around the Callejón de Huaylas and Conchucos. Similarities can be tied to sites such as La Galgada in the Santa Valley (Grieder et al 1988) and Chupacoto and Huaricoto in the Callejón de Huaylas (Burger 1992:123). Chupacoto specifically can be tied to the Kareycoto mound at Cosma with its analogous layout and building techniques (Richard Burger, personal communication 2014). The presence of coastal Sechín iconography at Chupacoto is intriguing. Sechín style stone carvings have also been documented at the site of Kushipampa, in the Moro pocket (Ikehara 2010b). The Kareycoto component at Cosma may represent an intermediate community between coastal and highland Sechín components.

The fact that the Cosma complex is not aligned with the major prehistoric passes and trade routes, is isolated, and difficult to reach both from the highlands and the coast make it a costly route for travel for the purposes of pilgrimage. It should be noted that Chavín has also been posited as being located along difficult routes (Rick 1997). In addition to its challenging location, the monumental architecture associated with the site acts as the second category for costly signaling. The monumental mound constructions and a hilltop fortress of megalithic dimensions attest to the site’s ability to produce labor forces larger than the resident site population. The hilltop fortress, known as Iglesia Hirka, sits on a ridge top overlooking the ceremonial mounds at Cosma. At an altitude of 3080 masl, the fortress can be seen from further down valley, its polished worked stones glistening in the sunlight like a beacon, signaling to others Cosma’s strength and presence on the ritual landscape.

Excavations at the Cosma complex have illustrated that it was a significant religious center participating in the Kotosh Religious Tradition, established early on during the Late Preceramic. Evidence for shellfish and exotic ocean shells like spondylus demonstrate that even though the
Cosma center was participating in this highland religious tradition, it was tied into a larger interaction network that involved coastal communities. There are at least three instances in the sites’ use-history of interactions with the coast, based on ceramics and the presence of shells and fish bones. These are within the Late-Preceramic (Spondylus shell, fish vertebrae and crab claws), the Early Horizon (numerous ocean shell), and the Early Intermediate-Middle Horizon Periods. Following the models set forth by Topic and Topic’s 1983 article, this may illustrate that during these three major occupations, Cosma was a secondary node, tied into a larger first-rank interaction network. I argue that Cosma’s previous existence as a substantial Kotosh-Mito center is what structured its establishment as an Early Horizon center. The sacredness and long standing of the ritual landscape, along with its ecological elements may have been the catalyst for the re-interpretation as an Early Horizon satellite locale. The large presence of ceramic disks/pirurus and panpipes in the Early Horizon contexts is also intriguing. The presence of higher quantities of musical instruments on the mound apron and mound top, in association with the large quantities of polished and decorated ceramics, giant feasting vessels, and the sub-adult burials, speaks to the role of the Kareycoto mound as a space for communal gathering for non-domestic activities during the Early Horizon. Activities on the mound were most likely related to feasting, dance, and ritual offerings for the mound as a primary huaca for the region, resulting in a neutral ground for communal gathering and ritual.

Following the end of the Early Horizon, specifically during the Early Intermediate Period, Middle Horizon, and Late Intermediate Period, there was an influx in domestic activity on the Kunka ridge-line and associated use of the Acshipucoto mound for burials of elite individuals. Following this, during the Late Horizon, activity moved further east up the Kunka ridge and was centered around the site of Cajarumi, where subterranean tombs and Inca carved stonework has been previously described (Advincula and Chirinos 2000; Lane 2010; Lau 2016). Akillpo or local Late Intermediate through Late Horizon styles have also been documented throughout the ridge-
lines, and two carbon dates taken from Kunka illustrate that the basin was occupied well into the Late Horizon-Colonial Period. From there, historic records and maps can be utilized to establish the presence of the Cosma community as an independent agro-pastoral town removed from the larger hacienda system located lower down the valley.

It’s intriguing that during the Late Preceramic through Early Horizon, architectural elements at Cosma can be classified more in line with highland styles (Kotosh-Mito inspired rooms, consistent patterns of fill of these rooms, and galleries or gallery tombs within the mound). By the Middle Horizon however, those influential networks appear to have shifted more towards the coast. This is exemplified mainly through ceramic styles in the Cosma basin related to coastal wares (Casma appliques, press molded, etc).

With the data presented from the excavations in mind, the ensuing chapter revisits the Late Preceramic, specifically the development of the Kotosh-Mito classifications and the pertinent centers, which were involved in the making of those architectural and ritual canons. By revisiting these Late Preceramic centers presented in Chapter 3, I’ll be able to discuss the Kotosh-Mito and coastal variations in lieu of the data from Cosma and what this data means for the understanding of Late Preceramic religious developments in the Andes. I believe that through Cosma’s early founding as a center for Kotosh-Mito rituals, the favorable geographic and environmental setting of the basin, and the continued addition and modification of the prehistoric monuments eventually became material mnemonic devices that structured the landscape as a mediating one for ritual practice.
CHAPTER 7: REVISITING THE LATE PRECERAMIC: MITO, KOTOSH AND COASTAL HEARTHS

As discussed in Chapter 3, the Andean Late-Preceramic occupies the period of time between 3000 BCE to 1800 BCE. Large-scale public monuments were first constructed during this time, with divergent traditions existing on the coast and highlands, respectively (Haas and Creamer 2006; Shady and Leyva 2003). While the coast saw the introduction of the large pyramid mound complexes associated with sunken circular plazas (e.g., Norte Chico area, Casma valley, Salinas de Chao, etc.), the highlands were home to a different tradition emphasized by small privatized rooms with single entranceways (Burger 1992: 51).

The focal elements of this Preceramic highland tradition have been classified in two distinct ways, which are the focus of this chapter. The two names previously given to this phenomenon are known as Kotosh and Mito. Each of these classifications focused on distinct markers. The Kotosh Religious Tradition as described by Burger, examines the ideational and cosmological order with a central ceremonial hearth forming an axis mundi in these ritual chambers, which Burger refers to as shrines (Burger and Salazar Burger 1980). Specifically, Burger identifies the ritual burning of offerings in a central/sacred hearth consumed by fire and transported by the rising smoke as the central activity that is occurring inside these rooms (Burger and Salazar Burger 1980).

In contrast, Elizabeth Bonnier’s classification looked to the material expressions of early religious activities, conveyed as the architectural elements of these rooms. She examined this architecture with an emphasis placed on the chronological similarities of structures. Bonnier utilizes the terminology “Mito Tradition” to distinguish the Initial Period structures from those excavated for the Late Preceramic. Bonnier argues that Burger’s requirements for the “Kotosh Religious Tradition” were too broad, which is why her focus was on a more stringent set of criteria specific to the architectural features of these chambers. Bonnier’s canonization of this set of criteria was
conducted through her work at the highland site of Piruru, and comparative architecture at the type site of Kotosh. Mito architecture then always includes features such as the split level floor (which Bonnier labeled the epicaust (upper) and pericaust (lower) (Bonnier: 1997: 124)), central hearth feature, a flue, ventilation shafts, niches, plastered walls, and floors with red or yellow pigments. These structures were typically square with rounded corners (Bonnier 1987). While rituals in Kotosh rooms focused around the central hearth for Burger, Bonnier distinguishes Mito architecture by the “sacredness” being placed on what she interprets as special “floor-altars.”

7.1 Kotosh or Mito? What’s the Difference?

Kotosh has been the type site for the Kotosh-Mito tradition since its excavation in the 1960s. Located in the central highlands of Huánuco, excavations in the Kotosh mounds revealed numerous shrine-like rooms with interior wall niches and mud-relief friezes decorating the chamber walls. Additionally, these rooms included sunken, or split level, floors with central hearth features and ventilation shafts or flues. At Kotosh, before a chamber was abandoned at the site, the structure would be *ritually sealed* in a process known as “temple entombment” (Matsuzawa 1972). Temple entombment involved taking sterile soil and rocks to fill off the structure followed by the sealing with a clay capping to close it off completely before the construction of another chamber would take place. Excavations at the site further revealed that some rooms were re-utilized, repaired, and altered several times before being ritually closed off (Izumi and Terada 1972.) Dates at Kotosh and the nearby site of Shillacoto place their occupational use well within the Late Preceramic.

While Kotosh is considered the type site for both the Kotosh Religious Tradition and Mito Tradition, the earliest of these centers is the site of Huaricoto, located in the Callejón de Huaylas, near the current day city of Carhuaz. Huaricoto was occupied until the Early Horizon; however, an early carbon sample taken from a central hearth dated the earliest use at Huaricoto to uncalibrated
3290±120 B.C.E and 2820±200 B.C.E (Burger and Salazar Burger 1980). Excavations at Huaricoto revealed at least 13 different structures at the complex, sharing a similar construction pattern to the rooms at Kotosh and Shillacoto. Like the other Mito/Kotosh Religious Tradition structures mentioned, the floors and the fill layers were kept clean of any debris or trash. The rooms and hearths were also ritually sealed. It was Burger’s work at this site which led him to classify these structures, and those at Kotosh and La Galgada as ritual chambers specific to hosting activities associated with the “Kotosh Religious Tradition.” The main element of this tradition focused on the ritual burning of offerings in a central fire, and a well bounded and cleaned ritual space, with the sterile sealing of the chambers or hearths after use.

Finally, the site of La Galgada contributed heavily to our understanding of Kotosh-Mito ritual architecture. Unlike the other centers, this site is located on the Tablachaca branch of the upper Santa Valley, at a lower elevation (1100 masl). It is known for its dual mounds, Mito style temples, and its associated sunken circular plaza. La Galgada is to date a unique example in its abundance of Mito architecture. The largest mound, known as the north mound, was intensely excavated by Grieder and Bueno Mendoza, revealing that before a Mito structure was sealed off completely, it was re-utilized as a burial space for the housing of multiple individuals at a time. The rooms at La Galgada were rectangular with rounded corners, included wall niches, split level floors, central fire features, and single entrance ways (Grieder el al 1988). Dates for La Galgada range from uncalibrated 4100 ± 50 BP (2900 ± 2425 cal BCE (95%)) to 3130 ± 80 BP(1670 ± 1120 cal BCE (95%)), however, the base of the mound and presumably the earliest constructions were never excavated.

As with Huaricoto and Kotosh, as time went on, older structures were ritually sealed off and constructed over, but at la Galgada by the Initial Period, only one large central room was the focus
of the platform on the north mound. This room, featured a non-centralized hearth and only a single level floor - which could accommodate up to fifty people. One of the noted patterns at La Galgada different from those at Kotosh and Piruru is “the pattern of stepping down into an enclosed chamber.” This, along with its sunken circular plaza is reminiscent of coastal traditions for the same time period.

These sites were originally all classified as Kotosh or Kotosh-Mito centers until Elizabeth Bonnier’s work defining the Mito tradition in the 1980s and 1990s (Bonnier 1997; Bonnier and Kaplan 1988). This was done through her work at the site of Piruru, located within the Tantamayo river valley in Huánuco. Bonnier classified the 15 rooms excavated at Piruru into “Pre-Mito,” “Mito,” and “Post Mito” structures. The main distinction between “Pre-Mito” and Mito rooms, were that Pre-Mito structures lacked the split level floors (Bonnier 1997). Twelve of the rooms at Piruru were classified as Pre-Mito. All of these units had single floor levels, and all but two included the central hearth features. At Piruru, Bonnier argues, Mito phase architecture does not occur until the Initial Period (3370 ± 60 BP) (Bonnier and Rosenberg 1988). The date reported was associated with the single “Mito” room present at the site (Bonnier 1997:127).

Pre-Mito floors were interpreted by Bonnier as “sacred” alters due to the presence of “thin layers of charcoal” or “burning lenses” on the actual floor layers. Bonnier saw these burning episodes on the single level floors as a sign of their consecration as sacred spaces or “floor-altars” for rituals to be performed (1997: 127). These Pre-Mito structures did not have air ducts, but could have ventilation shafts and patches of “red earth” in them, another feature Bonnier attributed to the sacredness of these floors. Pre-mito structures at Piruru had a variety of styles, including structures which were “round, square, or rectangular and averaged 3 m in size (Bonnier 1987; 1997).”
While Burger focused on the importance of the central hearth in Kotosh rooms, Bonnier’s attention was on activities taking place on the sacred ground surface, or “floor-altar” (Bonnier 1997: 129). Bonnier interprets the transition from the single floor to the dual/split floor as a change in liturgy at the site, where the split levels mark two different planes or sacrosanct surfaces. While the hearth still remained the central location, the sudden construction of the split level floor was an indicator of “the introduction of a new cult, or liturgy, involving (Bonnier 1997: 129),” the other definitive features of Mito architecture, such as wall niches, plastered surfaces, flues and ventilation shafts.

Since the late 1980s, excavations at Kotosh-Mito sites has slowed significantly and discussions on our understanding of this early tradition has lain dormant until recently. The addition of the excavation of the sites of El Silencio, along the middle Santa River valley, Hualcayan in the Callejón de Huaylas, and several “ventilated hearth structures” found in coastal sites in Casma and in the Norte Chico, has regenerated the conversation on the origin and classification of these early Preceramic ritual chambers.

7.2 Coastal Preceramic Traditions, Ventilated Hearths & Square Room Units

While this Late Preceramic tradition of central hearths, niches, and split level floors has been classified and defined in a number of ways in the highlands, this is not the case for similar Preceramic structures found throughout the coast. Much of the attention paid to the Late Preceramic in central and northern Peru has focused on the large monumental pyramid mounds scattered through the different coastal valleys. In a few cases however, ventilated hearth structures and “square room units” have been recorded for the Late Preceramic and Initial Periods, raising questions on the relatability of these structures to those of the Kotosh-Mito tradition of the surrounding highlands.
Starting with the Norte-Chico region, specifically at the center of Caral where Shady recorded several “ventilated hearth structures.” These hearths were found in association with the larger pyramid mounds (Shady 2006). Two of these structures have been defined in detail, though both of these structures have been labeled as “Altar del fuego sagrado,” or the Temple of the Sacred Fire, despite their location in different areas of the site. The first Altar del fuego sagrado is located at the top of the Templo Mayor and was found associated to the east of an atrium. This structure consists of a single level floor built upon a platform. A central hearth was located on the plastered floor of the room with a subterranean duct “similar in function to the various altars that [we have] identified in association with other buildings of the city” (Shady 2006: 39). This structure was quadrangular in shape, and the surrounding corridors included small niches and other reliefs, though no niches were found within the room itself. Shady has interpreted this specific room to one of the final use/additions of the Templo de Mayor (Shady and Machacuay 2003: 175).

The second “Altar del fuego sagrado” described at Caral is located in the Temple of the Amphitheater. Unlike the first temple described, this structure is located outside of the temple, and constructed in a circular shape. The commonalities include a single level floor with a central hearth and subfloor ventilation, though the hearth consisted of two flues. Both these structures were relatively small, with the first reaching 2.81 meters in diameter, and the second 3.60m in diameter (Shady 2000; Shady and Machacuay 2003). For the ventilated structure documented at the Temple Mayor, it appears it was constructed originally as an open air structure before the walls were added (Shady and Machacuay 2003). While permanent walls were also added later in the Temple of the Amphitheater structure, Shady notes postholes signaling that this room in particular may have originally consisted of walls of perishable material. She interprets the location of both these altars (at the different “upper” and “lower” sectors of the site), their differing shapes, and contrasting placement in association with the pyramids (on top of and outside of) as indicating themes of duality.
within Caral (Shady 2006: 36). Unfortunately, while Caral dates to between 3640-2627 BP (Shady et al 2001), no carbon dates have been recovered for either of these ventilated hearth structures at the center.

