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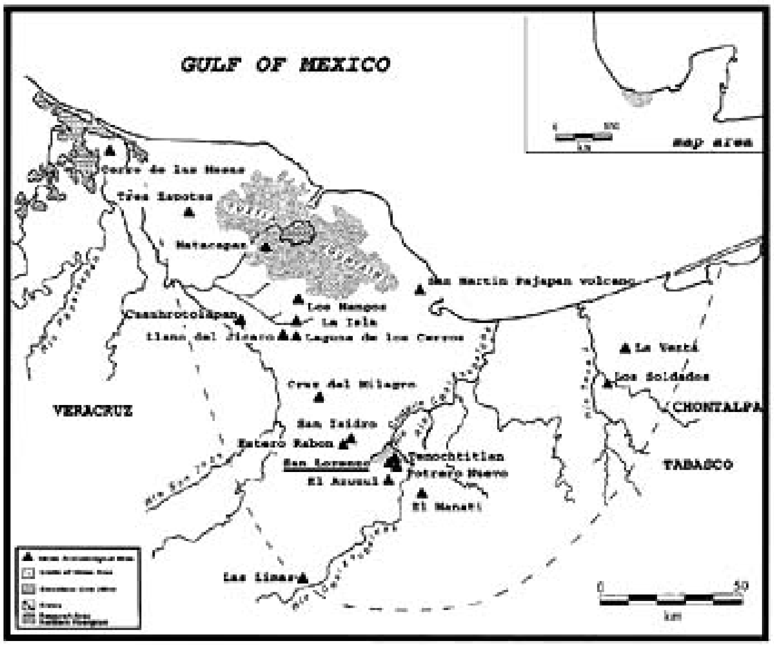
Early and Middle Formative: San Lorenzo, Veracruz, México



Research Year: 2001
Culture: Olmec
Chronology: Pre-Classic
Location: Veracruz, México
Site: San Lorenzo

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Introduction

The rich alluvial floodplains surrounding the Olmec center of San Lorenzo Tenochtitlán, Veracruz, México are dotted with mound sites that are contemporaneous with that center (Lunagómez 1995; Symonds 1995). Over one hundred, perhaps 150, unassuming mound sites are located on the floodplain north and northwest of the Olmec center (Vega 1999). The Río Tatagapa and Río Chiquito define the west, north and east limits of this research area (Figure 1). In 1998, FAMSI-sponsored archaeological excavations were carried out on 15 of the mound sites located in the north and northwest alluvial floodplain (Vega 1998, 1999). Those excavations were carried out under the auspices of the San Lorenzo Tenochtitlán Archaeological Project (SLTAP). The SLTAP also provided funding for the floodplain excavations. The 1998 excavations discovered structural (e.g., house floors) and non-structural (e.g., fire-pits) evidence of pre-Olmec and Olmec habitation (Vega 1998, 1999). These mounds, thus, may represent Early Formative period households located in a landscape that inundates during the wet season. The occurrence of pre-Olmec and Olmec cultural materials within the mounds provides an opportunity to study further the ceramic sequence and chronology of San Lorenzo.

Michael Coe and Richard Diehl (1980) of Yale University developed the first ceramic typology for the Olmec archaeological site of San Lorenzo based on their 1966 to 1968 excavations. They separated the San Lorenzo ceramics into eight individual phases (1980:137-159). Coe and Diehl's chronology for San Lorenzo remains unchanged although recent excavations have been carried out at San Lorenzo. Ann Cyphers of the Universidad National Autónoma de México carried out excavations at San Lorenzo from 1989 to 1996. Cyphers' project incorporated extensive local (e.g., Lunagómez 1995) and regional (e.g., Symonds 1995) surface surveys in the surrounding areas of San Lorenzo. Based on that archaeological research, Symonds, Cyphers, and Lunagómez (2003) have published part of an independent ceramic typology for San Lorenzo. During the 1998 excavations, I used Coe and Diehl's (1980) ceramic typology to date stratigraphic layers and floors/surfaces that were uncovered. This preliminary report describes the method used in the analysis of the materials recovered from the floodplain excavations.

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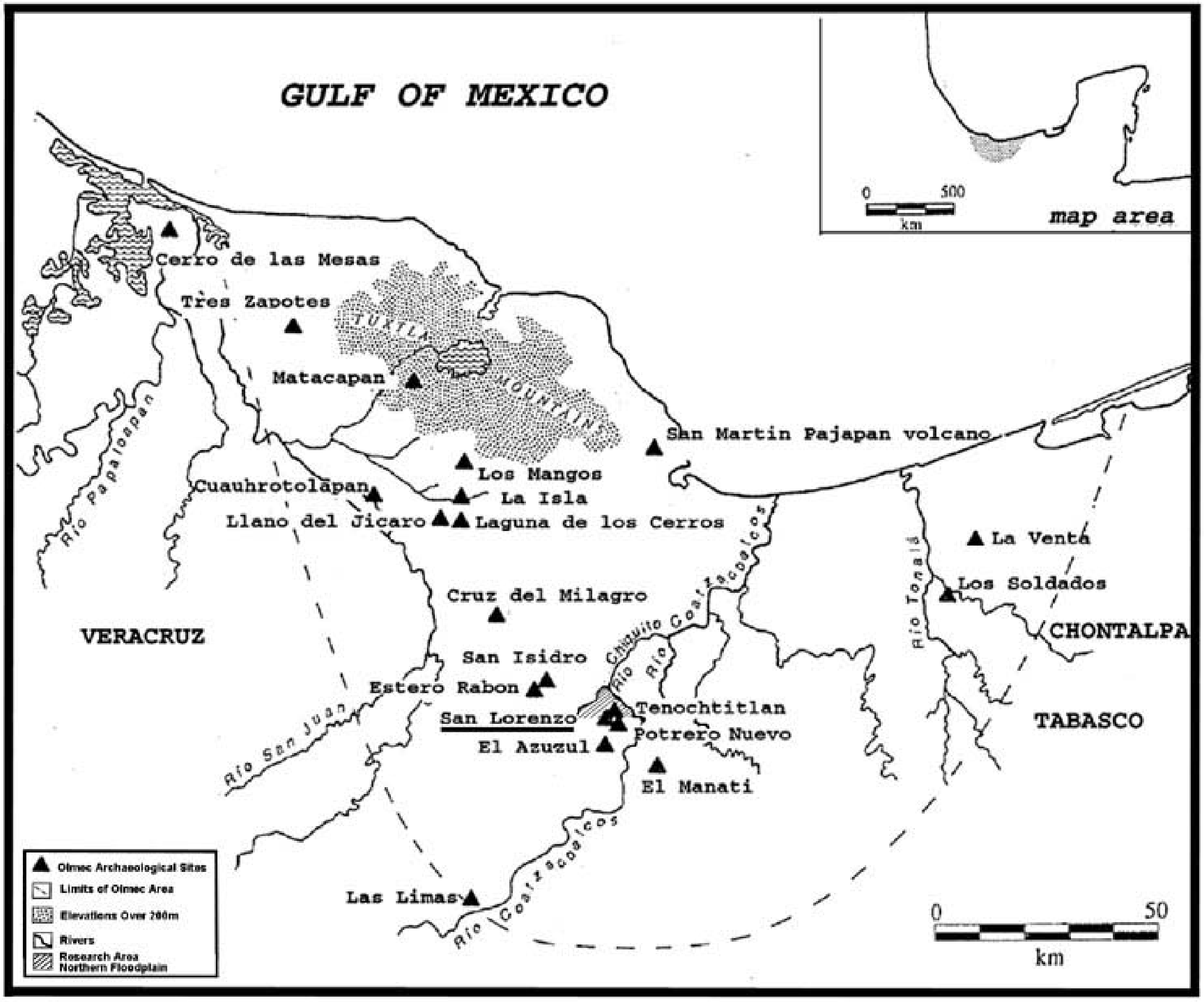

Figure 1. Olmec Archaeological Sites in Southeastern Veracruz, and Western Tabasco, México (After Grove 1997).

