

Contents

1	Central Nicaragua: when the center is the periphery	9
1.1	<i>Goals</i>	12
1.2	<i>Research questions</i>	13
1.3	<i>Outline</i>	14
1.4	<i>From past to present</i>	14
2	Narratives of place(s) and time(s)	16
2.1	<i>Narratives of place(s)</i>	17
2.1.1	Geography	17
2.1.2	Geology	18
2.1.3	Geomorphology	20
2.2	<i>Narratives of the past and past narratives</i>	25
2.2.1	Ceramic chronology of Pacific Nicaragua	26
2.2.2	Ceramic chronology of Caribbean Nicaragua	30
2.2.3	Archaeology and ceramic chronology of central Nicaragua	39
3	Just a matter of time?	52
3.1	<i>Time, archaeology, and oblivion</i>	53
3.2	<i>How the present became the past: things as palimpsests</i>	55
3.3	<i>Incorporated histories</i>	58
3.3.1	We matter	59
3.3.2	Style as the universe of what is possible	61
3.3.3	Step by step: operational sequence	62
3.4	<i>Towards vibrant chronologies</i>	65
4	Fieldwork methods	68
4.1	<i>Sampling strategies in the field</i>	68
4.1.1	Systematic surface survey	70
4.1.2	Methodology for mapping of mounded sites	72
4.1.3	Stratigraphic excavations	74
5	Spatiotemporal dataset	84
5.1	<i>Surface survey results</i>	84
5.2	<i>Mound recording results</i>	89
5.3	<i>Excavated contexts</i>	91
5.3.1	Aguas Buenas	91
5.3.2	Alberto Obando	101
5.3.3	La Aventura	105
5.3.4	Alcides Montiel	110
5.3.5	Barillas	111
5.3.6	Rosa Dolores Oporta	117
5.3.7	Oporta	122
5.3.8	Josefa Ocón Robleto	128
5.4	<i>Radiocarbon dates</i>	131

6 Laboratory methods and techniques for ceramic analysis 137

- 6.1 *Cleaning and storage of materials* 138
- 6.2 *Macrofabric grouping* 139
 - 6.2.1 Sampling for macrofabric grouping 139
 - 6.2.2 Handling of samples 142
 - 6.2.3 Attributes for macrofabric characterization 142
 - 6.2.4 Analytical steps 143
- 6.3 *Technological analysis of macroscopic traces* 146
 - 6.3.1 Sampling for technological grouping 147
 - 6.3.2 Identifying technical gestures: analytical steps 147
- 6.4 *Archaeometric analysis* 149
 - 6.4.1 Sampling for archaeometric analysis 150
 - 6.4.2 Mineralogical characterization 150
- 6.5 *Morpho-stylistic groups* 155
 - 6.5.1 Sampling for morpho-stylistic Groups 155
 - 6.5.2 Analytical steps 155
- 6.6 *Integration of approaches* 156
- 6.7 *Dating techniques* 156
 - 6.7.1 Absolute dating 156
 - 6.7.2 Relative dating 157

7 Ceramic technologies in the valley of Juigalpa 159

- 7.1 *Alberto Obando* 159
 - 7.1.1 Paste analysis 160
 - 7.1.2 Macrotraces of manufacturing practices 163
 - 7.1.3 Morphometric analysis 165
 - 7.1.4 Decorating techniques 165
 - 7.1.5 Ceramic manufacturing sequences at AO 166
- 7.2 *Aguas Buenas* 167
 - 7.2.1 Paste analysis 168
 - 7.2.2 Macrotraces of manufacturing practices 174
 - 7.2.3 Morphometric analysis 177
 - 7.2.4 Decorating techniques 178
 - 7.2.5 Ceramic manufacturing sequences at AB 179
- 7.3 *JOR* 181
 - 7.3.1 Paste analysis 182
 - 7.3.2 Macrotraces of manufacturing practices 186
 - 7.3.3 Morphometric analysis 188
 - 7.3.4 Decorating techniques 189
 - 7.3.5 Ceramic manufacturing sequences at JOR 191
- 7.4 *Oporta* 193
 - 7.4.1 Paste analysis 194
 - 7.4.2 Macrotraces of manufacturing practices 197
 - 7.4.3 Morphometric analysis 199
 - 7.4.4 Decorating techniques 199
 - 7.4.5 Ceramic manufacturing sequences at Oporta 200
- 7.5 *Barillas* 203
 - 7.5.1 Paste analysis 203
 - 7.5.2 Macrotraces of manufacturing practices 206
 - 7.5.3 Morphometric analysis 208
 - 7.5.4 Decorating techniques 208
 - 7.5.5 Ceramic manufacturing sequences at Barillas 209

7.6	<i>Rosa Dolores Oporta</i>	212
7.6.1	Paste analysis	213
7.6.2	Macrotraces of manufacturing practices	216
7.6.3	Morphometric analysis	217
7.6.4	Decorating techniques	218
7.6.5	Ceramic manufacturing sequences at RDO	219
7.7	<i>La Aventura</i>	220
7.7.1	Paste analysis	221
7.7.2	Macrotraces of manufacturing practices	223
7.7.3	Morphometric analysis	224
7.7.4	Decorating techniques	225
7.7.5	Ceramic manufacturing sequences at LA	225
7.8	<i>Contemporary ceramic manufacturing practices</i>	226
8	From traces on sherds to the vitality of human experience	231
8.1	<i>Challenges of composing vibrant chronologies</i>	231
8.2	<i>The vitality of the valley of Juigalpa (cal 300 CE - present)</i>	233
8.2.1	Geometric worlds (cal 300 - 900 CE)	234
8.2.2	Water worlds (cal 900 - 1250 CE)	241
8.2.3	Distant neighbors (cal 1250 - 1450 CE)	247
8.2.4	Micro-histories of violence, resilience, and resistance (cal 1650 - 1900 CE)	250
8.2.5	The solitude of a seemingly disconnected present (cal 1900 CE - today)	253
8.3	<i>Shaking what was taken for granted</i>	254
8.4	<i>Thoughts regarding AMS dating in central Nicaragua</i>	258
8.5	<i>Future research: itineraries in context</i>	259
8.6	<i>Concluding remarks</i>	259

Acknowledgements 262

Appendix 1	266
Appendix 2	268
Appendix 3	270
Appendix 4	272
Appendix 5	274
Appendix 6	294
Appendix 7	348
Appendix 8	350
Appendix 9	359
Appendix 10	375
Appendix 11	389
Appendix 12	401
Appendix 13	417
Appendix 14	424

Bibliography 434