Also within the Norte-Chico region, Matthew Piscitelli has documented several “split level” structures at the site of Huaricanga in the Fortaleza valley. While his excavations have revealed some of the earliest dates for split level floors starting at 4807±52 BP (3649-3496 (77.0% cal BCE), several traditional “Mito” components are missing from these rooms, such as niches and flues. Unlike those located at Caral, these structures did not exhibit central hearths 5, and instead exhibited signs of burning episodes directly on the floors (Piscitelli 2014). Of the five rooms documented in Mound B, four of them had split level floors; however, only two of these rooms had the dropped floor centrally located, like other Kotosh-Mito structures in the highlands.

Due to Bonnier’s original classification of “Pre Mito,” “Mito,” and “Post Mito” structures at the site of Piruru, and the presence of “split level floors” not being introduced at the site until the Initial Period, Bonnier interpreted this architectural change as the entering of a new liturgy at the Piruru site. Piscitelli argues that the early evidence for split level floors at Huaricanga indicate the Norte-Chico region as a possible “origin” for the Mito tradition. While these early dates at Huaricanga are intriguing, the lack of any other characteristics that make up the Mito categorization counters this assessment. Additionally, Huaricanga is the only site currently described for the Norte-Chico region in the Preceramic with dual level floors. One can argue that for Mito to have originated on the coast, specifically in the Fortaleza valley as Piscitelli claims, there should be more “Mito” style structures clustered throughout this region.

5 While Bonnier’s original canonization of Mito architecture only lists “central fire features” as a variant in Mito architecture, all previously “Mito sites” included structures with at least one central fire feature.
Like the structures investigated in Norte-Chico, the Casma valley has contributed a wealth of data on “coastal ventilated hearth structures.” The Pozorskis have excavated a number of these rooms within the Casma valley for decades. Like those in the Norte-Chico, the Casma samples are smaller than those found in the highlands and they include central hearth features, single floor levels, and flues, as well as what the Pozorskis describe as “troughs” (Pozorski and Pozorski 1996). Ventilated hearth structures have been found at the sites of Huaynuna, Bahia Seca, Pampa de las Llamas-Moxeke, Taukachi-Konkan. The structures recovered all have been interpreted as non-domestic units, built with stone “footings” and “perishable materials” for their superstructures. Save for a few ceramics, these rooms are artifact/refuse free and come in rectangular or circular varieties. Dates for these rooms range from the Late Preceramic (Huaynuna) to the Initial Period. Tortora reed samples were also recovered along with several post holes, leading the Pozorskis to speculate the superstructure and ceiling were dome shaped (Pozorski and Pozorski 1996: 346). “Sechín Alto Polity” ventilated hearths differ from their highland counterparts in that they are typically circular in shape and located within circular rooms resting on rectangular platforms. There are also typically four sub-floor ventilation flues instead of the single one traditionally found in the highlands (Pozorski and Pozorski 1996). Finally, these rooms when found clustered together typically do not share walls, but have a narrow space between them. This is different from several Kotosh-Mito sites where clustering of sites have been known to share walls (Bonnier 1987; Grieder and Bueno Mendoza 1988).

The Casma Valley examples are peculiar, not only due to the number of ventilated hearth structures found throughout the lower valley, but also the presence of a parallel Initial Period tradition referred to as the “Square Room Unit.” Square Room Units are structures built square in shape with rounded corners and include benches and high wall niches, but lack central fire features, split floors, and the ventilation flues described for the highland Kotosh-Mito examples. They also
have multiple entrance ways, paired with “bar-closure mechanisms” to control access to gaining entry into the rooms (Pozorski and Pozorski 2011; Pozorski et al 2016). Unlike Kotosh-Mito structures, Square Room Units have been found within a variety of contexts, including “temples, palaces, storehouses” among other locales (Pozorski and Pozorski 2011: 447). Though their functions vary, they remain relatively consistent in form, which the Pozorskis interpret as an “emblem that unifies the Sechín Alto Polity and reiterates its administrative structure” (Ibid).

At the mid valley site of Huerequeque, however, the Pozorskis have found square room units in geographic relation to earlier ventilated hearth structures. At least one of these ventilated hearths shares more similarities to the highland Mito-Kotosh style than the typical Casma/coastal variant. This hearth was centered inside a split level floor and only had one sub-floor flue, as opposed to the traditional four flues found in the coastal variants (Ibid; 436).

One of the square room units also revealed a central hearth feature, suggesting that at least for the site of Huerequeque, there was early evidence for early interactions, and that Huerequeque may have functioned as an outpost for the Sechín Alto Polity in order to control trade and access from the highlands (Pozorski et al. 2017). The Pozorskis have interpreted this structure, which was found with dense concentrations of marine fish on the surface of its north bench as being utilized for “seated assemblies” or “rituals that included feasting (Ibid; 436).”

Of note is the fact that when these specific Square Room Units were built after colonization by the Sechín Alto Polity at the site, the earlier ventilated central hearth structures were buried, suggesting that the Sechín Polity did not originally construct the site of Huerequeque.

“The earlier monumental architecture beneath the main mound north room was largely destroyed, and its distinctive brick shaped stones were reused to construct much of the square plaza wall. Similarly, the structure housing the Kotosh-type hearth was razed,
observed by later construction, and square-room administrative units were built nearby. The destruction and subsequent burial of the local culture’s major architecture reflects overt disregard for local tradition and suggests that the transition toward new leadership was not smooth” (Pozorski et al 2016: 446).

The Pozorskis raise an interesting point in regards to “the Square Room Unit” phenomenon in Casma, specifically when it comes to site function/use. These rooms, which are considered an administrative symbol of the Sechín Alto polity have been found within differing contexts and locations throughout several archaeological centers. This speaks not only to the importance of understanding the architectural layout of each structure to determine its original use, but also the provenience of where architecture is found in relation to other structures, and more importantly, how that room or structure is “treated” after being decommissioned. Ritual/religious rooms, which have been found relatively clean of artifacts and trash, are entombed with sterile rock fill and clay, a pattern not found in rooms which were utilized for domestic or administrative purposes.

Square Room Units constructed in the Casma Valley are standardized in their building and interpreted as emblems of power for the Sechín Alto polity. The similarly constructed Initial Period site of Gramalote, located in the Moche valley, is interpreted differently, however. The coastal center of Gramalote, is a small fishing community believed to have been linked into the large nearby ceremonial center of Caballo Muerto. While the majority of the site is composed of domestic use areas, a Public Architectural Compound (PAC) was excavated at the site. The PAC is located approximately 1000 meters to the north of the domestic area, and at the core of this compound sits a rectangular sunken plaza which includes a central hearth (Prieto 2018: 4). Differing from other square room units on the coast, are four circular holes cut into the floor near each of the room’s corners. These holes are marked by flat cobbles and one of the holes had burials inside. Three
additional burials were found in other areas of the sunken plaza, though the bodies were buried at different times while the plaza was still in use (Ibid; 5). A collection of unique artifacts was found within the central plaza and areas surrounding the structure. Prieto has interpreted these as the placement of ritual bundles which may have been involved in specific ceremonies taking place within the plaza (Ibid; 12). Prieto also notes that the proximity to the regional ceremonial center of Caballo Muerto would “have influenced the architectural program” of Gramalote, a “minor ceremonial local facility… as smaller local centers often mimic the larger regional counterparts” (Ibid; 12). At the center of Gramalote, the local community constructed the main temple by incorporating elements from coastal sites outside of the Moche valley, mainly the square room units of the Casma valley and possibly from the earlier site of El Paraiso (Ibid; 13). Prieto believes this was a conscious and creative decision made by the local ritual practitioners in order to meet the local religious needs of the community. Citing Maya case studies as an example, Prieto suggests that small scale communities developed their own agendas and social and political trajectories, taking a “central role in the history of their region” not just sitting passively under the control of larger political groups (Robin 2016 cited in Prieto 2018: 20).

Religious practices at Gramalote took place during a time when the Central Andes were becoming more complex and religious practices were consolidating, yet this small residential center played an independent and active role, borrowing architectural traditions from complexes scattered farther down the coast (Prieto 2018: 20). I utilize the site of Gramalote here as a pertinent example of how local communities may interpret or utilize architectural ideals and canons at a community level. This local interpretation may account for variants between not only highland and coastal sites, but architectural variations locally within regions. This is applicable when understanding the local variation of structures within the Cosma basin.
7.3 Cosma’s Place within Late Preceramic Ritual Architectural Traditions

The results of this study have illustrated the presence of several Kotosh-Mito ritual structures within the Cosma basin. All the excavations thus far have dated these rooms to the Late Preceramic (See Table 6.1 for list of carbon dates), despite a variety of architectural constructions. While Bonnier ascribed the Mito tradition as taking place specifically during the Initial Period, evolving out of Late-Preceramic prototypes deemed “Pre-Mito,” this does not appear to be the case for Cosma. Here, a variation in floor numbers all date to the Late Preceramic. Number of floors, shape of corners (rounded or square), and other accoutrements such as niches and flues may, in fact, then represent localized variations as opposed to temporal ones. Along with the site of Cosma, Rebecca Bria’s work at Hualcayan in the Callejón de Huaylas has also exposed Kotosh-Mito style architecture in a mound similar in shape and size to Kareycoto. Excavations conducted at the site of El Silencio in the middle Santa valley have also revealed Kotosh-Mito style rooms similar to those excavated at La Galgada. I believe that the incorporation of these sites into the collective/repository of Preceramic ritual architecture will help researchers account for the variability of Preceramic rooms while taking into account their geographic locations and local expressions.

Both Burger and Bonnier were instrumental in creating typologies and classifications for the religious rituals and architecture associated with highland developments during the Late Preceramic. While Burger’s Kotosh Religious Tradition classified the religious ritual of burning offerings in a central hearth, and has been perceived by some as being too broad, Bonnier’s criterion for the Mito tradition may have been too stringent, placing too much emphasis on number of floors, while not taking into account localized variations at individual sites. The past two decades have uncovered a number of additional sites and radiocarbon dates to allow us the opportunity to revisit and unpack the previous classifications for Late Preceramic religious developments in the highlands and on the coast. When we start to include these new datasets (sites like Hualcayan, El Silencio, and Cosma)
and their local variations, as well as their similar patterns in mound shape and composition, a new pattern for potential Kotosh-Mito sites emerges, adding several unexplored sites to this list of potential Kotosh-Mito centers. Mounds such as Quellcayrumi in Huánuco (Figure 7.x), Pueblo Viejo Santa Ana in the Lacramarca valley, Chupacoto in Huaylas, and sites like the Rayan mounds off the Jimbe branch of the upper Nepeña River Valley are all centers that share similarities in mound pattern and composition with either the Acshipucoto mound (low mounds with associated flat “plazas” Santa Ana, Rayan), or the Kareycoto mound (multi-tiered and comma shaped—Chupacoto, Quellcayrumi).

![Figure 7.1: (Top left) Aerial View of the Chupacoto mound, Huaylas. (Bottom left) Aerial view of Kareycoto mound, Cosma. (Top right) profile view of the Quellcayrumi mound, Yauya. (Bottom right) Profile view of Hualcayan, Santa Cruz. The Kareycoto mound and Chupacoto mound both share similar profiles to Hualcayan and Quellcayrumi.]

These sites are most likely large Preceramic centers similar in size and scope to the six main preceramic sites discussed in depth in this paper (Kotosh, Piruru, La Galgada, Huaricoto, Hualcayan, and Cosma). By expanding our scope outside of what has been perceived as the traditional geographic region for Kotosh-Mito networks, and including these local variants, I believe that the
distinction between highlands versus coastal traditions may become more blurred, specifically at sites like El Silencio, La Galgada, and Cosma, located along trade routes or in in-between zones.

Utilizing the history of Kiva research in the American Southwest on this point, Kivas specifically have previously been used as an analogous tradition for understanding the function and clustering of these Kotosh-Mito structures throughout sites in the Andes (Burger 1992: 68; Grieder 1988:31). The relative shapes of Kotosh-Mito rooms, and the location of multiple Kivas located at each prehistoric pueblo site also led to this comparison. The assessment was extra relevant due to ethnographic studies on Kivas, which are still utilized today. Kivas are used for clan meetings, as well as private rituals and dancing. Each clan has their own specific Kiva within a pueblo, and only members of the respective clan can use their specific Kiva. While Kotosh-Mito structures may have served a similar function as communal meeting spaces reserved for certain times of year, or in association with sacred rituals centered on floor altars or around sacred hearths, I utilize the comparison here for a different reason. Our understanding of Kotosh-Mito traditions to date comes from a limited number of sites. At the time of Bonnier’s strict canonization of Mito architectural features, only five of these sites were thoroughly excavated (Kotosh, Shillacoto, Huaricoto, La Galgada, Piruru) and published on in the literature. While the canonization of “Mito” architecture is a useful way for understanding these highland religious developments and sites tied to a religious network, the timing of Bonnier’s work may have been a little premature.

I postulate that even now, with several sites added to the database of Late Preceramic ritual architecture, our understanding and need to classify is still limited by 1) A lack of enough sites, and 2) Late Preceramic structures in the highlands are often buried beneath layers of later activity and hard to thoroughly excavate to find all rooms, and therefore associated patterns. I believe as more Late Preceramic sites are documented and excavated, our understanding of the different vernacular
or macro-regional variations will expand greatly in the coming years. The Kiva sites mentioned above are a prime example of this. Prehistoric Pueblo sites can be found throughout the southwest region, specifically in and around the four corners. Originally classified as “Anasazi,” “Fremont,” and “Mogollan” sites, the current understanding has been broken down by regional variations and local resource construction for the same tradition. Take, for example, the variations between Mesa Verde in southwest Colorado, Chaco Canyon in Northwest New Mexico, and Puye or Bandelier in north-central New Mexico. All sites are considered ancestral pueblo, and all have a pattern of pit-house to Kiva constructions. Numerous variations exist between them, however, not only in construction materials, but also in site placement (in canyon bottoms or built directly into cliff faces).