Ceramic Analysis

The condition of the floodplain sherds ranges from almost pristine to extremely eroded. This difference in the state of preservation provides an opportunity to study the erosion with the idea of eventually classifying eroded sherds. Normally, eroded sherds are considered unclassifiable, however; eroded sherds themselves constitute a type based on their condition and color. Ann Cyphers (personal communication) also treats eroded sherds as a type. Eroded sherds with a gray paste would thus represent a type. Unfortunately, this can lead to all gray colored sherds with different temper size being lumped into one general category. Noting the differences and similarities in the characteristics of temper can help separate those sherds. Temper characteristics also allow for comparisons with established types or sherds in various states of condition.

Thus, eroded sherds still have enough characteristics that can lead to their appropriate or established type assuming its type is represented in the ceramic assemblage. If the established type of an eroded sherd cannot be determined or defined as a new type, it would remain in the general type.

The majority of sherds occurred in the stratigraphic layers of the test units. I thus analyzed all sherds and not just those associated with features. The type of features discovered in the test units often had a low number of sherds. In some cases, no sherds were present (see Table 1, Table 6, and Table 14). In addition, some of the features were intrusive pits that date to later occupation levels. These intrusive pits could lead to problems in dating earlier features. Furthermore, analyzing all sherds helps track the movement of sherds for determining if the stratigraphic layers are disturbed. Thus, to ignore sherds from the stratigraphic layers would result in the loss of important data. This ceramic analysis therefore attempts to classify as many sherds as possible.

Ceramic analysis was carried out at the UNAM facility in Mapachapa, Veracruz, México with the permission of Dr. Ann Cyphers of the Instituto de Antropología (UNAM). I initially used both typologies as guidelines. I, however, quickly discovered that it is not that simple following established typologies because individual researchers may view a specific characteristic quite differently, especially, when dealing with color. Therefore, I returned to the basics. An assistant and I cleaned all sherds from every test unit before starting analysis. I used Ann Cyphers' cleaning method that incorporates a scalpel and a soft brush. Water tends to remove important surface treatments, such as slip. During the cleaning process, I noted the presence of diagnostic types as well as unique forms and surface decoration. This allowed me to verify observations made in the field.

All sherds from each test unit and their extensions were tended by metric level. Sherds related to features were placed between associated metric levels. The sherds of at least three test units were tended at one time. Those test units either were close to one another or shared the same area. This allowed for ceramic comparisons between test units or mounds. I lightly cleaned the sherds before separating them by surface color and paste. The additional cleaning resulted in finding surface treatments (e.g., red slip) not previously noted. Sherds were next grouped by appearance of temper. The sherds from each metric level and features were studied to identify diagnostic types and forms. The location of the diagnostic types as well as changes in phase was noted. This process allowed me to date specific features and stratigraphic layers as well as divide ceramic into established phases. It will also help me determine if sherds from different stratigraphic layers or occupation levels are mixed. I further noted increases and decreases in sherd frequencies. I compared this information to photographs and drawings of the stratigraphic profiles to determine if changes in sherd frequencies occurred in association with noted features as well as those not noticed during excavations but observable in the profiles. In some cases, I was able to associate the increase in ceramic frequencies to possible surfaces present in the profiles.

I analyzed rims first and then matched body sherds to rim. I used a flat platform with a vertical and horizontal scale to measure rim stance. These measurements were used to draw rim profiles. Modeling clay was used to make a mold of the interior and exterior of the sherd. I used a dissecting needle to trace the outline of the rim. I also used a digital caliper to make sure thickness was correct. This method reveals small changes in the lip of the rim that otherwise would be lost if only a pencil was used. The thickness of the lead tends to obscure small details. In addition to the profiles, the exterior of the all rim sherds, including those without decoration, was drawn. This allows for easy identification for future study. Partial reconstruction of rims was carried out to determine stance. In some cases, reconstruction resulted in complete profiles of vessels. I recorded rim and body sherd characteristics (e.g., color, paste, temper, diameter, form, and decoration). The temper was measured using two pen microscopes with 40x and 20x magnification. Both pen microscopes have internal mm scales. I noted particle size and shape. I used the Wentworth scale and U.S. Bureau of Standards Screen Scale (Wentworth 1922) for determining the particle size of temper; for example, very fine, fine, medium, and coarse. Separation of color was maintained to note variations within possible types. The Munsell Soil Color Chart (revised 2003 edition) was used to determine color. Body sherds with unique shape and decoration were also drawn. The form was noted with the appropriate number. I used Ann Cyphers' number system for form and decoration. I also noted all characteristics of individual body sherds to determine if they match analyzed rims and present typologies. This information will be used to correlate typologies. When no obvious match was found for rims or body sherds, they were treated as a possible new type. Possible new forms were also given a new number. Diagnostic sherds and unique forms will be photographed after analysis is completed. I will also photograph partial and complete vessels.

The described methodology is somewhat redundant and time consuming. However, the redundancy allows for verification of observation made at various points during analysis as well as expands on those observations. Therefore, the system of redundancy allows for a thorough analysis. It also helped maximize my knowledge of floodplain ceramics. More importantly, the knowledge gained expands on previous studies of the San Lorenzo ceramics.

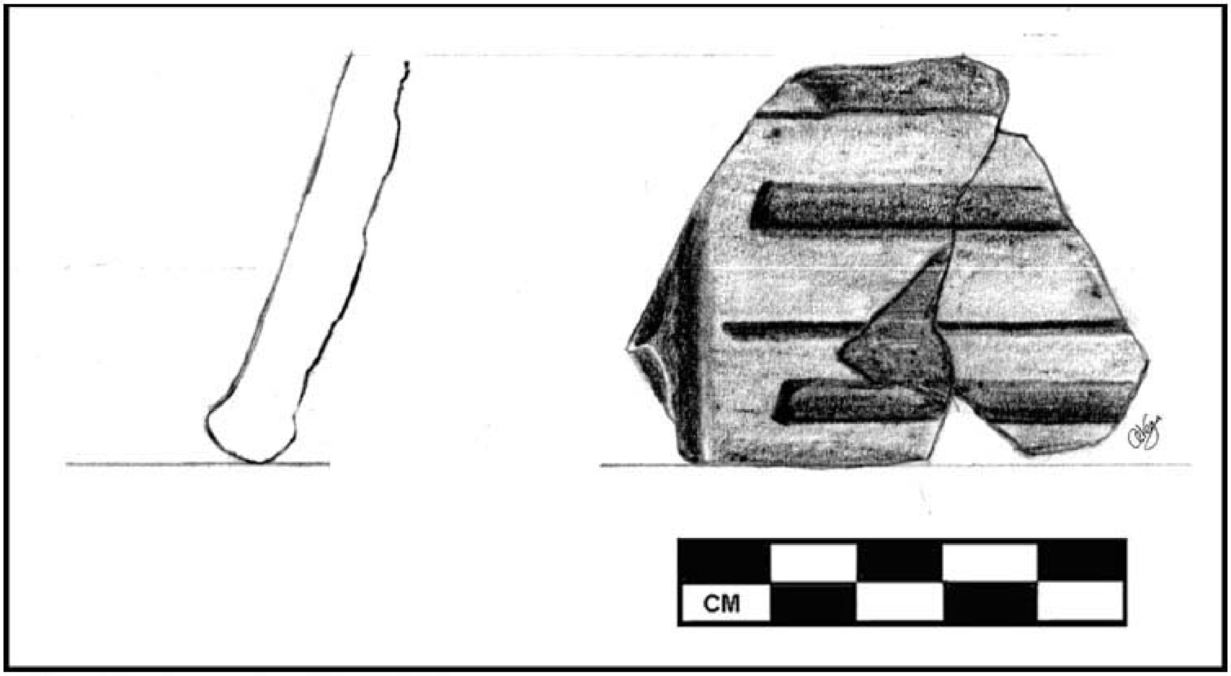

Figure 2. San Lorenzo phase (1150-900 B.C.).

Ceramic Frequencies

I divided the ceramics from the floodplain into 60 types based on the completed analysis. The results of this ceramic analysis are summarized in the frequency tables (see Tables 1 through 30, below). The ceramic frequencies of each test unit are divided according to stratigraphic layer and features. I only included the features that were associated with sherds in the tables. Thus, not all features are listed in the tables. The numbers 1 through 60 identify the individual types. However, these types are temporary until all ceramic analysis is completed. Additional observations made during the analysis of the remaining test units indicate that some of the types could be further divided. That analysis includes 2,135 drawings of profiles and exteriors (Figure 2; Figure 3, Figure 4, Figure 5, Figure 6). These drawings represent five test units. Unfortunately, this analysis remains unfinished. Both typologies (Coe and Diehl 1980; Coe 1981; and Symonds, Cyphers and Lunagómez 2003) are represented in this present typology.

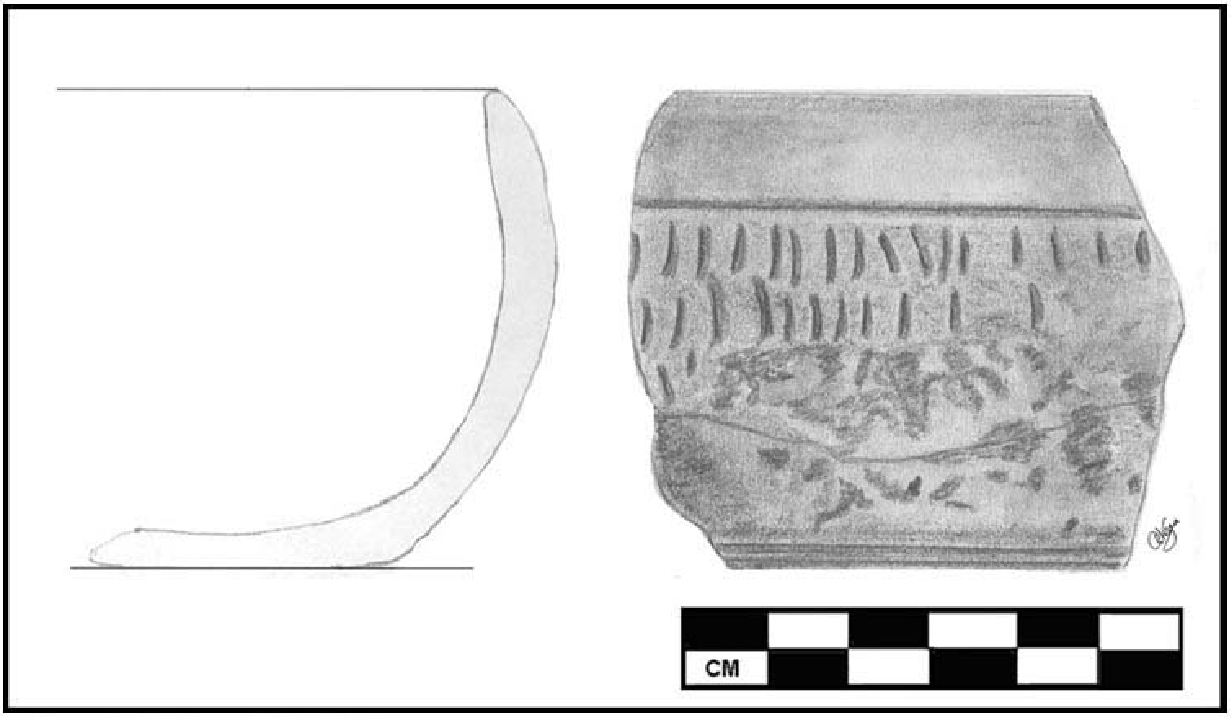

Figure 3. Bajío phase (1350-1250 B.C.).

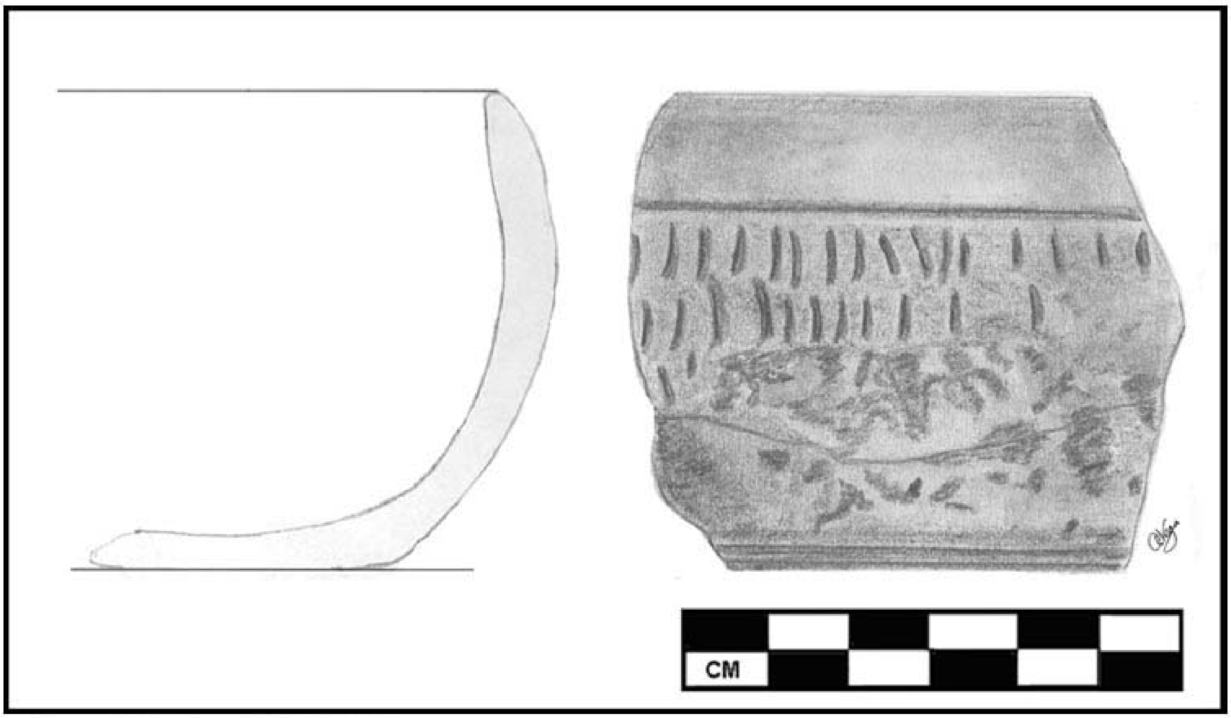

Figure 4. Bajío phase (1350-1250 B.C.).