While I disagree with the strict classification of Bonnier’s Mito tradition, I do concur with its usefulness for distinguishing the Kotosh-Mito tradition from the ventilated hearth structures documented throughout Late Preceramic or Initial Period “a-ceramic” coastal sites. These structures, specifically those in the Norte-Chico region, appear architecturally and spatially to be a distinct tradition. While some of these structures contain split level floors (Piscitelli 2014; Pozorski and Pozorski 2011; Pozorski et al 2017; Shady 2006; Shady and Machacuay 2003) central hearths, ventilation shafts, or a combination of these features, their overall architectural construction and placement is out of line with Kotosh-Mito rooms. For starters, their location within coastal sites fits a different spatial pattern than those in the highlands and surrounding areas. Kotosh-Mito rooms are built on mounded platforms, and often clustered together like honeycombs. Norte-Chico and Casma Valley ventilated rooms, however, are found as solo units and either outside of or in association with large pyramid mounds (located on top in association with an atrium) at coastal sites (Figure 7.2).
A Kotosh-Mito architectural understanding must be expanded to fit a combination of features from the newly excavated sites, and accounts for local styles and materials may be needed to fully understand the reach and influence of the Kotosh-Mito religious tradition from the Preclassic through Initial Period. As Grieder et al (1988) point out, La Galgada’s placement in a lower altitude zone along a major route linking the coast and highland would have played a strategic role within a larger regional system. While geographically the expansion of a “highly specialized” Mito architectural cannon may support the assertion that trade was direct between centers and people were moving between these sites, causing the tradition to spread through a religious network, not diffusion (Bria 2017; Grieder et al. 1988), I believe the current understanding of this cannon is too stringent and does not account for local variations or enough criterion to fully understand the extent of this network. Cosma is just one extra node we can now classify within the Kotosh-Mito tradition; however, even within the site, variations exist within the two mounds and internally within the different structures. Indeed, only one of the currently excavated rooms could be classified as a variant of Bonnier’s “Mito.” It could be the case that at each site, one primary “Mito” temple may have functioned at a time, with smaller, branch units existing for familial rituals. The larger “Mito” structure was a structure for communal gathering and ritual, before members broke off in smaller groups to conduct more personalized activities within their distinct room. The openness and
clustering of these smaller structures may have still lead to the feel of community gathering and participation, while distinguishing distinct and private units of practice. The two mounds in Cosma provide a new way to frame this early religious tradition by acknowledging localized interpretations found in Kotosh-Mito sites, specifically those located along coastal-highland trade routes which may be influenced by their proximity and ease of access to outside influences.
CHAPTER 8: CONCLUSIONS

This dissertation research has illuminated an important archaeological center in an isolated high valley basin of the Cordillera Negra. The occupation of this small basin located in the north-central highlands of Peru is framed in terms of the specific characteristics of its landscape resources and the eventual cultural resources that added to its growing cultural value. While periods of pause exist throughout the basin’s history, the subsequent occupants of the area eventually interjected their own symbolic and religious significance onto the landscape. This occurred over the course of several millennia. Cosma was first ecologically recognized as a flat fertile pampa located at the headwaters of a river during the Preceramic, with the first peak in monumental construction and ritual activity occurring by the Late Preceramic. Peak (LPC), pause (IP), peak (terminal EH), pause (EIP), and so forth. I argue that this was the result of persistent place theory, rather than the result of direct social or collective memory (Connerton 1989; Halbwachs 1992; Moore 2010; Schlanger 1992; Thompson 2013).

At Cosma, emplacement takes place early on in the site’s use and history. First, with the successive constructions of multiple Kotosh-Mito chambers, followed by evidence for the burial of children and offerings during the Early Horizon and the construction of a hilltop fortress. By the Early Intermediate Period, Middle Horizon, and Late Intermediate Period, our excavations have shown that while large scale public monuments cease to be constructed following the Early Horizon, burials, large stone carvings, and huanca stones were still being erected in site of the earlier monuments. Additionally, at least two high-status individuals and late ceramic wares were found interred within the earlier Acshipucoto mound. As this chapter will show, these are all elements of emplacement within the basin.

I argue that Cosma’s early founding as a substantial Kotosh-Mito center is what structured its re-use during the Early Horizon. The sacredness and long-standing of the ritual landscape, along
with its ecological elements, may have been the catalyst for the re-interpretation as an Early Horizon communal locale. Through excavations and survey work, paired with a theoretical framework of persistence and pilgrimage, this dissertation has not only presented data on the occupation history of the basin, but also on the way that space and landscape structured the interactions of individuals occupying the area. This chapter will summarize the three main themes presented in this study:

1) What was the chronological sequence of the Cosma basin? What cultures influenced Cosma’s development and what were the peak periods of occupation at the Cosma complex?

2) How did Cosma fit into the Kotosh-Mito tradition, and what does Cosma’s location and Late Preceramic variation fit into our current understanding of this religious network?

3) How do space, landscape, and early monuments structure interactions? How does pilgrimage help to preserve the resolve of a community and help it to persist as a center of importance through millennia? Following this, the chapter will discuss the broader impacts of the current study as well as propose avenues of future research for the Cosma basin and Cáceres District.

8.1 The Cosma Basin, a Summary of Occupation

This dissertation has illuminated a Late Preceramic center in the upper branches of the Nepeña River Valley. Excavations that took place in Cosma have illustrated the earliest evidence for occupations occurred around 3000 BCE, when privatized ritual structures associated with the Kotosh-Mito religion were constructed in two separate areas in the basin. The Acshipucoto and Kareycoto mounds were utilized as distinct epicenters for ritual activity throughout the Preceramic period. Through rebuilding events and the entombing of decommissioned rooms, these mounds eventually reached 10 m and 17 m in height, respectively. At least ten separate structures were documented within the Acshipucoto and Kareycoto mounds. Excavations have shown that the
Cosma Complex was established shortly after 3000 BCE and both mounds were most likely utilized at this time. By 2400 BCE however, activities on the Acshipucoto mound ceased while the Kareycoto mound continued to be utilized for Kotosh-Mito rituals. These rituals would continue through the Preceramic and possibly into the Initial Period.

By the Early Horizon Period, the Kareycoto mound is significantly re-imaged into an open platform associated with feasting activities and the burial of individuals on both the mound top and lower apron. The final meter’s worth of activity at Kareycoto is associated with the Early Horizon, with carbon dates dating between 2424 ± 27 and 2404 ± 24 BP (544 - 391 BCE (89 %)) and 540 - 379 BCE (95%) cal. (2σ)). This activity includes the burial of at least ten subadults (and one adult male) in association with ash lenses and smashed ceramic vessels and instruments. Additionally, the secondary nature of some of the interments at the site and differing burial patterns suggests people of differing belief systems visiting the Kareycoto mound. Perhaps Cosma’s association with the headwaters of the Nepeña River, and high mountain peaks Apus had been recognized and revisited during the Early Horizon.

The re-use of a preceramic temple complex to inter infants, fetuses, and perinates in the last phase of mound construction before shifting activity to the basin may indicate the effort of the prehistoric Cosma people to retain and return to previously established localized traditions for the burial of “special individuals” within the mound. The linking of the Kunka mound with the earlier mound constructions may show a conscious collective effort to revitalize a community, while jointly paying homage to the sacred landscape of the ancestors. It is the current interpretation that after the final occupation of the Kareycoto mound after 391 cal BCE (2σ), the use of the mounds within the basin were abandoned as people settled on the surrounding ridges. A connection to the previously established landscape at the site was purposeful, however, which is illustrated by the alignment of
the two mounds and the vantage point of Kunka, looking over the entirety of the basin and the ancestral mounds.

Based on the current excavations, mortuary activities appear to cease by the Early Intermediate Period through Late Horizon on the large Kareycoto mound, and domestic activities are focused on the associated ridges. While activities on the ridgelines are mostly domestic in nature, there are at least three separate locales associated with the later occupations which involved non-domestic use. The first is the re-visiting of the earlier Acshipucoto mound for the burial of high-status individuals. Several looted tombs were recorded paired with copious amounts of ash and burning on the mound top. At least five separate walls were documented with the later Middle-Horizon ceramics and human remains; however, no floors were documented within these later layers. Late activities then were specific to the burial of elite individuals on the mound top and to feasting events associated with the interment of these burials.

The second locale associated with later non-domestic activities was the curved wall interpreted as a plaza from the Unit 13 trench excavations. Materials recovered included fancier ceramic wares and a more complex architectural design (faced, worked field stones standing up over a half a meter in height). The wall was also curved and in association with possibly large fallen lintel stones. While the other excavations on Kunka reached sterile bedrock, Unit 13 never hit sterile, and unfortunately had to be aborted due to time constraints at the end of the 2016 season. This area of activity was also not far from the location of several pecked and huanca stones. The clustering of these stones was documented on the ridge-top aligned to the north-south with the earlier mounds. Finally, the third locale for non-domestic use on the ridge is the site of Cajarumi, which dates to Inca/Late Horizon Period. While no ceramics were recorded at Cajarumi, Akillpo sherds lower down on the Kunka Ridge were documented both during surface survey and within excavations.
Additionally, excavations conducted by Advincula and Chirinos (2000) have dated the Cajarumi component to the Late Horizon.

By the Colonial era, references to elements of the Cosma basin are referred to in 17th century historical documents, indicating that the Cosma basin may have already been established as an important center for the surrounding region. In part because of its location between trading routes to the coast and the highlands, paired with its ecological potential as a highland basin at the headwaters of the Cosma tributary, the Cosma area was established as an estancia by 1714, and existed as a separate independent unit through the Colonial occupation.

8.2 Cosma and the Kotosh-Mito Tradition

As discussed thoroughly in Chapter 8, Cosma was established early on as a center participating in Kotosh-Mito rituals. The “Mito” canon had previously been described by Bonnier (1987) as ritual architecture specific to the Initial Period; however, at least one early structure in Cosma (AC-1) exhibits numerous traits that fit into this Mito classification. The early dates for the Kotosh-Mito occupations at the Acshipucoto mound and the variations in form within the complex point to localized/vernacular variants in the tradition, most likely influenced by both coastal and highland styles. Contemporaneous structures have also been found on the coast, some of which exhibit sunken floors or ventilation shafts.

Structures like the sunken plaza at Sechín Bajo and other circular plazas found throughout coastal sites share characteristics with the Kotosh-Mito structures recovered at La Galgada and Cosma. Grieder had originally interpreted the variations at La Galgada as being influenced by coastal traditions due to La Galgada’s location along a highland-coastal trade route. It appears Cosma may also fit this pattern. There are at least three instances in the sites’ use-history of interactions with the coast, based on ceramics and the presence of shells and fish bones. The first example of this
interaction network takes place within the Late-Preperiotic as documented by the spondylus shells, fish vertebrae, and crab claws found inside or in association with hearths and ash lenses. Following the models set forth by Topic and Topic’s 1983 article, this may illustrate that during this major occupation, Cosma was a secondary node, tied into a larger first-rank interaction network.

The inclusion of the recently excavated centers such as El Silencio and Hualcayan are further expanding our understanding of the Mito-Kotosh religious network. As has been previously mentioned, geographically, trade between Kotosh-Mito centers and the movement of people between these complexes was what caused the religion to spread, through a connected network, and not through diffusion (Bria 2017; Grieder et al, 1988). I believe due to the presence of a clustering of centers which fit multiple criteria for the Kotosh-Mito canons in the highlands, and the early dates from Cosma and Huaricoto respectively, this spread was coming from the highlands outwards, and not from the coast in, as had been previously argued (Piscitelli 2014).

What the data from Cosma suggest, however, is that the interactions and connections between the coastal centers was more nuanced than originally believed. As Burger has pointed out when referring to the Chavín horizon, a number of important Chavín centers had already existed as “central nodes” for single or multi-valley polities during the Late Initial Period. These centers were a focus for religious activity in these areas, and were dedicated to patron gods associated with their respective territories (1988; 117). Burger continues by using the temple of Pachacamac as an analogy for branch cults associated with larger and newer polities (i.e., the Inca’s Sun cult worship establishing a shrine at Pachacamac) erecting shrines at these pre-existing centers (Ibid). Burger believes Chavin may have spread through similar means, by instituting satellite shrines at these Initial Period centers which functioned alongside the pre-existing localized traditions.
It’s possible these networks functioned earlier than the Initial Period, as Burger notes. Excavations at Cosma have shown shared elements of highland-coastal architectural traits as well as the presence of marine resources in the form of fish bones and shells. This illuminates a pre-existing coastal-highland Kotosh-Mito exchange system which Cosma took part in. Like the Chavín established shrines, or the example above at Pachacamac, coastal variants found throughout the Norte-Chico and Casma valleys may be similarly established shrines marking this nodal network and spread of an early religious ideology. This would account for the minimal number of these on the coast, and the fact that they fit a slightly different pattern then their highland counterparts (not clustered together, or as focal points for ceremonial ritual at larger pyramidal centers like Caral.) Further excavation is needed to truly understand these Late Preceramic religious systems and how far they may have penetrated into the daily life of coastal groups, but the data from Cosma has been illuminating to the discussion and presents a new way to frame the earlier Kotosh-Mito debate.

8.3 Persistence, Pilgrimage and the Cosma Landscape
The construction of the Cosma center during the Late Preceramic, and its connection to a broader religious exchange network established early on between the coast and highlands, would have made the Cosma complex a functionally dynamic ecological and cultural resource. A final point to make on the development of Persistent Places is flexibility, or their ability to remain “functionally dynamic” (Purtill 2012). That is, the adaptability of significant environmental, landscape, and cultural features to adjust to the needs of incoming groups, or an influx of new ideals. As excavations in Cosma have shown, structures there evolved out of small privatized ritual structures in the Late Preceramic and were transformed into larger multi-stepped mounds with associated open spaces and plazas by the Early Horizon. Additionally, the presence of the burial of the sub-adults in several different traditions speaks to the possibility of people with differing beliefs or practices burying their dead within the basin.
At Cosma, there is sufficient evidence that its inception started for the purpose of rituals in small privatized ceremonies linked to the Mito, or Kotosh Religious Tradition. Through time, however, this tradition expanded architecturally, as rooms became larger and more elaborately built. With each ritual sealing of a temple chamber and construction of a new one, the sacrality and power of the huacas became more intense. This process of monumentalization in “increments” over “extended periods of time relative to other sites in the region” (Thompson and Pluckhahn 2010), caused Cosma to become a Persistent Monumental Place for the region, influencing subsequent people to the place through emplacement (Moore 2010; Rodning 2009; Thompson and Pluckhahn 2010), but not through true collective memory of the original activities. These activities are associated with labor and coordination above the household level – and create places where people “continually return to alter, expand and reinvent their built environment” (Thompson and Pluckhahn 2010).

Following this Persistent Place framework, I posit that the original settlement of Cosma was related to an ideal location on a relatively flat expanse of land, near irrigable waters in the productive Quechua farming ecological zone. Originally a center of local importance due to its ecology, I surmise that Cosma was eventually tied into highland nodes and traditions during the Late Initial Period through Early Horizon. One such related node is the center of Chupacoto, located on the eastern flank of the Cordillera Negra (2,600 masl) outside of the town of Huaylas (Figure 8.1). The Kareycoto mound at Cosma shares several features with this mound. Both are constructed in a parallel fashion, which includes a built-up mound and long platform component, in a curved, or comma shape.

Though no excavation data has been published for Chupacoto, Sechín style stone carvings showing similarities to those found at coastal sites in both the Nepeña and Casma Valleys have been
recovered from the large mound. This could account for Cosma’s importance and monumentality as a gateway community, if it was tied to a major coast-sierra network of interactions (Topic and Topic 1983). Chupacoto and Kareycoto also share a similar pattern of construction with the site of Hualcayan, also located in the Callejón de Huaylas (and across the Santa River from Chupacoto). No Sechín style imagery has been found at Hualcayan, but recent excavations at the site have also revealed Kotosh-Mito architecture and carbon dates have dated the site to the Preceramic and Initial Periods. Like Cosma, Perolocoto, the large mound at Hualcayan, was also modified and re-utilized as a local center of importance during the Early Horizon (see Bria 2017).