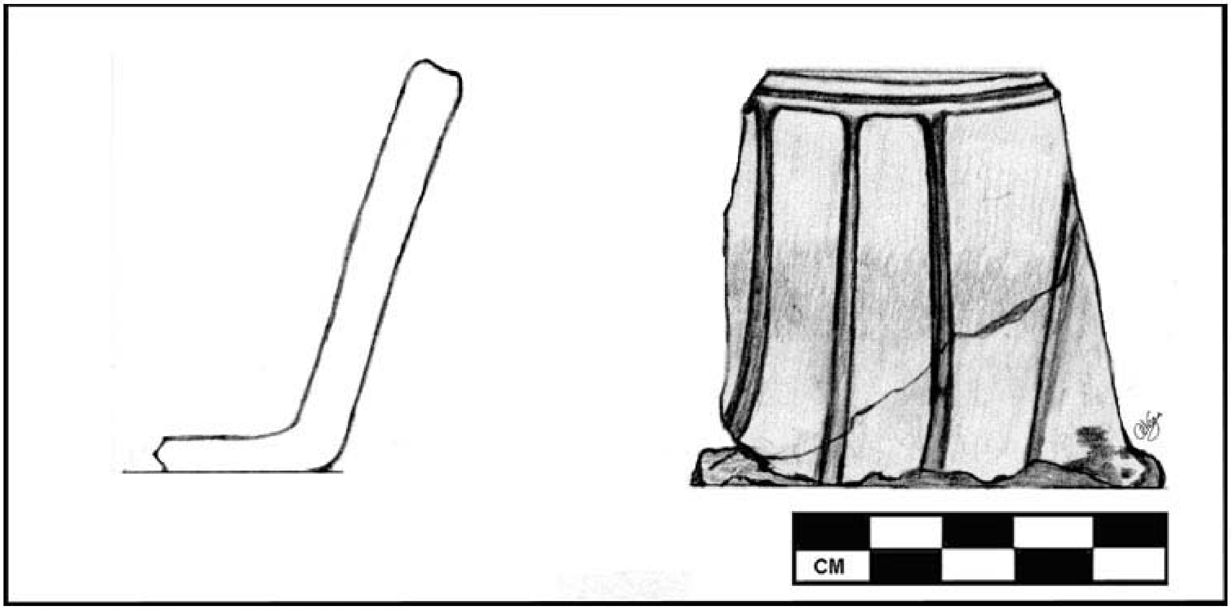

Figure 5. Bajío phase (1350-1250 B.C.).

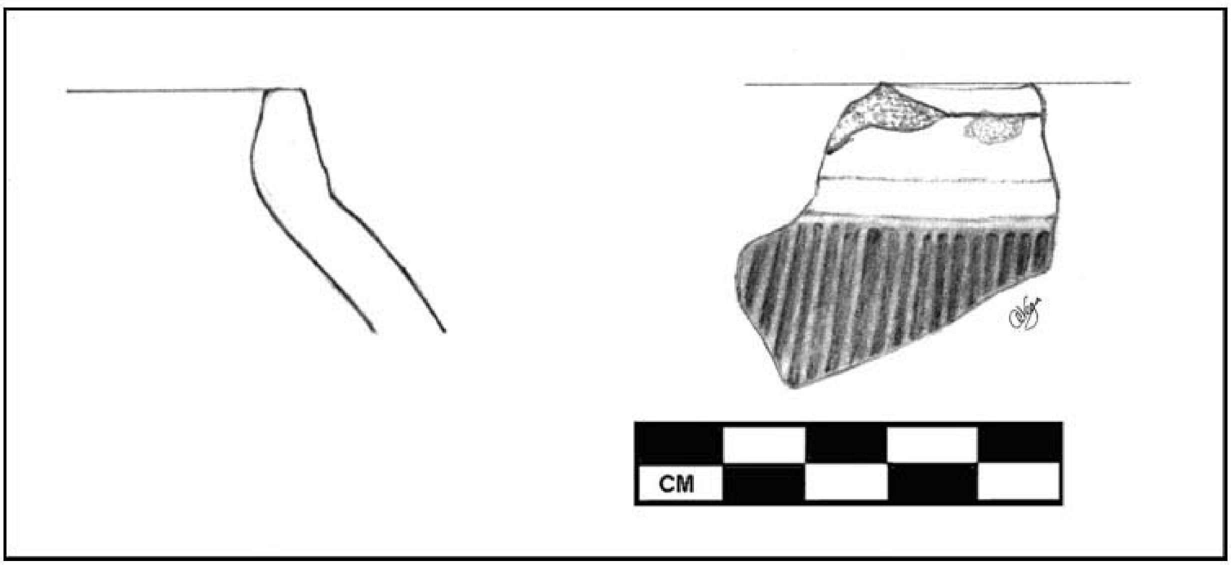

Figure 6. Ojochi phase (1500-1350 B.C.).

Table 1. Test Unit 1: Ceramic Frequencies Stratigraphic Layers and Features				
Stratigraphic Layers & Features	**Body**	**Rim**	**Base**	**Total**
I	390	15	0	405
II	845	37	1	883
III	462	33	12	507
IV	415	23	5	443
IV	327	8	1	336
V	1681	112	10	1803
VI	13	3	0	16
F1	2562	164	27	2753
F5	25	1	0	26
Total	6720	396	56	7172

Table 2. Test Unit 1: Stratigraphic Layers Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
6	4	1	0	5
7	30	11	3	44
8	1	0	0	1
10	32	3	0	35
11	33	8	2	43
12	56	7	0	63
13	105	6	0	111
14	65	4	0	69
15	13	2	0	15
16	254	8	1	263
17	282	13	0	295

18	11	1	2	14
19	10	1	0	11
20	1	0	0	1
21	0	1	1	2
23	8	0	0	8
25	1	0	0	1
28	1	0	0	1
29	105	5	0	110
31	17	1	0	18
32	19	1	0	20
33	116	10	6	132
38	34	2	0	36
39	0	3	1	4
41	8	5	0	13
42	2192	71	0	2263
43	117	6	0	123
47	55	2	1	58
49	50	5	0	55
51	1	2	0	3
52	49	8	0	57
53	40	7	5	52
54	413	36	6	455
56	4	0	1	5
57	5	0	0	5
58	0	1	0	1
59	1	0	0	1
Total	4133	231	29	4393

Table 3. Test Unit 1: Features Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
54	619	59	18	696
60	1	0	0	1
33	21	8	7	36
47	108	6	0	114
43	163	4	0	167
52	5	0	0	5
42	985	31	0	1016
29	95	8	1	104
46	0	7	0	7
28	0	1	0	1
36	2	0	0	2
49	554	25	0	579
25	5	1	0	6
53	19	13	1	33
31	5	2	0	7
12	1	0	0	1
13	1	0	0	1
9	3	0	0	3
Total	2587	165	27	2779

Table 4. Test Unit 1: Stratigraphic Layer IV Feature 1 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
54	618	59	18	695
33	21	8	7	36
47	108	6	0	114
43	162	3	0	165
52	5	0	0	5
42	963	31	0	994
29	95	8	1	104
46	0	7	0	7
28	0	1	0	1
36	2	0	0	2
49	554	25	0	579
25	5	1	0	6
53	19	13	1	33
31	5	2	0	7
12	1	0	0	1
13	1	0	0	1
9	3	0	0	3
Total	2562	164	27	2753

Table 5. Test Unit 1: Stratigraphic Layer VI Feature 5 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
43	1	1	0	2
54	1	0	0	1
42	22	0	0	22
60	1	0	0	1
Total	25	1	0	26

Table 6. Test Unit 4: Ceramic Frequencies Stratigraphic Layers and Features				
Stratigraphic Layers & Features	**Body**	**Rim**	**Base**	**Total**
I	0	0	0	0
II	39	3	0	42
III	923	44	6	973
IV	31	5	1	37
F1	3	1	0	4
F2	162	6	1	169
F3	33	1	1	35
F4	75	1	0	76
F5	25	1	0	26
F7	8	2	0	10
Total	1299	64	9	1372

Table 7. Test Unit 4: Stratigraphic Layers and Features Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
1	1	1	0	2
2	1	0	0	1
3	0	2	0	2
4	2	2	0	4
12	3	1	0	4
13	12	0	0	12
16	14	1	0	15
29	79	8	0	87
31	43	2	1	46
33	124	18	6	148
39	5	0	1	6
41	226	2	0	228
42	575	14	0	589
43	13	0	0	13
47	56	4	0	60
54	82	6	1	89
52	32	1	0	33
49	31	2	0	33
Total	1299	64	9	1372

Table 8. Test Unit 4: Stratigraphic Layer II Feature 1 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
31	0	1	0	1
42	2	0	0	2
47	1	0	0	1
Total	3	1	0	4

Table 9. Test Unit 4: Stratigraphic Layer II Feature 2 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
29	11	1	0	12
31	12	0	0	12
33	19	3	1	23
41	68	1	0	69
42	44	0	0	44
52	4	0	0	4
54	4	1	0	5
Total	162	6	1	169

Table 10. Test Unit 4: Stratigraphic Layer III Feature 3 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
29	9	0	0	9
33	2	1	1	4
42	18	0	0	18
49	4	0	0	4
Total	33	1	1	35

Table 11. Test Unit 4: Stratigraphic Layer III Feature 4 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
42	54	0	0	54
47	12	0	0	12
49	9	1	0	10
Total	75	1	0	76

Table 12. Test Unit 4: Stratigraphic Layer III Feature 5 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
42	25	1	0	26
Total	25	1	0	26

Table 13. Test Unit 4: Stratigraphic Layer IV Feature 7 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
4	2	2	0	4
4	2	0	0	2
4	4	0	0	4
Total	8	2	0	10

Table 14. Test Unit 11: Stratigraphic Layers and Features Ceramic Frequencies				
Stratigraphic Layers & Features	**Body**	**Rim**	**Base**	**Total**
I	26	1	0	27
II	216	20	2	238
III	450	28	9	487
IV	78	6	2	86
V	107	5	6	118
VI	26	0	0	26
F1	130	4	0	134
II/Intrusion	50	3	0	53
F2	18	1	0	19
F3	35	2	0	37
F4	31	4	2	37
F9	9	0	0	9
F10	52	2	1	55
F11	60	4	0	64
F12	243	3	2	248
F13	32	1	0	33
F14	233	11	7	251
F15	1454	86	31	1561
F16	229	21	6	256
Total	3479	202	68	3739

Table 15. Test Unit 11: Stratigraphic Layers Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
13	76	9	1	86
42	442	10	2	454
29	57	5	4	66
51	2	0	0	2
5	4	0	0	4
6	1	0	0	1
10	1	0	0	1
12	21	3	0	24
15	14	1	0	15
16	2	0	0	2
17	7	2	0	9
24	1	0	0	1
23	5	0	0	5
28	1	1	0	2
37	1	0	0	1
41	1	0	0	1
43	16	0	0	16
32	5	0	0	5
36	2	0	0	2
33	105	12	8	125
31	17	1	0	18
52	11	1	0	12
54	105	11	3	119
47	2	0	0	2
49	2	1	0	3
30	2	3	1	6
Total	903	60	19	982

Table 16. Test Unit 11: Features Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
10	4	0	0	4
12	5	0	0	5
13	52	2	1	55
15	8	2	0	10
16	45	2	0	47
17	44	2	0	46
18	4	1	1	6
22	6	1	0	7
27	7	0	0	7
28	8	0	0	8
29	343	17	6	366
31	107	1	0	108
32	148	1	1	150
33	426	63	23	513
34	4	0	1	5
36	13	0	0	13
37	9	0	0	9
39	2	0	0	2
41	2	0	0	2
42	757	26	1	783
43	68	1	0	69
47	11	0	0	11
49	8	1	0	9
51	2	0	0	2
52	245	13	3	261
53	2	0	0	2
54	246	9	2	257
Total	2576	142	39	2757

Table 17. Test Unit 11: Stratigraphic Layer II Feature 1 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
10	4	0	0	4
12	2	0	0	2
13	24	1	0	25
15	6	1	0	7
16	10	0	0	10
17	38	0	0	38
18	1	0	0	1
22	6	1	0	7
29	2	0	0	2
42	32	1	0	33
54	5	0	0	5
Total	130	4	0	134

Table 18. Test Unit 11: Stratigraphic Layer II/Intrusion Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
16	21	1	0	22
29	3	1	0	4
32	0	1	0	1
33	1	0	0	1
42	15	0	0	15
49	1	0	0	1
54	9	0	0	9
Total	50	3	0	53

Table 19. Test Unit 11: Stratigraphic Layer II Feature 2 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
12	1	0	0	1
13	8	1	0	9
16	3	0	0	3
18	1	0	0	1
42	3	0	0	3
54	2	0	0	2
Total	18	1	0	19

Table 20. Test Unit 11: Stratigraphic Layer II Feature 3 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
13	3	0	0	3
15	1	0	0	1
16	3	0	0	3
17	6	1	0	7
18	0	1	0	1
33	6	0	0	6
42	7	0	0	7
54	9	0	0	9
Total	35	2	0	37

Table 21. Test Unit 11: Stratigraphic Layer II Feature 4 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
13	9	0	1	10
15	1	1	0	2
16	6	1	0	7
29	2	1	1	4
33	2	0	0	2
42	10	0	0	10
54	1	1	0	2
Total	31	4	2	37

Table 22. Test Unit 11: Stratigraphic Layer III Feature 9 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
12	1	0	0	1
42	7	0	0	7
54	1	0	0	1
Total	9	0	0	9

Table 23. Test Unit 11: Stratigraphic Layer III Feature 10 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
12	1	0	0	1
13	8	0	0	8
17	0	1	0	1
29	5	0	0	5
32	1	0	0	1
33	1	0	0	1
41	2	0	0	2
42	26	1	0	27
43	3	0	0	3
54	5	0	1	6
Total	52	2	1	55

Table 24. Test Unit 11: Stratigraphic Layer III Feature 11/Floor 1 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
16	2	0	0	2
29	7	1	0	8
33	5	1	0	6
42	36	1	0	37
54	10	1	0	11
Total	60	4	0	64