As discussed briefly above, there are peaks in ritual activity in the Cosma basin associated with significant ceremonial use of the monumental elements during four main periods: The Late Preceramic, the Early Horizon, the Middle Horizon to Late Intermediate, and finally the Late Horizon/Colonial. These ritual activities will be discussed in brevity here for the purpose of explaining this theoretical framework. For a more in-depth analysis of the excavations and use of the basin, please refer to Chapter 5. Our earliest evidence for significant human occupation within Cosma dates to the Late Preceramic Period (3000-1800 BCE), when the people in the basin constructed several privatized ritual temples associated with the Kotosh Religious Tradition, or Mito architectural tradition of the central highlands. A peak in ritual activity again occurs in Cosma towards the end of the Early Horizon, between 700-300 BCE, a time which is associated with a
collapse of the Chavín cult’s influence, and more regional turbulence occurring within the valley (Ikehara 2015; Chicoine et al. 2017). Following this final Early Horizon activity, excavations have shown activity shifted in the basin to the surrounding hillsides and ridge-tops.

Materials recovered from excavations and surface survey date the activity on the ridges to the Early Intermediate Period (marked by the presence of Kaolin or Recuay sherds); the Middle Horizon and Late Intermediate Period (as shown by the significant amount of sherds recovered from the southern ridge-line); and finally Inca activity is also present on this same ridge-line (carved granite boulders and two radio carbon dates.) While the majority of excavated material for these later time periods are domestic in nature, the presence of mortuary structures and intrusive burials associated with the earlier mound and the Inca stonework points to Cosma’s importance in the area as a persistent landscape. The Cajarumi site specifically, located near the peak of the southern ridge, has been interpreted as being used for sacred water rituals (Advincula and Chirinos 2000; Lane 2010; Lau 2016) and is composed of a sector of subterranean tombs, followed by a number of carved granite boulders. Andeanists have referred to these carved boulders as “living rock,” and the most intricately carved boulders at the site are interpreted as “a model of the local landscape.” Features on the rocks are said to represent villages, lakes, and rivers, a schematic map of the local topography, with a special emphasis played on the intricately chiseled channels and pools for holding water (Lau 2016). The high mountain peaks and proximity to a natural spring resulting in the source of the Cosma River would have marked the site of Cajarumi as a sacred area for mountain worship and water rituals. Additionally, it may have been a ritual shrine linked to the nearby Inka shrine of Kipia, on a ridge just to the south, and along the prehistoric (and modern day) route which leads to the Callejon de Huaylas.
Our excavations revealed that by the Late Preceramic, a number of ritual chambers associated with the Kotosh or Mito tradition of the central highlands were constructed and utilized at the site. The two basin mounds were originally erected during this time period. As the original Kotosh structures were no longer used, they were ritually sealed off before new structures were built over the original in a process known as “Ritual Entombment.” The dominant mound at the site (Kareycoto) eventually reached 17 m in height (along a 250 m long platform) during this building phase, while the smaller mound (Achhipucoto) reached 10 m in height. These two large mounds, known as huacas, had prominent positions within the basin. The larger mound of Kareycoto has a central location on the basin. It can be seen from all vantage points when entering the basin and is surrounded by prehistoric terraces and modern day agricultural fields. The smaller mound, known as “Achhipucoto,” is aligned along a north-south axis with Kareycoto and the mound known as “Kunka” located on the domestic ridge-line.

By the following Early Horizon Period there is a significant period of reuse within the basin. A massive hilltop fortress is built during this time on the western ridge-top overlooking the Cosma drainage. This corresponds to a considerable amount of reuse on the larger Kareycoto mound. This peak in ritual activity by the late Early Horizon is associated with evidence for feasting, and the placing of infants and fetuses along with the burning and smashing of offerings such as elaborately decorated bowls, ocean shells, slate points, panpipes, and spindle-whorls. Of the 10 sub-adult burials, 8 were secondary, meaning they had been originally located elsewhere before being reburied on the mound top, and at least three different burial practices were noted, indicating that people with differing religious traditions were visiting the Cosma basin for the interment of their dead. Along with the mound burials, a small chullpa, or above ground chamber tomb, was added to the landscape just off the foot path at the mound entrance. Chullpa date at least to the Early Intermediate Period (200 BCE-600 CE) but are more commonly associated with the Middle
Horizon (800-1000 CE). These tomb types are specific for acting as territorial markers for ayllu (or familial kinship) groups in the past, as they were utilized to house malquis, or the mummy bundles of revered ancestors (Herrera 2007). The open access of the chullpas allowed for members to visit and care for the mummies, while also bringing them out to include in rituals and festivals throughout the year (DeLeonardis and Lau 2004; Moore 1996). Other contemporaneous tomb types exist within the basin; however, they lack the open access of the chullpa. The placement of the only chullpa in the basin associated with the earlier mound illustrates a recognition of the sacred by the Middle Horizon people of the basin to claim and practice their ancestor worship with the sacred elements of the landscape.

By the Middle Horizon and succeeding Late Intermediate Period, the smaller mound on the basin is extensively reoccupied for the purposes of burial. The top strata on the mound is associated with large episodes of burning. Several intrusive chamber tombs had been looted in antiquity, but our team was able to recover the remains and associated artifacts with a high-status individual associated with coastal variant styles, and other items, such as copper disks and a wooden artifact. The presence of these high-status coastal goods so far up into the mountains speaks to the importance of the Cosma basin in antiquity, specifically for trade wares down the coast coming from the Quechua ecozone. By the Late Intermediate Period, coastal groups were claiming ties to the ancestral landscape by burying their dead in the earlier mounds. This connection is corroborated by the North-south alignment of the mounds with the third Kunka zone associated with the later ceramic wares and domestic area at the site.

By the Late Horizon, the southern ridge-top was significantly modified by the Inca. Specifically the site of Cajarumi, which is composed of a sector of subterranean tombs, followed by a number of carved granite boulders. This site is located near one of the natural springs which trickle
down the mountain to form the Cosma River. The carvings and locations of the boulders have been interpreted by scholars (Advincula and Chirinos 2000; Lau 2016) as schematic maps of the local topography associated with water rituals. As Salomon had noted for the small village of Rapaz, most of the ritual practice addressed the smaller, closer mountains whose bodies governed the local flows of water (2017; 28). Kevin Lane’s work in the region, specifically his survey and excavation work in the puna and janca ecozones around Pamparomás, illustrated a community based bottom-up approach for community water of organization and power. His work hypothesized that these were small communal, non-state managed complexes, at least during the Late Intermediate Period (Lane, 2009). As per Salomon, for many places in the Andes the flow of water and the governance of that water became the basis for ritual and social organization (2017; 31).

The site of Cajarumi is still utilized today as a shared meeting space between the communities of Cosma and Pamparomás. Both these towns were originally part of the Huaylas district, before the districts were split after the War of the Pacific. The boundary line between the two provinces/districts currently exists along the center of the Cajarumi ridge. Despite this the people between Cosma and the hamlets associated with Pamparomás are friendly with one another, often meeting throughout the year for trade, fiestas, and intermarriage.

The number of people who travel back and forth between the towns for their respective festivals is many (in Cosma, those walking the road will often leave at 4 am in order to make it to the Pamparomás side in time for the soccer matches). In fact, the two communities have an understanding and shared respect/care for the Cajarumi site. Every November 14th, they meet on the ridge in front of the site, and while participating in a faena, work together to clean the boulders and tombs of encroaching vegetation and any damage which may have been caused by the wild bulls/cows and stray donkeys. In 2016 the two communities came together to “construct” a soccer
field on the flat part of the ridge just to the west of the start of the site. Huayno music was played, while the communities participated in drinking, dancing, and some rounds of soccer. The mayors from both districts attended this event and negotiated the upkeep for the newly constructed field and subsequent matches every year.

During the historic/colonial period as well as modern day, Cosma has retained its weight as an important center for the surrounding region (specifically in the Cáceres District). While historic maps and archaeological sites illustrate that other centers existed at the time the Spanish arrived in Ancash, historic documents show that Cosma was the first town established in the area during the Colonial Period (Gambini 1975). Records indicate that in 1714, Cosma was purchased by local inhabitants of the basin as an estancia while the rest of the district lands would fall under the control of the Jimbe Hacienda. These estancias were “independent small-holds” or “hemmed in hamlets.” They included elected mayors (alcalde) as authority figures for each community (Thurner 1997: 91). Along with this early founding and relative early independence from the hacienda system, the annual patron saint’s festival is the largest for the district.

This festival, in honor of Cosma’s patron saint of San Lorenzo, or Saint Lawrence, takes place August 8–11 each year. People come in from all over the region, and family members who now live in Chimbote, Lima, the United States, and Europe will often fly in for the week of festivities. The week-long party includes castillo fireworks, nightly dances, daily (and nightly) drinking circles, a live brass band, soccer matches, bull runs, indigenous dancers (danzantes), and a pop-up market which forms in the town’s central plaza. In addition to this market, food vendors

---

6 This was determined by speaking to spectators/outsiders who came to Cosma for the annual festival, as well as local people from neighboring communities that host their own saints festivals. Even in the district capital of Jimbe, there is talk of the “Cosma festival” throughout the year being one of the biggest and most entertaining for the district.
come in from Jimbe, Chimbote, and Pamparomás, and numerous local houses open up menus to feed the number of non-locals who come in for the event. It is during this time that the small village of about 100 people expands to a bustling community of hundreds of people. The houses that sit empty throughout the year are re-inhabited by distant family members, former owners who now live elsewhere, or are rented out as hospedajes to visitors.

The Cosma festival more than any other event structures the community and familial relationships. Peruvian Independence Day, Christmas, Semana Santa, and other traditionally recognized holidays are often ignored throughout the year in Cosma or celebrated with a small meal with immediate family members. It is the festival that structures time, shapes discussions, and reinforces relationships with extended family members and friends. The perceived success of the festival also will determine the success of the upcoming year, and the importance of this festival may stem from the fact that San Lorenzo currently carries the weight and role of the former ancestral “w’aka” or apu of the town—the indigenous beliefs having been supplanted by Catholic figures but holding the same (or similar) roles for the community. By the 1570s, the imagery of Christian saints were perceived by indigenous people of Peru to be “the w’akas of the Spaniards.” During this time period, saints had been fitted into communities as “emblems and divine patrons of pre-existing native groupings and ethnic constituencies.” These saints’ cults then would be supplanted into village life and became a way for local power to be legitimated (Sallnow 1987:52).” It is easy to see how these “w’akas of the Spanish” would have taken the role of the earlier, indigenous w’akas of each local community.

There are many examples of Andean syncretism, and the attempts of the Spanish to wipe out w’akas, ancestral worship, and apu worship early on in the Colonial era. Sallnow however, makes it a point to mention that often the act of planting crosses or building churches or saint’s shrines on
these earlier huacas and “pagan” sites by missionaries were only “confirming in the eyes of the natives the sacred status of these locales (Sallnow 1987; 51).”

While points on the landscape (mountain peaks, especially those associated with apu spirits, or local deities) may contrast with the built monuments, like the church, the hilltop fortress, and the huacas. Huacas in the Andes refer to the indigenous concept of the sacred (Moore, 2010). Though there are different classes of “W’aka” in Andean cosmology, I use the term “Huaca” here to refer specifically to pyramidal constructed forms which protrude out of the landscape. Through their construction and lifetimes huacas take on their own power and agency. They are brought into being, believed to be alive, and have the power to reward, or punish those who interact with them (Janusek 2015). The huacas within the Cosma basin were the earliest public ritual structures built, not only having prominent positions within the basin, but also being the largest and most representative of the native, indigenous (save for the mountain peaks themselves, which surround the Cosma basin).

As Sallnow explains is the case, specifically for pilgrimage cults, “Sacredness must be tapped at a particular spot in the landscape, at a shrine anchored in physical space, it is place bound, part of a unique, historically configured cultural topography and having a particular pattern of groups and peoples with its ambit” (Sallnow 1987; 9). This sacredness is represented throughout the Cosma basin, both by the large multi-tiered mounds, the intricately carved boulders at Cajarumi, and the clustering of huanca and pecked stones on the Kunka ridge-line.

8.3.1 Communal Gathering & Ritual in the Establishment of the Cosma Basin.

Through Cosma’s early founding, and long standing tradition of the construction of Kotosh-Mito structures, the Cosma basin may have successfully reached a regional importance as a persistent landscape during the Preceramic. After all, the mounds were to reach almost their full height (18 and 10 meters) during this time period. Cosma then may have been established and re-visited early on as
a pilgrimage center for the region, or what Werbner (1977) has referred to as “cults of the middle range.” These are cults that are farther reaching than parochial cults, but are typically less inclusive in belief and members than a world religion. For middle range cults, their central places focus around local, sacred geographies, with a ritual topography of their own, defined by the local people themselves as cultural ritual landscapes (Werbner, 1977; ix).

Cosma’s establishment as an early Kotosh-Mito center may have arisen through a neutral ground model. Ideas about the origins of complexity have traditionally focused on economic models of food production, trade and exchange, or conflict. Another model considered here, referred to as communal gathering, is often discussed by anthropologists and archaeologists as an outcome rather than an origin of complex (i.e. non-kin) interactions. The nature of corporation between non-related groups has often been considered in terms of some form of self-interested outcome. Trade must benefit both sides, warfare models typically offer corporation for mutual protection, and irrigation agriculture is a management strategy for the flow of water, but in all these cases social complexity is seen as arising from these “forced” interactions.

The following discussion does not discount that social complexity has various origins across the globe, but where there is evidence for alternative models a thorough consideration is warranted. One model on how complexity developed in an alternate way is summarized by the work at the site of Göbekli Tepe in Turkey. Dating to the pre-pottery Neolithic (9600-8800 BCE), this impressive site has been interpreted as the earliest example of monumental architecture in the world. But under whose direction was this work undertaken?

The lead excavator Klaus Schmidt has suggested that non-local people repeatedly revisited the site to build, feast, and make sacrifices. Many of the animals depicted in the sculptures and reliefs at the site were likely the same ones brought there to ritually slaughter and then eat. Schmidt has also
indicated that these temples and the initiation rites, feasting, and communal building that occurred here formed the origins of complex social behavior. Schmidt’s excavations at this early center have lead him to conclude that “first came the temple, then the city” (2000), implying the religious structures were integral in the communal development of Göbekli Tepe. The evidence is clear that supra-family labor was necessary for the creation of these structures. This type of organization outside of a clearly defined social hierarchy (and without any other indicators of cohesion, intensive agriculture, or objects of trade) suggests that other factors were at work.

In the Andes, an example of early communal labor aggregation for religious constructions can be found in the Zana Valley, specifically, the Nanchoc tradition, dating back to 5700 BCE (Dillehay et al. 1997). Excavations within the Zana Valley have revealed early cemetery mounds constructed well before the adoption of agriculture. In fact, the authors believed the Las Pircas people were still nomadic, only beginning horticultural innovations (Ibid; 46). The construction and use of the Nanchoc mounds may have in actuality come before permanent settlements in the region (55). Dillehay and his team argue that the Nanchoc Valley example illustrates that defining a “universal suite of cultural mechanisms and processes that set the stage for civilization may not be possible” and that any universally claiming hypothesis needs to look at local contexts and take the local ecology, political history and religious beliefs into account. While communal ritual at Göbekli Tepe was structured around the erecting of monumental stones and sacrificial rituals communal ritual life at Nanchoc involved the extraction of lime and burial of individuals. Dillehay et al point out the sense of shared purpose may help non-kin groups bind together, giving them a cohesive bond as a society. In fact, ceremonial places in preindustrial societies were “the first seats of power, exchange and authority” and utilized to organize groups for cooperative purposes (Dillehay et al. 1997; 55).
Communal gathering and the sites of Göbekli Tepe and Nanchoc are discussed above in regards to a consideration of neutral grounds for pre or early sedentary societies. As discussed in Chapter 2, theories on persistent places and the pilgrims that visit neutral grounds from time to time may represent an early form of social complexity as different groups of people or family units learn to collaborate together for the purpose of resource extraction or communal gathering. In this regards, social complexity may consist of three factors:

1) An agreed upon place. A neutral location where non-related groups gather from time to time for the purpose of trade, resource extraction, or shared rituals.