Table 25. Test Unit 11: Stratigraphic Layer IV Feature 12/FI-3 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
18	2	0	0	2
28	7	0	0	7
29	37	0	1	38
31	16	0	0	16
32	10	0	0	10
33	27	2	1	30
36	1	0	0	1
37	1	0	0	1
39	1	0	0	1
42	110	1	0	111
43	2	0	0	2
47	8	0	0	8
49	6	0	0	6
52	2	0	0	2
54	13	0	0	13
Total	243	3	2	248

Table 26. Test Unit 11: Stratigraphic Layer IV Feature 13 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
29	3	1	0	4
33	5	0	0	5
39	1	0	0	1
42	10	0	0	10
43	10	0	0	10
52	3	0	0	3
Total	32	1	0	33

Table 27. Test Unit 11: Stratigraphic Layer IV Feature 14 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
28	1	0	0	1
29	46	0	2	48
31	5	0	0	5
32	18	0	1	19
33	38	6	4	48
37	3	0	0	3
42	78	1	0	79
43	10	0	0	10
47	2	0	0	2
52	6	0	0	6
54	26	4	0	30
Total	233	11	7	251

Table 28. Test Unit 11: Stratigraphic Layer IV Feature 15 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
18	0	0	1	1
27	1	0	0	1
29	73	5	1	79
31	18	0	0	18
32	5	0	0	5
33	96	19	6	121
34	4	0	1	5
42	127	7	0	134
43	3	0	0	3
47	1	0	0	1
53	2	0	0	2
52	60	2	0	62
54	21	2	0	23
Total	411	35	9	455

Table 29. Test Unit 11: Stratigraphic Layer IV Feature 15 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
27	6	0	0	6
29	130	5	1	136
31	68	1	0	69
32	114	0	0	114
33	235	32	10	277
36	12	0	0	12
37	5	0	0	5
42	185	4	0	189
43	28	0	0	28
51	2	0	0	2
52	120	8	0	128
54	138	1	1	140
Total	1043	51	12	1106

Table 30. Test Unit 11: Stratigraphic Layer IV Feature 16 Ceramic Frequencies by Type				
Type	**Body**	**Rim**	**Base**	**Total**
29	35	3	0	38
33	10	3	2	15
43	12	1	0	13
42	111	10	1	122
49	1	1	0	2
52	54	3	3	60
54	6	0	0	6
Total	229	21	6	256

Figurine Analysis

The floodplain excavations yielded various body parts (e.g., heads, arms and legs) of figurines. Unfortunately, no complete figurines were recovered from the test units. Nonetheless, the body parts still possess useful information about the complete figurine from which it belongs. The condition of the figurine fragments varied from good to poor. The various fragments were thus divided into body parts; head, torso, legs, feet, arms, and hands. These body parts were examined for anatomical and non-anatomical traits. For example, anatomical traits for figurine heads include head shape, eyes, ears, noses, and mouths; whereas, non-anatomical traits of figurines include ornamentation (e.g., bracelets, necklaces, ear spools, and pendants), headdresses, and garments. Each individual trait or element thus has its own characteristics. Body position (e.g., seated, prone, standing, kneeling, and legs crossed) was noted. I also noted surface treatment (e.g., burnishing, slip, paint, and color) and temper characteristics (e.g., particle size and color). These categories and subcategories are a representation of traits and do not include the entire list. The list of categories can grow depending on the traits present on each individual figurine fragment. I measured body parts and broken areas (e.g., arm and leg sockets) with the intention to distinguish legs from arms. Differences in body part lengths and diameters (e.g., arms and legs) as well as other traits (e.g., body position) may represent a specific style. In addition, I drew all four profiles of each figurine fragment. This helps identify the characteristics of the object. Thus, drawing the artifact is an important component of my analysis (Figure 2, Figure 3, Figure 4, Figure 5, Figure 6). The figurine analysis is not complete.

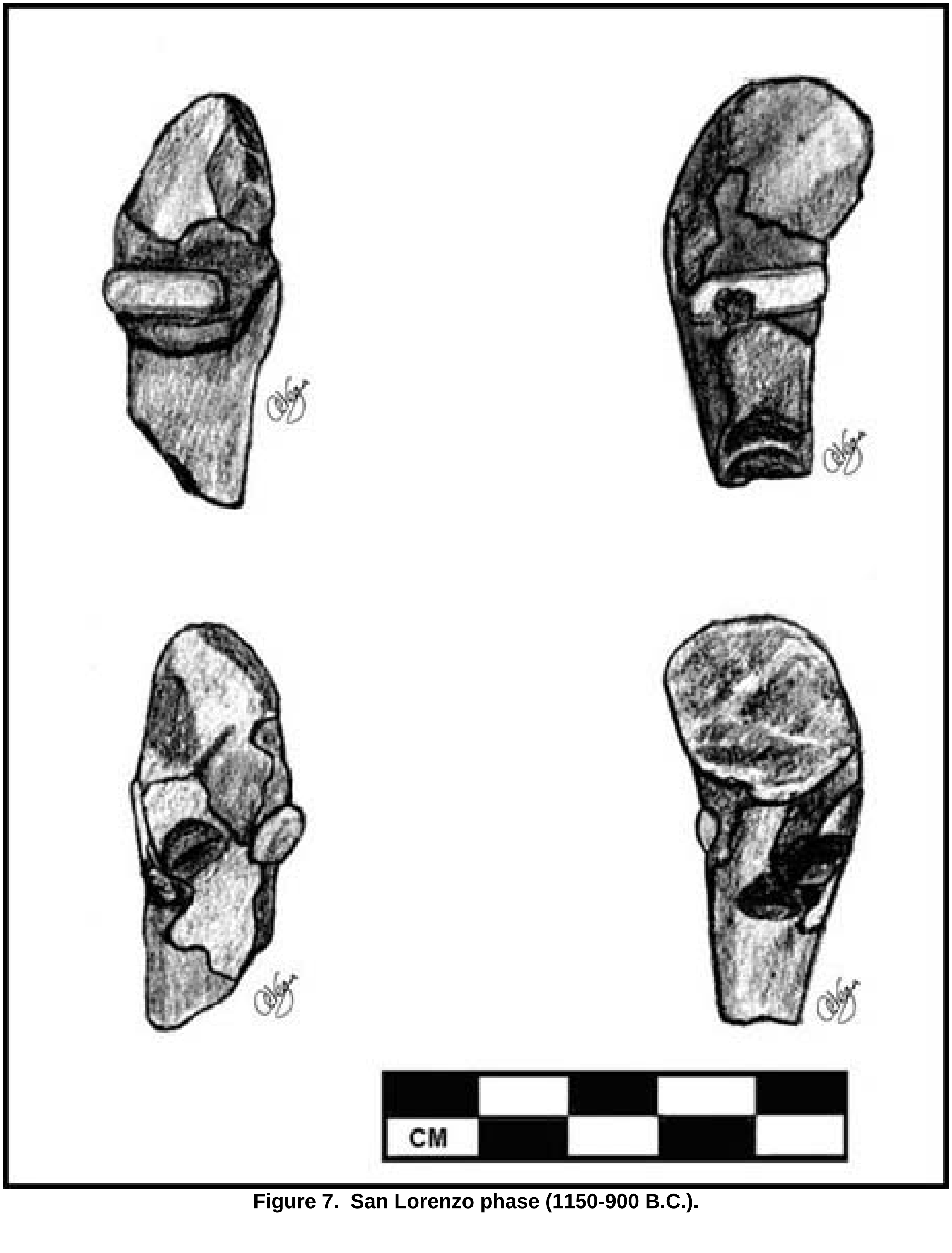

Figure 7. San Lorenzo phase (1150-900 B.C.).