2) The persistence of these places over time includes the cultural and natural “resources” that is valued by the people gathering in these locals.

3) Places like Göbekli Tepe, Nanchoc, and Cosma may have functioned as a “center” or nodal locale for the purpose of communal gathering and the shared construction of ritual spaces.

Cosma’s early founding as a monumental Kotosh-Mito center may have arisen as a neutral ground locale, a place for communal gathering on the regional cult level. While it is believed regional cults do not make an appearance in the Andes until the introduction of the Chavín phenomenon, the Kotosh-Mito tradition may have laid the foundation for this turn in religious complexity. Many Kotosh-Mito sites were subsequently re-occupied as Chavín focused ritual centers during the Early Horizon, and a Kotosh-Mito temple has similarly even been documented at Chavín de Huántar (Contreras 2010). Cosma’s reputation as a prominent Kotosh-Mito complex would have established a localized, sacred topography, easily incorporated as a regional pilgrimage shrine by the developing Chavín regional cult.
The landscape is again re-imagined during the Late Intermediate/Late Horizon, mostly as a domestic hamlet settled around the Cosma ridge-lines. The earlier vestiges of the landscape, however, are re-visited and utilized for the burial of elite individuals associated with Chimu ceramics. The Cajarumi ridge is also established as one specific for the use of water rituals and may have functioned as a communal gathering place for people in the surrounding hamlets. A network of prehistoric roads and other Inca-Colonial shrines have been documented past the Cajarumi ridge on the path to Pamparomás. This path and the location of Cajarumi near the headwaters of the Cosma River could have functioned as a shrine, a node connecting a larger network of pilgrimage associated with mountain worship and water rituals.

As Werbner specifies when discussing middle-range cults, while regional analysis may help to distinguish the local cultural translations done by the resident members of each community, one of its greatest contributions may be the focus played on the “little community” and bringing these smaller centers to the forefront as a way of understanding how people, goods, services and ideas flow (Werbner 1989; 244). Cosma’s history then as a small but relatively stable pilgrimage center was continuously tied into larger religio-networks throughout its use-history.

8.4 Implications of the Study

Archaeological excavations in the Cosma basin is one of the first to establish an empirical basis for the cultural history of the Jimbe branch of the upper Nepeña River valley. No excavations or in-depth surveys had yet to be conducted in the area. Yet, this zone is critical for studying inter-regional interactions (Topic and Topic 1983). Data obtained has shed light on the plurality of identity in zones of dynamic cultural interactions. Specifically, the role that intermediary, or “in between” zones, may play into the socio-political dynamic of larger polities. In the Andes, both ends of the inter-regional interaction spectrum (the highlands and the coast) have been more thoroughly
examined, and work in Cosma has provided a better understanding of the role intermediate zones play within interaction networks, specifically in regards to Late Preclassic religious developments.

Theoretically, prehistoric components from Cosma tie into Rodning’s (2009) concept of “emplacement” and the development of persistent places through neutral ground and community based ritual practices. This dissertation has illustrated that Cosma continued as a small but stable population where monuments of a much larger scale were periodically constructed with the assistance of outsiders from the surrounding region. Persistent place has helped explain the long-term occupation whereby the monuments became part of a venerated landscape.

The presence of highland groups in zones readily accessible from coastal areas has the potential to help Andeanists reassess the conventional categories of sierra and costa. Cosma’s placement in an intermediary zone “off the beaten path” may change the way we look at interaction networks, specifically religious ones. Research in Cosma is imperative in understanding religious complexity and its role in the early socio-political expansions in the central highlands. To date, only a handful of Preclassic sites in the highlands have been excavated. In addition, our understanding of the transition, both temporally and geographically, of the different traditions of ceremonial architecture and visual arts from the Preclassic period into the Initial Period and subsequent Early Horizon is still limited. Excavations at Cosma not only shed light on inter-regional interaction networks, but also on early highland Preclassic religious developments, specifically those of Kotosh-Mito and the transition of private ritualized structures to the more public and spectacular Chavín cult. This work contributes to our understanding of human mobility and the movement of material goods and ideas, in particular the ways through which communal identity is developed, maintained, and negotiated through religious influence. Cosma’s initial founding and consistent occupational sequence will help to develop our understanding of why and how certain places
become persistent throughout millennia, while others fall out of use or influence.

The project bridges the geographic gap in literature for the central Andes through the study of a previously under-represented region. For those past and future scholars working in comparable in-between zones, this research can add to the database of areas neither considered “costa” or “sierra.” Additionally this dissertation research complements theories on persistent place, and archaeological pilgrimage, of which only minimal work has been done on the subjects for the Central Andes. The methods in this research are also unique, in that they include a combination of survey, in order to reconstruct patterns of human occupations longitudinally, and excavations in order to add contextual emphasis to the association between the ceremonial architecture and material culture.

8.5 Future Research and Goals

The future goals of research at the Cosma complex are twofold. First, to continue excavations at Cosma, specifically at the monumental mounds to fully understand the sequence of Kotosh-Mito structures within the basin. To truly answer some of the questions framed throughout this dissertation, more Kotosh-Mito structures need to be excavated to document and classify the different variants in Kotosh-Mito structures throughout the site. Excavations at the Kareycoto mound are essential for understanding the true depth and range of dates for the Preceramic ritual structures in Cosma. Excavations within the agricultural fields and prehistoric terraces which surround the Kareycoto mound are also needed to properly understand the chronological sequence at Cosma not associated with ceremonial constructions, but focused on the more daily, local occupations. In addition to this, further excavations at Kunka, Cajarumi, and the sites of Watsi may also answer questions about the presence of Recuay/EIP groups along the Cosma ridges above the basin.
Future project goals are to expand on the analysis of materials from the 2014-2016 seasons, specifically phytolith and residue analysis. The biological remains may also provide samples for future isotope and DNA analysis. Site delination for protection of the Cosma complex and its archaeological components is another future goal of the project. In addition to delination of the complex through Peru’s Ministry of Culture, protection and preservation of the Kotosh structures, specifically the AC-1 chamber is another proposed part of the Cosma project.

Additionally, continuing the survey work conducted in 2013 and 2016 in order to explore the platform mounds and mortuary complexes in the surrounding upper valley (specifically the Rayan area) is another long-term research goal of PIADCA. As speculated above, several mounds mentioned in this dissertation fit a compositional pattern in line with Kareycoto and Acshipucoto, and may be additional Kotosh-Mito complexes yet to be explored. This future research may help to illucidate the meanings and perception of “Place” within the Andes.
REFERENCES

Allen, Catherine

Advincula, Mario and Ricardo Chirinos

Aldenderfer Mark


Arkursb, Elizabeth and Charles Stanish

Arsenault, Daniel

Baca, Aïcha Bachir and Oscar Daniel Llanos Jacinto

Barreto, Cristiana, Hannah Fernandes & Edithe Pereira

Bauer, Brian and R. Alan Covey

Bauer, Brian and Charles Stanish
2001 Ritual and Pilgrimage in the Ancient Andes: The Island of the Sun and the Moon. University of Texas, Austin, TX.

Baker, B., Dupras, T.L.; and Tocheri, M.W.

Bawden, Garth
1996 The Moche. Wiley-Blackwell Publishing
The Early Intermediate Period Origins of Moche Civilization. 


Benito, José Antonio

Benfer, Robert A. Jr.

Bennett, Wendell

Bettcher, Johanna Katrina
2001 Children and Childhood in Ancient Peru. Master’s Thesis, Department of Anthropology, Trent University, Ontario, Canada.

Bibby, D

Bliege Bird, Rebecca and Eric Smith

Bolin, Inge

Bonnier, Elizabeth
1987 Les Architectures Precéramiques dans la Cordillère des Andes.


Burger, Richard L. and Lucy Salazar Burger


Bria, Rebecca 2017  Ritual, Economy, and the Construction of Community at Ancient Hualcayán (Ancash, Peru). PhD Dissertation, Department of Anthropology, Vanderbilt University, Nashville, TN.


Castillo, Luis Jaime and Santiago Uceda Castillo 2008  The Moche of Northern Perú. In *The Handbook of South American Archaeology*, edited by Helaine Silverman and William Isbell. University of Illinois at Urbana-Champaign, Urbana, IL, USA


Chicoine, David


Chicoine, David and Hugo Ikehara


Chu, Alejandro

Coleman, Simon and John Elsner

Conlee, Christina A., Jahl Dulanto, Carol Mackey, and Charles Stanish

Connerton, Paul

Contreras, Daniel

Cook, Anita and Tiffiny Tung

Cotrina, Jorge, Víctor Peña, Arturo Tandaypan y Elvia Pretell
Covey, Alan

Custred, Glynn

Creamer, Winifred, Alvaro Ruiz Rubio, Jonathan Haas
2007  Archaeological Investigation of Late Archaic Sites (3000-1800 B.C.) in the Pativilca Valley, Peru. *Fieldiana*, New Series No. 40, Published by the Field Museum, Chicago, IL.

Creamer, Winifred, Alvaro Ruiz Rubio, Manuel F. Perales Munguia and Jonathan Haas

Daggett, Cheryl C.

Daggett, Richard E.

1984  The Early Horizon Occupation of the Nepeña Valley, North Central Coast of Peru. PhD dissertation, Department of Anthropology, University of Massachusetts, Amherst.


D’Altroy, Terence, Ana María Lorandi, Verónica I. Williams, Milena Calderari, Christine A. Hastorf, Elizabeth DeMarrais & Melissa B. Hagstrum

Davidson and Gitlitz
DeLeonardis, Lisa and George Lau

Demarrais, Elizabeth, Luis Jaime Castillo and Timothy Early

Di Lernia, Savino and Mary Anne Tafuri

Dillehay, Tom D.


2017 Where the Land Meets the Sea: Fourteen Millennia of Human History at Huaca Prieta, Peru. University of Texas Press, Austin.

Dillehay, Tom, Patricia J. Netherly, and Jack Rossen
1989 Middle Preceramic Public and Residential Sites on the Forested Slope of the Western Andes, Northern Peru. American Antiquity 54: 733–775.

Dillehay, Tom, Jack Rossen and Patricia Netherly

Dillehay, Tom, Carlos Ocampo, José Saavedra, Andre Oliveira Sawakuchi, Rodrigo M. Vega, Mario Pino, Michael B. Collins, Linda Scott Cummings, Iván Arregui, Ximena S. Villagran, Gelvam A. Hartmann, Mauricio Mella, Andrea González, George Dix

DiGiovone, Michael

Donnan, Christopher
Downey, Jordan  

Druc, Isabelle  

Durkheim, Emile  

Eade, John and Sallnow Michael  

Eeckhout, Peter  


Elera, Carlos  
1993  El complejo Cupisniques: antecedents y dessarrollo de us ideologia religiosa. Senri Ethnological Studies, 27, 229-257.


Engel, Frédéric-André  

1963  A Preceramic Settlement on the Central Coast of Peru: Asia, Unit I. Transactions of the American Philosophical Society 53(3).


Espinoza Soriano, Waldemar

Fazekas, I.Gy. and Kósa, F.

Feldman, Robert A.


Fuchs, Peter R., Renate Patzschke, Germán Yenque, and Jesús Briceño

Fung Pineda, Rosa

Fung Pineda, Rosa and Carlos Williams

Gade, Daniel

Gambini, Wilfredo
1975  Monografía de Cáceres, Del Peru–Jimbe (Distrito de la Provincia Del Santa, Dpto. De Ancash)


Gelles, Paul H.

Gero, Joan M.

Ghezzi, Ivan

Ghezzi, Ivan and Clive Ruggles


Girault, Louis

Gose, Peter


Grieder, Terence E.


Grieder, Terence E., and Alberto Bueno Mendoza

Grieder, Terence, Alberto Bueno Mendoza, C. Earle Smith, Jr., and Robert M. Malina
Haas, Jonathan and Winifred Creamer

Haas, Jonathan, Winifred Creamer and Alvaro Ruiz


Halbwachs, Maurice

Harris, Edward

Helmer, Matthew

2015 *The Archaeology of an Ancient Seaside Town: Performance and Community at Samanco, Nepeña Valley, Peru (ca. 500-1 BCE)*. British Archaeological Reports.

Helmer, Matthew, David Chicoine and Hugo Ikehara

Herrera, Alexander


Herrera, Alexander and Kevin Lane


Hiltunen and Gordon McEwan

Holridge, L.

Huayta, Victor Falcon

Ikehara, Hugo


Ikehara, Hugo, and David Chicoine
Ikehara, Hugo, J. Fiorella Paipay, and Koichiro Shibata
2013 Feasting with Zea Mays in the Middle and Late Formative North Coast of Peru. Latin American Antiquity 24(2):217–231.

Ikehara, Hugo, and Koichiro Shibata

Isbell, William

2008 Wari and Tiwanaku: International Identities in the Central Andean Middle Horizon. In The Handbook of South American Archaeology, edited by Helaine Silverman and William Isbell. University of Illinois at Urbana-Champaign, Urbana, IL, USA

Isbell, William and Anita Cook

Isbell, William and Katharina Schrieber

Izumi, Seiichi and Toshihiko Sono

Izumi, Seiichi and Kazuo Terada (editors)

Izumi, Seiichi, Pedro J. Cuculiza, and Chiaki Kano

Janusek, John

Jones, Kimberly
2010 Cupisnique Culture: The Development of Ideology in the Ancient Andes. PhD dissertation, Department of Art and Art History, University of Texas at Austin, Austin.

Jung, Rosa
Kantner, John
2014 A Tale of Two Pilgrimage Centers: Chaco and Nasca. Presentation in the SAR Membership Lecture Series, on March 27, 2014.
https://www.youtube.com/watch?v=RXL5mQemYC0

Kantner, John and Kevin Vaughan

Kaulicke, Peter R.

Kazuo, Terada
1982 Excavations at Huaca de la Luna in the Cajamarca Valley, Peru, 1979 (edited with Onuki, Y.). University of Tokyo Press, Tokyo.

Keatinge, Richard

Kembel, Silvia Rodriguez


Kembel, Silvia Rodriguez and Herbert Haas

Kembel, Silvia Rodriguez, and John W. Rick
2004 Building Authority at Chavín De Huántar: Models of Social Organization and Development in the Initial Period and Early Horizon.

Knapp, Bernard and Wendy Ashmore

Kosok, Paul
Lane, Kevin


2011 Engineered Worlds: Community, Technology and Landscape in the Ancient Andes.


Lane, Kevin y Milton Luján
2011 Arquitectura Prehispánica Tardía: Construcción y Poder en los Andes Centrales. Universidad Católica Sedes Sapientiae, Fondo Editorial

Lanning, Edward P.