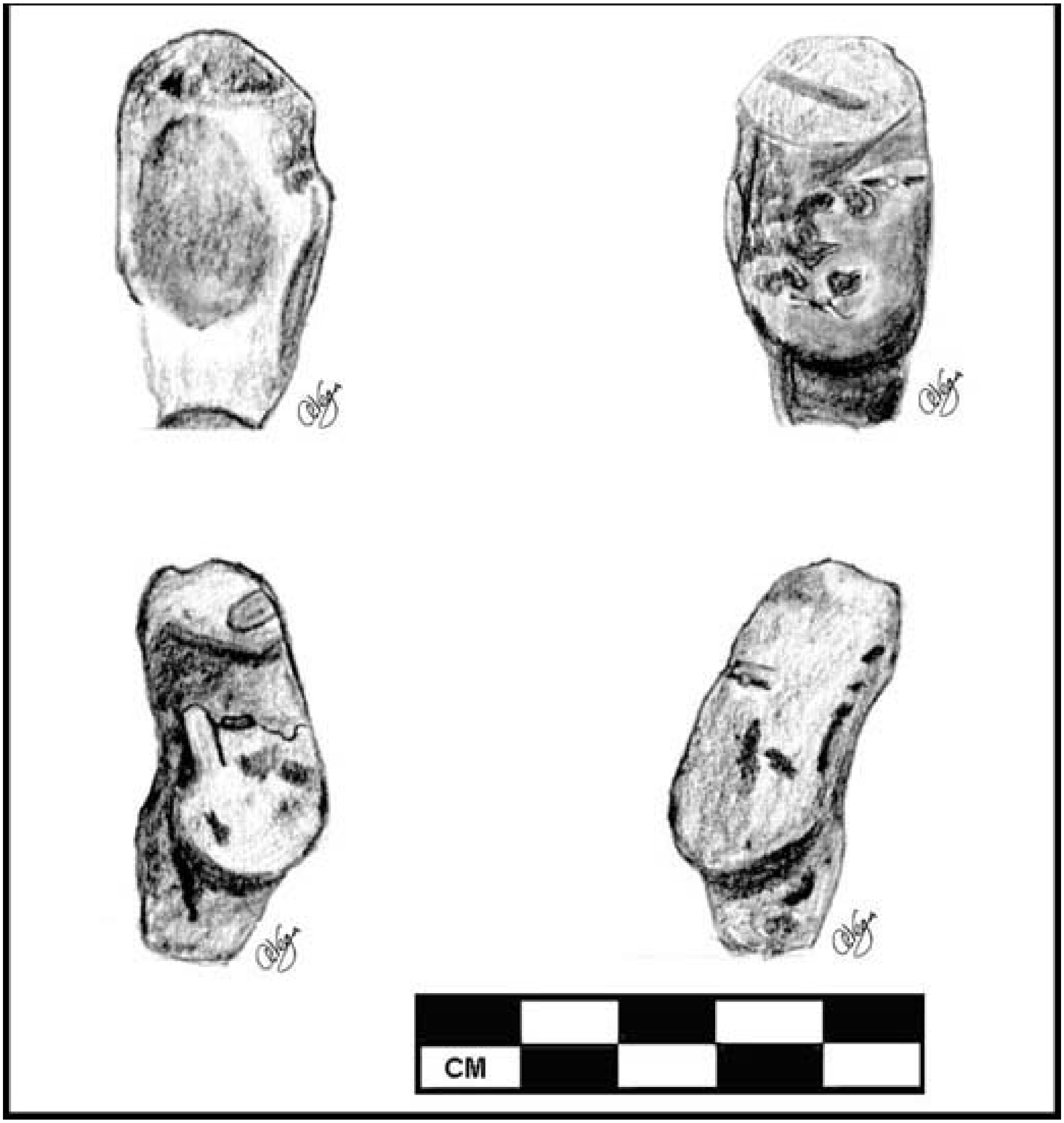

Figure 8. San Lorenzo phase (1150-900 B.C.).

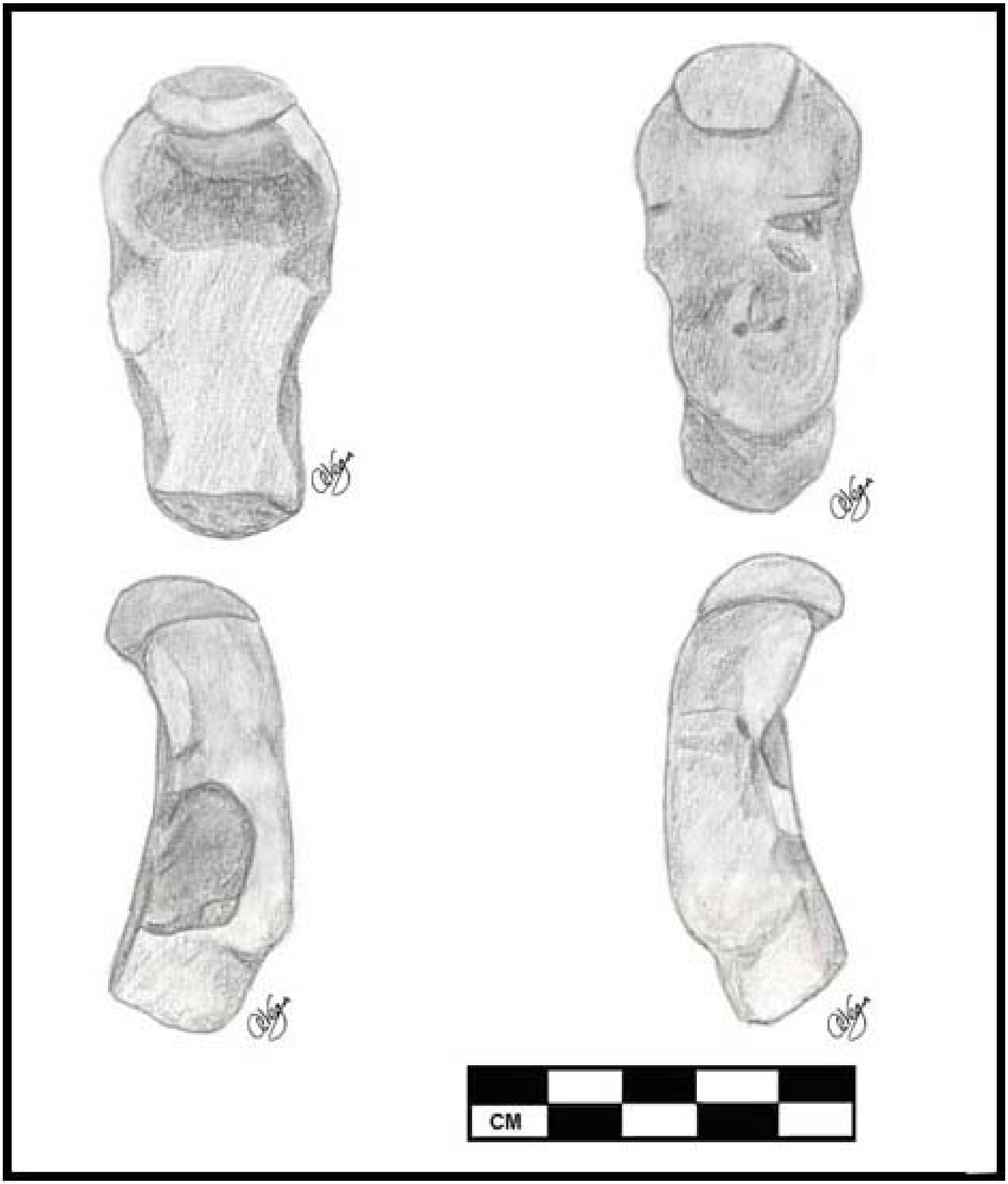

Figure 9. San Lorenzo phase (1150-900 B.C.).