Larco Hoyle, Rafael
1941 Los Cupisniques. Casa Editora La Crónica y Variedades, Lima.


Lathrap, Donald

Lau, George


Lewis, M.E.

Littleton, Judith and Henry Allen

Lumbreras, Luis G.

1974  *The Peoples and Cultures of Ancient Peru*. Smithsonian Institution Press, Washington, DC.


Lynch, Thomas F.


Mackey, Carol J. and Alexandra M. Ulana Klymyshyn

Malpass, Michael


Marcone, Giancarlo

Marcone, Giancarlo and Enrique Lopez-Hurtado

Martiarena, Laurie

Matsumoto, Yuichi

Matsuzawa, Tsugio

Matsuzawa, Tsugio and Izumi Shimada

Mayer, Enrique
1979  *Land Use in the Andes: Ecology and Agriculture in the Mantaro Valley of Peru, with Special Reference to Potatoes*. Centro Internacional de la Papa. Social Science Unit Publication. Lima.

Mayell, Hillary
2001  *Pilgrimage Route Uncovered at South America's Lake Titicaca*. National Geographic News.

Maza, Jesus
2017  Informe Técnico Arqueológico: Reconocimiento arqueológico al canal Huiru Catac y sitios arqueológicos periféricos
Millaire, Jean-Francois


Mills, Barbara and Rafael Vega-Centeno

Montoya Vera, María

Moore, Christopher and Victor Thompson

Moore, Jerry D.


Moore, Jerry and Carol Mackey
2008 The Chimú. In The Handbook of South American Archaeology, edited by Helaine Silverman and William Isbell. University of Illinois at Urbana-Champaign, Urbana, IL, USA
Moseley, Michael E.


Murra, John

Netherly, Patricia
1977 Local Level Lords of the North Coast of Peru. Cornell University.

Netherly, Patricia J., and Tom D. Dillehay

Nesbitt, Jason

Nesbitt, J., B. Gutierrez, and S. Vasquez

ONERN

Onuki, Yoshio


2016 Las Excavaciones de Kotosh a Través de Memoria Personal. Revistas PUCP, Lima, Peru, 1-17.
Ortloff, Charles, and Michael Moseley

Pacifico, David
2014 Politics: Diversity, Community, and Authority At El Purgatorio, Peru. Dissertation, department of Anthropology, University of Chicago, IL.

Piscitelli, Matthew

Poole, Deborah A.

Pozorski, Sheila and Thomas Pozorski
1987 Early Settlements and Subsistence in the Casma Valley, Peru. University of Iowa Press, Iowa City.


Pozorski, Sheila, Thomas Pozorski, Rosa Marín Jave
2017 Newly Discovered Friezes at the Peruvian Site of Taukachi-Konkán: A Possible Glimpse into Initial Period Cosmology. Latin American Antiquity 28(4):1-17

Pozorski, Shelia, Thomas Pozorski, Bobbie Lovett & Rosa Jave Marín
2016 Huerequeque: An inland outpost of the Initial Period Sechín Alto Polity in the Casma Valley of Peru, Journal of Field Archaeology, 41:4, 428-447,

Pozorski, Thomas

Pozorski, Thomas and Shelia Pozorski


2005  Architecture and Chronology at the Site of Sechin Alto, Casma Valley, Peru. *Journal of Field Archaeology* 30:2: 143-161

2011  The Square-Room Unit as an Emblem of Power and Authority within the Initial Period Sechin Alto Polity, Casma Valley, Peru. *Latin American Antiquity* 22(4):427-451


Purtill, Matthew
2012  *A Persistent Place: A Landscape Approach To The Prehistoric Archaeology Of The Greenlee Tract In Southern Ohio*. Lulu Publishing, Morrisville, NC.

Prieto, Gabriel
2018  The Temple of the Fishermen: Early Ceremonial Architecture at Gramalote, a Residential Settlement of the Second Millennium B.C., North Coast of Peru, *Journal of Field Archaeology*

Proulx, Donald A.


Purtill, Matthew

Quilter, Jeffrey

1989  *Life and Death at Paloma*. University of Iowa Press, Iowa City.


Raimondi, Antonio  

Ramon, Gabriel  

Rasnake, Roger  

Redfield, Robert  

Reinhard, Johan  

Rengifo, Carlos  
2014  Moche social boundaries and settlement dynamics at Cerro Castillo (c. CE 600-1000), Nepeña Valley, Peru. PhD dissertation, Sainsbury Research Unit for the Arts of Africa, Oceana and the Americas, University of East Anglia, Norwich, England.

Renfrew, Colin  

Rice, Prudence  
1987  *Pottery Analysis, a Sourcebook.* The University of Chicago Press, Chicago, IL.

Rick, John W.  


Rick, John and David Lubman

Rick, John and Silvia Rodriguws Kembel

Rick, John W., Christian Mesía, Daniel A. Contreras, Silvia Rodriguez Kembel, Rosa M. Rick, Matt Sayre, and John Wolf.

Rodning, Christopher

Roe, Peter

Rowe, John


Sallnow, Michael

Salomon, Frank
Samaniego, Lorenzo  


Schaefer, M.; Black, S.; and Scheuer, L.  

Schlanger Sarah  

Schlanger, Klaus  

Schreiber, Katharina  

Shady Solis, Ruth  

Shady Solis, Ruth, Jonathan Haas and Winifred Creamer  

Shady Ruth and Carlos Leyva  

Shady, Ruth and Marco Machacuay  

Shibata, Koichiro  


Shimada, Izumi  


Silverblatt, Irene Marsha  

Silverman, Helaine  

1993 Cabuachi in the Ancient Nasca World. Iowa City University of Iowa Press.

Soriano, Augusto

Stanish, Charles
2014 Ancient Andean Political Economy. University of Texas Press; Reprint edition, Austin, TX.

Stanton, Travis W. and Aline Magnoni

Squire, Ephraim
1877 Peru; incidents of travel and exploration in the land of the Incas. Harper & Brothers.

Tello, Julio


Thompson, Donald


Thompson, Victor


Thompson, Victor and Thomas Pluckhahn
2010 Monumentalization and Ritual landscapes at Fort Center in the Lake Okeechobee Basin of South Florida. Journal of Anthropological Archaeology 31:49–65

Thurner, Mark

Topic, John and Theresa Topic


Trever, Lisa

Tuan, Yi Fu

Turner, Victor


Turner, Victor and Edith Turner

Ubelaker, D.H.

Urton, Gary
2017 Inka History in Knots Reading Khipus as Primary Sources. University of Texas Press. Austin, Texas.
Van Buren, Mary

Varón Gabai, Rafael
1996 La Ilusión Del Poder. Institut français d'études andines, Instituto de Estudios Peruanos, Lima, Peru.

Villamarín, Juan and Judith

Vindal Ødegaard, Cecile

Vogel, Melissa

Van Buren, Mary

Van Gennep, Arnold

Von Hagen, Victor
1955 Highway of the Sun. Duell, Sloan and Pearce, Little, Brown, Boston, MA.

Verano, John

Watanabe, Shinya
Wegner, Steven

Weismantel, Mary

Werbner, Pnina

Werbner, Richard


Wesler, Kit

Williams, Carlos

Williams, Ryan and Donna Nash

Willey, Gordon R.

Wilson, David J.

1988 *Prehispanic Settlement Patterns in the Lower Santa Valley Peru: A Regional Perspective on the Origins and Development of Complex North Coast Society*. Smithsonian Institution Press, Washington, DC.

Zuidema, R. Tom

Zuloaga Rada, Marina
APPENDIX A: DATA FROM SALITRE & JIMBE SURFACE SURVEYS

Salitre Area

Seven sites were visited in the Salitre area, all previously documented by Richard Daggett. Of these sites, three were cemeteries, heavily disturbed, with bones scattered on the surface (Figure A.1). Ceramics included wares of varying time periods, including circle and dot (Daggett’s Early Horizon Ware I), and Early Intermediate Period Recuay/Kaolin sherds, as well as Middle Horizon polychrome wares.

![Sites Surveyed](image)

Figure A.1: Sites visited in the Salitre area, 2013 pedestrian survey.

Cemeteries: The three cemeteries were originally numbered sites: PV31-349, PV31-348, and PV31-343. Of these cemeteries, PV-31-348 and PV31-349 had associated platform mounds (Figure A.2). Both these sites were connected through a ridge, and were most likely related in antiquity. At 348, and 349, the platform mounds were located on the highest point of their respective ridge-lines (on
the eastern edge of the sites), the ridges then extended westward. It was on these elongated ridgelines where the cemeteries with the mixed occupation ceramics were located. For PV31-349, or the cemetery ridge-site located to the north, the cemetery and looted activity extend the length of the ridge, or 553 m. Elevation for 349 is 820 masl at the platform mound, down to an average of 770 m along the cemetery ridge. The southern site, PV31-348 extends 385 meters along the ridge. Elevation for 348 is 850 mat the platform mound, down to 750 m at the cemetery (Figure A.3). Both platform mounds were constructed of stone, and built up in a concentric pattern, and dated to the Early Horizon, like those described for the middle and upper valley by Daggett in his 1987 article (Figure A.4). The third cemetery, PV31-343 located at 725 m, and extends 230 m along an isolated ridge. Near the center of this ridge (9° 4' 54.552" S, 78° 9' 32.0652" W) was a low earthen mound construction, which also had been heavily looted/disturbed.

The platform mound sites of 348 and 349. Both mounds are approximately a 15-20 meter walk along the ridge. Yellow circles indicate location of respective mounds, yellow lines along associated lower ridges illustrate the extent of the cemeteries.

Figure A.2: The platform mound sites of PV31-348 and 349 with associated cemetery ridges.
Figure A.3: Pv31-348 mound as seen from PV31-349.

Figure A.4: Collection of surface ceramics found at 349, Early Horizon sherds as well as painted Middle Horizon and press molded ceramics.

PV31-342: Another site visited just west of the three cemetery sites, was the mound of PV31-342, located along the center of a ridge at 760 masl (9° 5' 4.4664" S, 78° 9' 26.7696" W). The mound extends 80 m east-west, by 30 m north-south. Surface elements included exposed single level walls, collapsed rock wall, and ceramics which date into the Early Horizon (mainly circle and dot stamped and incised wares). Additionally, a slate point was documented on the surface, these points have been described previously by Daggett as belonging to the Early Horizon (Daggett 1984: 186).
Finally, the site PV31-276 was re-visited early in July of 2013. This site, located at -9.053601,-78.148912, on a low ridge at an elevation of 840 masl, extends the length of the ridge, or 319 m east-west. It can be seen from the town of Salitre, just to the south and adjacent of the modern day community (Figure 5). It should be noted in Daggett’s original documentation and visiting of the site of 276. He has the reference town listed as “Yana,” however today the community is known as Salitre. Mostly a domestic site, it is broken up by several stone walls, and contains three earthen mounds (Figure A.6). Along the southern edge of the ridge-line appeared to be a heavily looted cemetery, where exposed bones and surface ceramics were littering the surface. The site consisted of numerous surface ceramics, ranging from Daggett’s Early Horizon Phase I wares (stamped and incised circle and dots, small bowls, etc.), to Early Intermediate Period and Middle Horizon ceramic wares (Figure A.7-9). Several kaolin/Recuay and Moche sherds were documented on the surface. On the western edge of the site boundary, along the lower portion of the ridge and along the natural footpath leading up to the site two large boulder matates and a pecked boulder stone were documented. This pecked stone, located at -9.054732,-78.150053, and 820 masl, had its northern face polished, with a number of carved circular indentations of varying depths and widths conforming in a spiral pattern (Figure A.10). Though the purpose of these pecked stones has not yet been determined, several others were documented further up the valley, specifically in the Cosma basin.
Figure A.5: PV31-276 site outside of the town of Saltire. 276 is located along the length of a low ridge or small hill. Along the northwest and southeast slopes of the ridge, numerous looter’s holes associated with cemetery remains were documented both by Richard Daggett in his survey, and in the 2013 survey.

Figure A.6: Close up of the features of the 276 site. Blue marker indicates the large pecked boulder and the clustering of large grinding stones documented along the footpath into the site.
Figure A.7: Assortment of pottery sherds with Casma Incised, Appliqué Nubbin, and Punctate decorations from 276.

Figure A.8: Assortment of painted wares, and polished sherds from the 276 site.
Figure A.9: Shells and lithics photographed at 276.

Figure A.10: Pecked stones and grinding stones along footpath along the western end of 276 site.
Figure A.9-10: Show the large amount of rock fall associated with walls/structures on the 276 ridge. The photo directly above shows a wall which is still standing in some places. Photo taken from one of the elevated earthen mounds, facing southeast.
Figure A.11: Location of two of the earthen mounds, facing east from the third and largest of the mounds.

Figure A.12: Taken from the Salitre Alto ridgeline (facing towards the north), almost the entire 276 ridge can be seen here, earthen mounds and grinding stone/boulder locations have been pointed out by yellow arrows.

Salitre Alto: Located 900 m to the SW of PV31-276 is what Daggett documented as “Salitre Alto,” or the largest of the mound sites he had reported in the upper valley (Figure A.13). Another Early Horizon concentric platform mound site, Salitre Alto was covered in numerous Early Horizon Phase I stamped and incised wares, as well as thousands of collapsed field stones associated with the
concentric walls (Figure A.14). This site sits at the top of a high ridge, 942 masl, overlooking the river, 276, and down the Nepeña valley past the Moro pocket.

Figure A.14: Wall fall associated with the Salitre Alto ridge-top site.

Figure A.15: Collection of Early Horizon sherds documented on the surface of Salitre Alto.
**Quilcay**: Quilcay is located on a flat low ridge 695 masl. The site is a large fortress, which extends 66 m east-west and 40.80 m north-south (Figure A.16). The double walls of the structure include four parapets, and an internal square room on the eastern end of the fortress (Figure A.17). This site shares similarities with the fortresses recorded throughout the Moro pocket by Ikehara, and may mark the boundary for the end of the Moro pocket tradition, and the start of the “upper valley,” at least during the Early Horizon when these fortresses were constructed (Ikehara 2015).

![Figure A.16: Google Earth satellite imagery of the fortress of Quilcay.](image-url)
Jimbe Area Sites

Jimbe is the district capital of the Caceres District. Over the course of 8 non-consecutive days, six separate sites were visited in the Jimbe area. Four of these sites had previously been described by Richard Daggett, while four were sites not yet reported in any literature to date. Six of these sites were small platform mound complexes, two were petroglyphs or isolated carved stones (Figure A.18).
PV31-263 (Jimbe Bajo): The Jimbe Bajo site was first documented by Daggett in his 1984 dissertation as PV31-263 (Figure A.19-20). This site was a heavily looted site of concentric walls arranged around a low earthen mound and associated platform. Located at 9°1'43.65"S, 78°8'53.60"W, at an elevation of 1013 masl, the site takes up the entirety of a low knoll which is attached to the Jimbe ridge (approximately 192 east-west x 125 m north-south.) The platform extends 20x12 meters, and is located on the southern edge of the knoll top. Ceramics included Daggett’s Early Horizon Phase I sherds, rims associated with stamped and incised bowls (Figure A.21). The site was designated “Jimbe Bajo” based on its lower placement on the ridge, and proximity to the modern day town.

Figure A.19: Jimbe Bajo site, facing west.

Figure A.20: Close-up of walls and rock fall at the Jimbe Bajo site.
Huaca Loco: Huaca Loco and the Deer Stone: Just north of the town of Jimbe, a ridge-top mound spotted in google earth was investigated (9° 0'24.57"S, 78° 8'36.85"W). This site had previously not been documented, so it was recorded by our team as “Huaca Loco.” The Huaca Loco site is located a 15 minute hike down an access road located to the northeast of the town of Jimbe at an elevation of 1225 masl. This site is defined as a ridge-top mound and domestic site (Figure A.22). Huaca Loco is littered with ceramics, mostly Formative (1800-900 BCE) as noted by their incising, burnishing, or circle and dot stampings typical of this period (Figure A.23). Composed of four different sectors, defined by the local topography, three separate flat protuberances on the ridge created three circumscribed site concentrations. The largest of these concentrations is the most northerly, and measures 49 x 35 meters. A ridge-top mound, it is surrounded by smaller stone walls and rooms. This area has been badly destroyed by looters. At least one possible subterranean tomb was documented on the ridge to the north of the main sector, described above (Figure A.24). At the base
of the site, along the access road, and now surrounded by a barb wire fence on a private farm a boulder was documented with several carved images (9° 0'26.86"S, 78° 8'27.16"W.) The iconography on the boulder dates to the Formative, and pictured is a sun, mountain, what has been interpreted as a deer, and bird like Figure A, as well as a spiral and humanoid shape (Figure A.24-29.)
Figure A.24: Curved fieldstone wall exposed on the Huaca Loco mound.

Figure A.25: Deer Petroglyph, outside the site of Huaca Loco (PV31-273). The side face of the stone includes a deer, possible other quadruped (bottom right), and mountain (bottom right). The top of the stone is inscribed with other, more abstract designs.
Figure A.26: Close up of bottom figure.

Figure A.27: Side face close up of the main deer and mountain iconography on the “deer stone.”
Yahuarpampa, Etched Stone: Just to the west of Jimbe in the farm hamlet of Yahuarpampa, along a low ridge which overlooks the Jimbe River, a second worked stone was recorded. Located at 9° 1'37.32"S, 78° 8'33.80"W and an elevation of 1025 masl, the boulder is made of granite, and measures 2 meters in height. Unlike the other petroglyphs recorded in the survey these carvings were etched into a large boulder in an undiscernible design (Figure A.30-31). What was discernible however was some distinct shapes, one of which is reminiscent of the coastal Sechín style of the neighboring Casma valley, which dates to 1800-900 BCE. The only other Sechín style stone documented in the valley was at the middle valley site of Kushipampa (Ikehara 2015). The carving on the boulder faced south, towards the location of the river. Currently the boulder is surrounded by avocado fields, and no walls or ceramics were visible exposed on the surface.
Figure A.30: Yahuarpampa, Sechin style carved stone.

Figure A.31: Close-up of main portion of the carving of the Yahuarpampa stone.
PV31-267: Pv31-267 is located outside the community of Huanca, to the south of the town of Jimbe. The site can be found on the western end of the ridge, at an elevation of 1235 masl, at 9° 0'45.93"S, 78° 7'38.80"W. The site is composed of a multi-tiered platform mound and associated walled plazas. The entirety of the complex measures 85 m east-west and 17.60 m north-south. Surface ceramics included wares classified under Daggett’s Early Horizon Phase I sherds, as well as Recuay and Moche painted sherds, and Middle Horizon wares. The site is known locally as “Huaca Grande,” due to the large boulders which are standing upright on the ridge. Two separate stairways were recorded at the site, leading up towards the area of the site associated with the boulders. The site was heavily looted, and though Daggett documented the site as two separate mound concentrations, current interpretation is that the site is one extended complex which extends the majority of the western side of the ridge (Figure A.32-A.40.)

Figure A.32: Site Map illustrating sites: 266, 267, and 304, along with the location of the towns of Huanca and Jimbe.
Figure A.33: PV31-266 site (an extension of 267) taken from PV31-267 mound. The pavilion had been constructed over the main part of the platform mound shortly before the 2013 survey.

Figure A.34: Site elements on the Huaca Grande Ridge.
Figure A.35: Huanca stones located at the 267 “Huaca Grande” site.

Figure A.36: Location of walls and entranceway/stairs at the 267 site. Photo taken facing West-northwest.
Figure A.37: Looter’s hole at the 267 site, broken ceramic sherds and bone fragments can be seen in association.

Figure A.38: Looted Machay at the site (top), and close-up of that same tomb showing broken sherds and bone fragments (bottom).
Figure A.39: Collection of ceramics, shell, and turquoise bead surface artifacts documented on 267.

Figure A.40: Collection of looted ceramics jars, spindle whorls, and figurines from the 267 site. These artifacts were collected from a local who lives in the home at the base of the mound.
Figure A.41: PV31-304, located on the next ridge to the south of the Huanca Grande ridge and site PV31-267. This site included numerous walls, both above and underground, chullpa, and Early Horizon period ceramic wares.

Figure A.42: (Left) the PV31-304 Platform mound, facing east. (Right) Collection of walls associated with the PV31-304 site, running down the southern slope of the ridge.

Figure A.43: Chullpa structures associated with the PV31-304 mound. These structures have been heavily looted/destroyed.
The Colcap Ridge

A half hour drive to the east of Jimbe is the Canchas/Palacio Hirka ridge. Several sites were recorded along this ridge. These sites had not been previously recorded by Daggett, but were first described by Gambini in his 1984 book (Figure A.44).

Rocro: Located just a 30 minute hike to the southwest of the town of Canchas, on a low ridgeline is the site of Rocro. Rocro is defined by megalithic architecture typical of the “fortress sites situated in the lower Moro pocket. From east to west the site measures 570 m across the Colcap ridge (9° 0'13.11"S, 78° 4'58.43"W) (Figure A.45).
This site is made up of a large flat platform, built up from the natural ground level and measuring 57 x 40 m (Figure A.46). Heading west from the platform, the first large terraced wall is seen creating another step, or elevated platform, though this space is incredibly overgrown with local vegetation. Five stone foundations and walls for small one room structures were recorded in this area. Once through, a third elevated platform was reached, however the standing wall in this area measured up to 3 m at its highest point (Figure A.47). Inside this area, four standing huanca stones were recorded, laid out in a square pattern. Two more of these elevated platforms with associated walls were documented to the west before reaching two raised and rounded platforms, with a small lower saddle between them (Figure A.48). The first had a diameter of 35 m, the second larger with a diameter of approximately 80 m. Though the entire site was covered by vegetation and only 4 plainware ceramic sherds were visible on the surface, the architecture of the walls and similar architectural technique to those in the middle valley place its date to the Early Horizon Period (900-200 BCE). Corresponding with at least two other megalithic sites in the upper valley, no evidence presented suggests these are in fact fortress as the colloquial term used by local inhabitants conveys.
Instead, based on comparisons with similar architecture in the middle valley near the town of Moro (see Chapter 3) these massive constructions may represent local shrines combined with some defensive strategy, similar to dzongs (fortress monasteries) from the Tibetan Himalayas.

Figure A.46: The site of Rocro taken from the site of Watsi in the Cosma basin.

Figure A.47: Sampling of walls common at the Rocro site.
Puma Rumi: Continuing along the ridge to the east, directly to the south of the town of Colcap is the site of Puma Rumi. Located at an elevation of 2775 masl at 8°59'40.40"S, 78°3'19.00"W, Puma Rumi is a domestic center which extends up the ridge from the town of Colcap up to the ridge summit (Figure A.49). Small house terraces and associated small walls and rock fill extend up the ridge, however no surface ceramics were observed. A carved granite feline statue which sits in front of the Colcap church was said to be taken from the top of this site (Figure A.50). Due to the fact that no surface materials were observed, a time period cannot be determined for the site, however its proximity to the site of Palacio Hirka, just 300 meters to the east may reveal its association (Figure A.53).
Figure A.49: The top of the Puma Rumi ridge, facing south.

Figure A.50: “Puma” stone outside of the church at Colcap. The townspeople claim they removed it from the top of the Puma Rumi site, on the southern ridge-top.
Figure A.51: Wall foundations at the Puma Rumi site.

Figure A.52: Walls at Puma Rumi
Figure A.53: Relationship between the Puma Rumi and Palacio Hirca sites.

**Palacio Hirka**; Palacio Hirka is a large Early Horizon fortress located at 2750 masl at 8°59'42.19"S, 78° 3'6.97"W. The site resembles the fortresses located in the Moro pocket described by Ikehara (2015), most notably that of Paredones. Palacio Hirka measures 45 x 52 meters, and has an associated platform to the east which measures 84x68 meters (Figure A.54). Only three plainware surface sherds were observed and photographed, none of which were diagnostic. Walls to the fortress measure up to 3 m in height, and are constructed in the pachilla style. A large gateway, was located towards the southern edge of the main wall, when facing the fortress from the plaza area, or the east (Figure A.55-56). Collapsed lintel stones more than 3 m in length were located in front of the structure. Palacio Hirka and the surrounding area, save for the open plaza space was heavily overgrown with vegetation, making the majority of the complex hard to map or describe. What can be discerned however is that what is located inside the walls is elevated higher than both the plaza space, and the area to the outside. It is possible the walls were used more for retention/construction purposes, and not necessarily for protection or defense. Additionally, there
were no observed parapets like at Quilcay, near the Salitre area. The “gateway” did not enter the actual structure, but instead was a feature outside of the main walled compound. Due to the resemblance to the fortress structures in the Moro area, Palacio Hirka is speculated to be associated with the same time period, or the terminal Early Horizon.

Figure A.54: Large open plaza space to the east of the main part of the fortress.

Figure A.55: Entrance/gateway at the Palacio Hirca site
Figure A.56: Backside of the same entryway, with local guide Maximo for scale.

Figure A.57: Stairway leading up to the main entry at Palacio Hirca
Rayán Sites

The town of Rayán is located at 3300 masl and is the last community on the northern edge of the Caceres District. Several sites of different function are located scattered around the community. Three separate funerary areas were documented to the northeast of Rayan.

**Rayán Chullpa 1:** The first, located at 3700 masl (8°54'22.79"S, 78° 6'13.98"W) was on a low ridge and had a clustering of 5 small chullpa (Figure A.60). Chullpa are above ground funerary structures, they can be single chambered, or multi chambered (and leveled), which house the remains and funerary goods of numerous individuals. These style tombs are traditional in the highlands, arising during the Middle Horizon (600-1000 CE). The five chullpa documented here were all single level structures, openings to the northeast, and badly looted with no human remains or ceramics visible.
Figure A.59: Sites documented in the Rayan area.
Figure A.60: Extent of chullpa along the ridge. Road to the right of the ridge heads towards the lagoon/Recuaybamba, and eventually over the Cordillera Negra into Huaylas.
Figure A.61: Photograph of Chullpa recorded on the Rayan ridge.

Figure A.62: Facing southwest towards the Cosma basin and a clustering of chullpa on the Rayan ridge in the foreground.

Figure A.63: Backside of a chullpa at Rayan. The majority of these structures were heavily looted/destroyed.
El Castillo: Also at 3700 masl, but on a steep slope of a larger ridge (8°53'43.81"S, 78°5'17.70"W) to the east of the first clustering of chullpa is a large mortuary monument known by locals as “El Castillo.” Castillo is a large chullpa structure measuring more than 3 m in height, with a base area of approximately 100 m (Figure A.64). This structure is built of large worked field stone, and has several different entrances. On the southern side of the chullpa is an annex with two chambers, both having been looted. The second of these chambers enters into a tunnel measuring 50cm wide, and 3m deep before turning to the left (Figure A.65-68). As the tunnel entrance was so small and could not be explored without excavating, the length and dimensions of the tunnel were lost after its turn to the left.

Figure A.64: The first Castillo at Rayan, facing towards the south.

Figure A.65: Photo of the northwest wing of the Castillo chullpa, facing west. This photo shows the entrance to one of the tunnels/chambers documented within the large Castillo structure.
Figure A.66: Photo taken from within the chamber, illustrating the length of the tunnel (at least 2 m deep).

Figure A.67: At least two separate tunnels/chambers were documented, however one was looted/opened more heavily than the other.
Figure A.68: Photo taken within the chamber/tunnel on the right, showing a small window/opening connecting the two tunnels.

Figure A.69: Collection of walls and structures down the ridge from the Castillo structure.
Figure A.70: Full length of the Castillo, facing towards the southeast, the entirety of the Castillo stretches 91 meters from the top of the “tower” to the bottom walls (length of structure indicated by black arrows).

**Castillo 2:** A smaller “Castillo” was located to the south of the first, again on a flat knolls on what is otherwise a steep hillside. At 3500masl (8° 54′16.17″ S, 78° 5′27.69″ W) this Castillo was more disturbed and showed signs of more collapse. Again with a base area of 100m, the height could not be determined due to all the collapse.

Figure A.71: The backside of the second Castillo, which is noticeably more heavily looted/destroyed than the first.
Figure A.72: The second Castillo at Rayan shared similarities in shape and construction elements with the first. For example, the walls flaring out of the Castillo and extending down the ridge can also be found at Castillo #2.

Cotos: Additionally at Rayan, three separate “cotos” or mound sites were documented on the hike back to town. Due to time restraints they could not be visited in detail, but were GPSed and photographed and show similarities to composition and construction of the Acshipucoto mound located in the Cosma basin (Figure A.72). This mound dates to the Preclassic (3000-1800 BCE) and has evidence of re-use during the Late Initial Period (1100-1250 CE). The coto mounds at Rayan were claimed by locals to have been looted by the former mayor in the 1970s, and white kaolin ceramics, often attributed to the Recuay culture (200-600 CE) of the central highlands were the vessels that were recovered from the looting.

Figure A.73: Map of two of the mound locations at Rayan. The road seen between them is a footpath which leads from the Castillos to the town of Rayan.
Figure A.73: Photo facing southwest towards the two ridgetop mounds at Rayan. This photo also shows the extent of terracing associated with both mounds.

Figure A.74: The lower mound, labeled “Rayan-coto 1” was first recognized through aerial imagery before pedestrian survey. This mound has been heavily modified through terracing and above ground walls.
Figure A.75: The upper mound was pointed out by a local during the 2016 pedestrian survey. This mound exhibits similarities with the Acshipucoto mound in the Cosma basin.

Figure A.76: The second Rayan mound, showing the extent of terracing associated with the slope. Photo taken facing northeast.
Figure A.77: Photo of the ridge directly to the west of the Rayan-chullpas. Located along this ridge several structures can be seen through satellite imagery. The protuberance is a large mound, pointed out by a local during survey. It is on this mound that stone carvings and bones like the stone mortar documented in Cosma are claimed to have been identified on the surface.
Figure B.1: Map of the Cosma basin, with location of sites and activity clusters recorded between 2013-2016

**Huanca and Worked Stones in the Basin**

This section covers the separate types of worked stones which were documented at this part of the site. Kunka is located on the ridgeline overlooking both the Cosma basin to the north, and a branch of the Salitre River to the south. The views to the north include the entirety of the Cosma basin, including the inspiring view of the two large mounds in the basin, set within the picturesque backdrop of the Cordillera Negra Mountains (Figure B.2-B.3). Additionally, the view includes the Colcap ridgeline, where the site of Rocro can be seen on the lowest dip of the ridge. From Kunka, the views to the south include the Cordillera Negra peaks associated with Pamparomás, and a view of the Salitre quebrada down valley.
Figure B.2: Map showing the location of the different worked stones recorded throughout the basin.