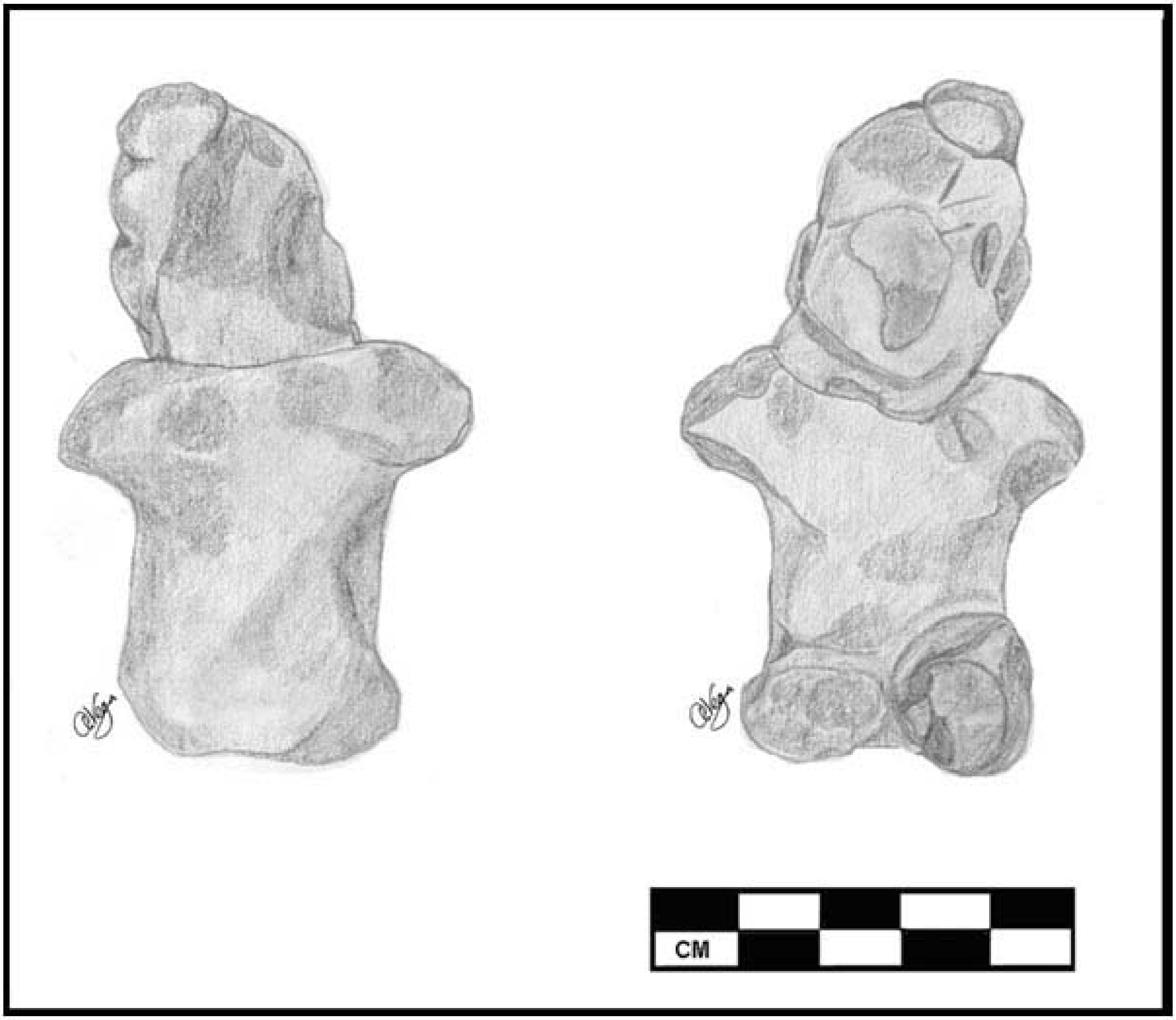

Figure 10. San Lorenzo phase (1150-900 B.C.).

Preliminary Conclusions

The ceramic analysis (14,443 sherds) has confirmed the presence of pre-Olmec and Olmec habitation on the small mound sites that scatter the northern alluvial floodplain of San Lorenzo. I was able to identify Coe and Diehl's (1980:137-159) Ojochi, Bajío, San Lorenzo, Nacaste, Remplás and Villa Alta phases in at least three of the mounds excavated. I have yet to identify the Chicharras or Palangana phases. Coe and Diehl (1980:150) believe that the pottery of the Chicharras phase has complete continuity with the San Lorenzo phase although differential firing and white pottery begins in the Bajío phase. The differences in type and form cited by Coe and Diehl (1980:151) may not represent a new phase but could result from the Bajío phase deposit or sample being too small. Coe and Diehl's excavations thus may have not included all pottery types of the Bajío phase. Based on the preliminary analysis of the floodplain sherds, I believe that the Chicharras phase has enough continuity with the Bajío phase to suggest that pottery types of Chicharras phase may belong with Bajío phase. I also believe that the skill level and technology involved in the manufacturing of pottery during the Ojochi and Bajío phases was equal to that of the San Lorenzo phase. In fact, the inhabitants of the floodplain probably used the same source of sands and clays during the different ceramic phases of San Lorenzo. Thus, form and decoration are better indictors of chronology than temper when dealing with the San Lorenzo ceramics.

The Ojochi and Bajío phase ceramics, in my opinion, have a great sense of style, especially the Bajío phase pottery (Figure 2, Figure 3, Figure 4, Figure 5, Figure 6). The pottery from those phases represents a more naturalistic style. That is, elements associated with the physical environment are reflected in the decoration (e.g., fluting) and/or form (e.g., calabaza) of the ceramics. In contrast, the San Lorenzo phase has pottery that portrays supernatural images or abstracts of the supernatural (e.g., Coe and Diehl's [1980:162-175] Calzadas and Limón Carved-Incised; Symonds, Cyphers, and Lunagómez's [2003] Tigrillo) that are also manifestation of the physical world but reflect a sense of ideology (Figure 2). Differential firing and controlled firing are also present in the floodplain pottery. I would (as did Coe and Diehl 1980:182-184) treat differential and controlled firing as representing two different types. The ceramic analysis of the remaining test units needs to be completed before addressing these possibilities in more detail. Nonetheless, the analyses of the ceramic and other materials from the alluvial floodplain excavations provides an opportunity to further study the changes in the cultural materials of San Lorenzo over time and space. The majority of the materials come from possible pre-Olmec and Olmec habitation or household sites. Thus, the cultural material analyses will contribute to the understanding of the Olmec from a household perspective.

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