Figure B.3: Location of worked stones, huancas, and pecked stones in Sector A and B.
The Kunka area of the southern ridge is unique for its collection of large worked stones. Four separate categories of worked stones can be described for this area, these include: huanca, pecked, tab-worked, and half-moon stones. Huanca stones have previously been discussed in detail, and are often described as literal representations or embodiments of the ancestors (Duviols 1979; Lau 2016). Huancas were placed standing upright, in what were viewed as special places, and they stood typically as territorial markers, to mark shrines or tombs, or placed in agricultural fields (Lau 2016). Lau mentions that for Huanca stones in Ancash, many were placed atop ridgetops or hills, were highly visible and had ‘spectacular views of local landscape (2016:190).’ Seven Huanca stones were documented on the ridge line, with the majority built as part of or associated with walls. One stone specifically, standing upright, is not associated with wall fall, and in an area of Kunka associated with minimal surface walls and rooms (Figure B.4). This stone stands alone in a flat open expanse of the site, measuring 1.5 m in height and 50 cm wide. A granite slab, it looks partially worked and almost human like in form when looking at the stone from the north. It should be noted a Huanca stone is positioned outside the school entrance, which faces the town plaza. It is unknown the original site provenience of this stone.

The second category of worked stones documented in Kunka are the “pecked stones” so called because of the differing patterns made up of small, round, shallow holes or depressions pecked into the rock. Two pecked stones were documented at Kunka, however a third was documented in Sector B, associated with the Acshipucoto mound. This stone was centered directly to the south of Acshipucoto, and consists of four shallow holes of differing widths. The two thicker holes are aligned N-S just like the mounds within the Cosma basin. A third smaller hole is aligned to the N-S of the thicker ones, however a fourth indent is off to the west. These dots may represent a map of the mounds within the landscape, as the four mounds at the site are organized in the same way (Kareycoto and Acshipucoto to the N-S, with the small mound formation at Kunka aligned
with the two basin mounds, however the fourth mounded feature is off to the west of the aligned mounds.

Of the two other pecked stones documented at Kunka, one was documented on a small (roughly 75 cm) slab of worked white granite. The indents are more uniform in size and are fairly shallow. The second pecked stone at Kunka is more impressive. This stone, which is also a slab of granite is shaped into a large half-moon (the third category of worked stone to be discussed below). Originally most likely standing on an end (a similar stone without the peckings was found standing just to the east of this one), this stone was documented fallen with the peckings exposed at the top. At least 39 separate holes were carved into the stone at varying sizes and depths.

It should be noted that during the 2013 survey, a large pecked boulder stone was documented in the Salitre area near the start of the upper valley. Located along a footpath at the entrance of site PV31-276, this boulder stone was associated with two large grinding stones. The pecking on the stone was documented on the western side of the boulder, which slopes down and faces the path leading to the site. PV31-276 is located on a low ridge just to the east of the town of Salitre. This ridge lowers on its western end, making it the easiest way to access the site. PV31-276 had been previously documented by Richard Daggett, and is a ridge-top habitation site with associated cemeteries along the northern and southern edges of the ridge. Several walls, three small earthen mounds, along with Early Horizon through Middle Horizon materials were documented on the surface at the site, including kaolin Recuay sherds. The boulder at 276 is the only other known of, or reported pecked stone in the remainder of the valley.

The third category of worked stone classified during survey were what have been labeled as “half-moon stones.” Once larger boulders, these rocks have been shaped into half-moon shapes, and are buried into the ground with the curve of the “half-moon” sticking out of the ground. Eight
of these shaped rocks have been documented, all but one associated with a wall. Of these eight, one of the largest was also a pecked stone as mentioned above.

Figure B.4 82: The standing huanca stone on the Kunka ridge-line.

Figure B.5: The standing huanca stone on Kunka with the Cosma landscape in the background (facing east).
Figure B.6: Pecked stone in front of the Achipucoto mound.

Figure B.7: Boulder with pecked stones aligned with the Achipucoto mound.
Figure B.8: Pecked stone on Kunka ridge, located to the south of the Acshipucoto mound.

Figure B.9: Close-up of the Kunka pecked stone.
Figure B.10: Curved “moon” stones on the Kunka ridge.

Figure B.13: Curved stones on the Kunka ridge, facing south.
Figure B.14: Grinding stone on the northern slope of Kunka.

Figure B.15: Carved stone examples from the Kunka ridge.
Documented Sites in Cosma.

**Watsi.** The site of Watsi is located at 3600 masl on the eastern ridge overlooking the Cosma basin. Watsi extends 1000 meters east-west along a protruding ridge and has a strategic vantage point of the lower valley, Cordillera Negra Mountains to the north, Cajarumi ridge to the south, Iglesia Hirka ridge to the east, and Palacio Hirka ridge to the north. The site is made up of large (upwards of 3m) walls, constructed with small field stones. Mostly appearing domestic in nature, the lower walls make up circular rooms, one with a well-defined niche still in place. “Underground tombs” were reported by local community members, however only one was documented while on survey. This “tomb”
appeared to have at least two chambers separated by large lintel stones, but had previously been looted.

Figure B.18: Aerial imagery illustrating the extent of the Watsi site. Green square indicates the location of the subterranean tomb/structure recorded at Watsi.

Figure B.19: Walls at Watsi, local field guide Dominicano stands against one of the large walls for scale.
Figure B.20: Example of walls at Watsi.

Figure B.21: Subterranean tomb at Watsi.
Figure B.22: Looted subterranean structure (most likely a tomb) located at the site of Watsi

Figure B.23: Structure located on top of Watsi, small room with lower entrance opening can be seen on the back wall.
Cesurhirka - The site of Cesurhirka is located on the Cajarumi ridge between Cosma and Pamparomás. This site is located to the west of the Cosma/Pamparomás access road by 231 meters. A collection of alternating domestic spaces/walls and open “plaza” fields, the site extends for 385 meters and is located at 3400 masl. Walls are constructed of small field stones, with the tallest measuring a meter and a half in height. Like the site of Watsi, Cesurhirka is overtaken by vegetation, and at times we had to crawl on hands and knees through the brush until a cow path could be reached. Because of the amount of brush covering the majority of the site, no ceramics were recovered during our survey.
Figure B.26: The Cesurhirka site as seen from the Watsi ridge. White arrow indicates the footpath/road to Cajarumi. Yellow bracket shows the extent of the surveyed site. Yellow arrow points to the elevated area of Watsi which included the most walls/structures during survey.

Figure B.27: Example of architectural styles of walls encountered at Cesurhirka.

Ishki Rumi- Ishki Rumi is a large boulder machay site on the top of the Kunka ridge overlooking the Cosma basin. Heavily looted and disturbed by its use as a shelter for grazing animals, several human remains were documented as well as plain surface ceramic sherds. The site is located at 3136 masl and includes two large boulders (hence the name Ishki, in quechua being two,
and Rumi – meaning rock). No architectural elements were recorded at Ishki Rumi, and the area is currently utilized for staking and grazing cattle.

Figure B.28: Open plaza area with associated fallen wall collapse at the Cesurhirka site.

Figure B.29: The large boulder Machay of Ishki Rumi. Photo taken facing east.
Figure B.30: Human remains inside the boulder tomb.

Figure B.31: Location of Ishki Rumi in relation to Cajarumi site. The large Ishki Rumi boulder can be seen as a white dot in the above photo.
Cajarumi—The site of Cajarumi is the most documented site in the area. Previously described by and reported on by Gambini (1975), Advincula and Chirinos (2000), Lane (2006), Martierina (2014), and Lau (2016), the site sits on the border between the town of Cosma and the dividing line of the Caceres District and District of Huaylas (Pamparomás). Cajarumi is located at 3600 masl and as its name suggests (Caja = box, Rumi = stone), it is well known for its stone carved boulders. This site features several subterranean stone-lined tombs, as well as intricately carved boulders. These boulders have been carved with channels, square depressions, and what has been interpreted as the shape of local topography (Lau, 2016). No surface ceramics were recovered during our survey of the site, but it was previously excavated by Advincula and Chirinos as an Inca occupation. Several stairways connect the stone carved area of the site with the sector which included the stone-lined tombs, and it is located just to the east of the trail which connects Cosma to Pamparomás.

Figure B.32: Architectural elements at Cajarumi. Top left: Stairway documented at the site. Top right: Informal walls associated with boulders. Bottom left: Entrance to one of the two subterranean tombs documented on the ridge. Bottom right: Inside one of these tomb structures.
Figure B.33: One of the large worked boulders at the Cajarumi site.

Figure B.34: The top of a large worked boulder buried beneath the surface.
Figure B.35: Huge boulder at Cajarumi with worked square design on top. This boulder also featured a large slab, which may of at one point covered the chamber on top. Person can be seen sitting on top near the carved chamber for scale.

Figure B.36: The same boulder from Figure B.35, taken from the top looking into the chamber and slab covering.
Figure B.37: Oblique view deeper into the chamber.

Figure B.38: Carved boulder further up the Cajarumi ridge. While the other boulders mainly have the simplistic square design, this one features different elements, including “radiating line,” deeper chambers and has its own “topographic affect.” This boulder has been interpreted as a possible representative map of the area and utilized in water rituals associated with the valley headwaters (Lau, 2016).
Iglesia Hirka—The site of Iglesia Hirka is situated on the western Cosma ridge at 3090 masl. Iglesia Hirka overlooks the Cosma basin, as well as the upper, middle, and lower valley. The Iglesia Hirka site is reminiscent in architectural construction to the Early Horizon “fortresses” located in the Moro pocket, specifically that of Paredones. (Ikehara, personal communication 2013). Large cut stones make up square walls which at their peak measure 3m. The fortress itself measures 50m x 42m and includes three internal circular rooms. The western wall is the lowest, only measuring a half meter in height, this wall opens up to a large flat expanse of open field. Only a hand full of non-diagnostic plainware sherds were collected from the site. As like Watsi and Cesurhirka, the area inside and surrounding the site of Iglesia Hirka is heavily overgrown by thorns, bushes, and large cacti causing poor visibility throughout the site.
Figure B.40: Facing west towards Iglesia Hirca from the western Cosma ridgeline.

The Iglesia Hirca site from lower down the ridge.

Figure B.41: Close up of the eastern face of Iglesia Hirca
Figure B.42: Photo taken from Jimbe on a cloudless day. The shining sun made the polished stone face of the western wall of Iglesia Hirka glimmer so that it could be seen from farther down valley.

Figure B.43: The walls/distinct square shape of the fortress structure can also be seen from the sites of Watsi and Cajarumi, both located across the Cosma basin from Iglesia Hirca.
Figure B.44: From the site of Watsi, the distinct square shape and sharp corners of the Iglesia Hirca site can be made out. Photo taken facing west.

Figure B.45: Google Earth aerial imagery of the Iglesia Hirca site. Imagery date is from 2012, which shows the three circular rooms/structures inside the site.
Figure B.46: Plan map of the Iglesia Hirca site indicating the apron/platform area on which the fortress was built. The southern wall is illustrated by the dashed line. This wall tapers out the end of the structure with only one-two coursings of stone making up the wall. This may indicate the structure was never finished or was meant to be open at least on one end. This could be supported by the fact that the wall leads into a large open space/associated plaza area.

Figure B.47: North wall of Iglesia Hirca with crew members for scale.
Figure B.48: Close-up of the Iglesia Hirca north wall construction.

Figure B.49: North wall at Iglesia Hirca, yellow arrow indicates fill level/retention materials which can be seen in destroyed sections of the wall.
Figure B.50: While Iglesia Hirca is extremely overgrown with vegetation, the yellow dashed line indicates a level of soil, or the elevated slope of the area inside of the walls. Yellow bracket shows a terrace/apron level which was built up for the construction of the structure.

Figure B.51: Wall collapse from one of the circular structures in the foreground.
APPENDIX C: VESSEL FORMS FROM EXCAVATIONS

Early horizon vessel forms from cosma excavations

Figure C.1: Plate of size variation for bowl subgroup E: Bowl with angular shoulder and constricted mouth.
Figure C.2: Plate of size variation for bowl subgroup A: Shallow bowl with slightly thickened rim which is round in cross-section.
Figure C.3: Plate of size variation for bowl subgroup B: Deep bowl with slightly concave sides.
Figure C.4: Plate of size variation for bowl subgroup C: Semi globular bowl with slightly constricted rim, the lip is beveled.

Figure C.5: Figure illustrating bowl subgroup D: Semi globular bowl thickened rim – lip beveled on the interior.
Figure C.6: Plate of size variation for bowl subgroup F: Bowl with convex sides, slight thickening of the rim, lip is rounded.

Figure C.7: Plate of size variation for bowl subgroup G: Bowl with vertical sides, rim is thickened lip is rounded.
Figure C.8: Plate Variety A: V1 - Plate with Beveled Rim.

Figure C.9: “Plate” Version 2: Bowl with gently outward sloping sides and flat bottom, slightly thickened rim.
Jar Form Varieties, Early Horizon

Figure C.10: Jar, subgroup H: Neckless jar with an unthickened rim, and no pronounced change in the thickness of the wall.

Figure C.11: Jar, subgroup I: Rounded neckless jar with slightly angular shoulder and thickened rim.
Figure C.12: Jar subgroup E: Globular jar with the exterior rim bulging and interior rim beveled.

Figure C.13: Jar, subgroup F: Neckless globular jar, wall expands in thickness at the rim.

Figure C.14: Jar Subgroup G: Globular neckless jar with flattened angular lip.
Figure C.15: Jar Subgroup A: Globular jar with a short flaring neck, rim bulges outward.

Figure C.16: Jar subgroup C: Short necked jar with flared opening and excursive lip.

Figure C.17: Jar subgroup D: Large short necked jar with outward flaring rim which is S curved.
Figure C.18: Necked jar version B1: Large rounded jar with short neck, mostly flared.

Figure C.19: Necked jar version B2: Round short necked jar with flaring neck.
Figure C.20: Necked jar version B3: Jar with vertical short neck, unthickened rim

Figure C.21: Necked jar version B4: Large rounded jar with longer vertical neck, slight flare

Middle Horizon & Late Intermediate Period Varieties

C.22: Necked jar forms, Middle-Horizon styles.
C.23: Necked jar, Middle Horizon style.

C.23: Necked jar and applique, Middle Horizon style.
VITA

Kimberly Munro is an anthropological archaeologist with over a decade of experience working in Peru. In addition to her excavations in the Central Andes, she also spent several years working in CRM for the National Park and National Forest services. Kimberly earned her dual B.A. degree in Anthropology and Religious Studies in 2007 from Florida State University. She also holds a M.S. in Geography (Geographic Information Sciences) from FSU. During her tenure at Louisiana State University, Kimberly has received several grants and fellowships, including the National Science Foundation Dissertation Improvement Grant, National Geographic Waitt Grant, Lewis and Clark Field Research Grant, and the Huel D. Perkins and Dissertation Writing Year Fellowship. She currently works as an instructor at Trinidad State Junior College in southeast Colorado where she lives with her husband and fur family.