

Figure 5.1 Location of the Valle de Samacá

Mortuary Tradition and Leadership

A Muisca Case from the Valle de Samacá, Colombia

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IN THE SIXTEENTH CENTURY, Muisca groups occupied the northeast Andean region of Colombia known as the Altiplano Cundiboyacense. Most of the information about the Muisca, particularly that pertaining to sociopolitical organization, is available in chronicles and archival documents. These sources describe Muisca societies as hierarchical, with the political ascendancy of the elite based mainly on wealth accumulation (Aguado 1956, 1:289). However, some scholars have pointed to the lack of evidence of wealth in the archaeological record for the entire Altiplano region (Londoño 1985; Reichel-Dolmatoff 1986).

Regarding the period prior to European contact, however, very little is known about the sociopolitical organization and the basis through which elite obtained and maintained their political preeminence. This chapter addresses the question of the institutionalization of leadership in Muisca society through the analysis of mortuary practices as represented in the archaeological record and supplemented with information from ethnohistorical sources. I suggest that social differentiation reflecting differences in rank is evident in the archaeological record by the fourteenth century and that the elite of one Muisca group, whose archaeological record is discussed below, sustained their positions through prestige acquired via a system of gift-giving.

Current Archaeological Research

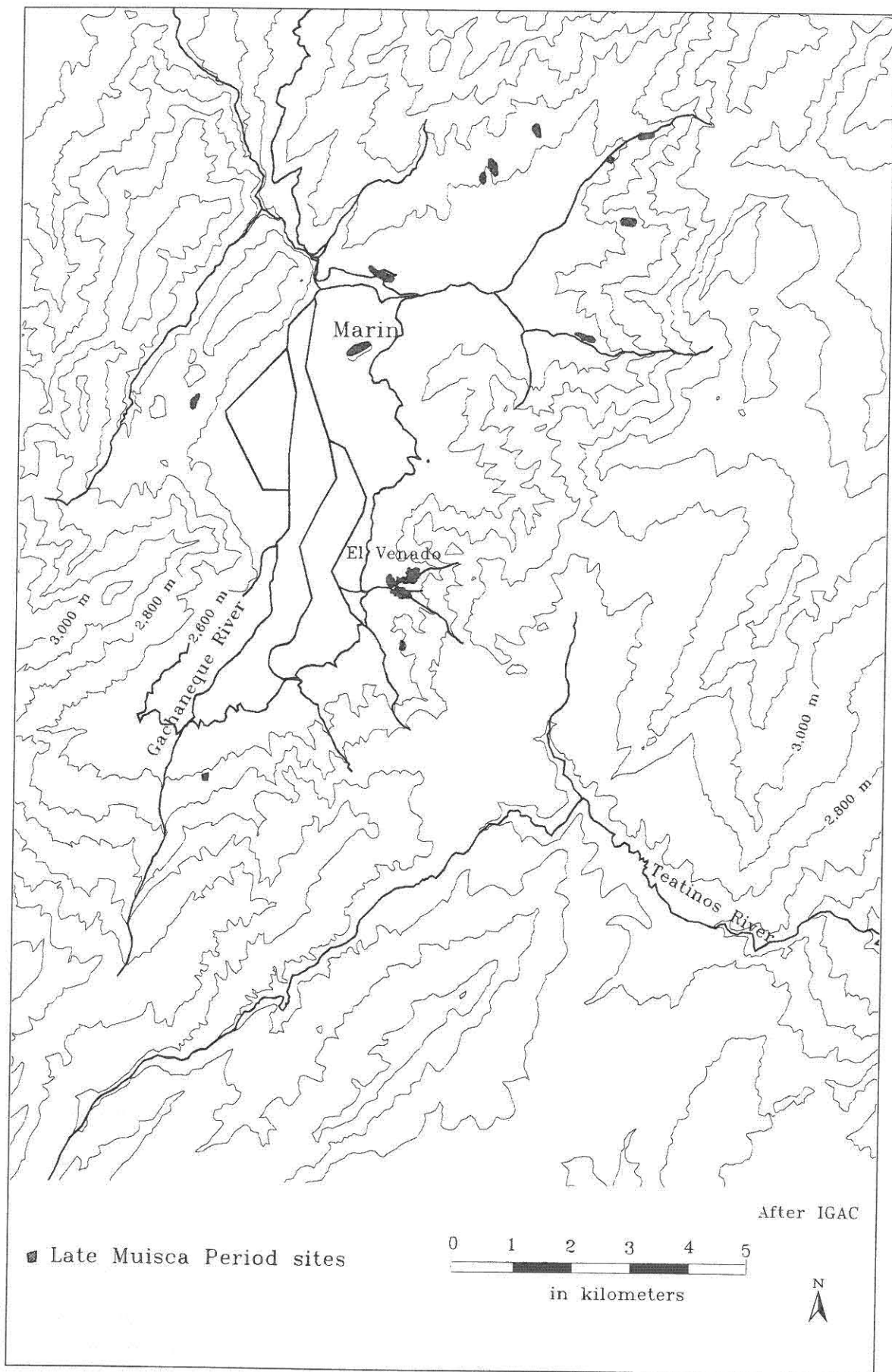
At the time of Hispanic contact, four large and several small Muisca chiefdoms inhabited the Altiplano Cundiboyacense. Chroniclers of the sixteenth century described severe political instability among the chiefdoms. Rivalry among the groups was common, with the region characterized by constant confrontations which frequently resulted in territorial gains and losses. The Valle de Samacá, located in the central part of the Departamento de Boyacá (figure 5.1), was no different, and

shortly before European contact the valley was incorporated into the Tunja chiefdom (Londoño 1983).

Preliminary archaeological surveys within the Valle de Samacá (figure 5.2) have indicated a settlement hierarchy which, at least on the basis of size, appears to be three-tier (Boada 1987a, 1991; Boada et al. 1988). The prime settlement, El Venado, is about 12 ha in size and has the longest sequence of occupation and most diverse archaeological assemblage of all the sites in the part of the valley surveyed so far. Unfortunately, little is known about the burials at El Venado, although the four known cases are very similar to the burials excavated at other sites in the valley. Typically, at these sites, little variation is observed in the number and types of burial offerings, body treatment, and tomb shape. However, the settlement of Marín, the focus of this study, exhibits also other traits that have only been reported at the prime center of Tunja, which is located outside the Valle de Samacá.

Marín, a nucleated site approximately 3 ha in size, seems to have been a second order settlement during the fourteenth century AD (Boada 1987b). It is situated at 2600 meters above sea level on the north slope of a small hill facing a small dry lake bed (figure 5.3). The climate is dry, with annual precipitation ranging between 500 and 1000 mm (IGAC 1977:120–127). The soil at the site is of low acidity (pH 7.5 – 8.4 Ingeominas analysis), which has permitted good preservation of archaeological remains, especially bone. The entire area is subject to severe erosion, and the site, in particular, has been heavily disturbed by agriculture since 1988. About thirty-two artificial terraces were placed throughout the settlement at a mean distance of 15.6 m (one standard error=1.5 m) from each other (see figure 5.3). A nearest neighbor analysis was performed on these thirty-two terraces, with corrections for boundary effect as recommended by Pinder, Shimada, and Gregory (1979). This analysis indicated no significance to the depar-

Figure 5.2
Location
of the
Marín site
in the
Valle de
Samacá



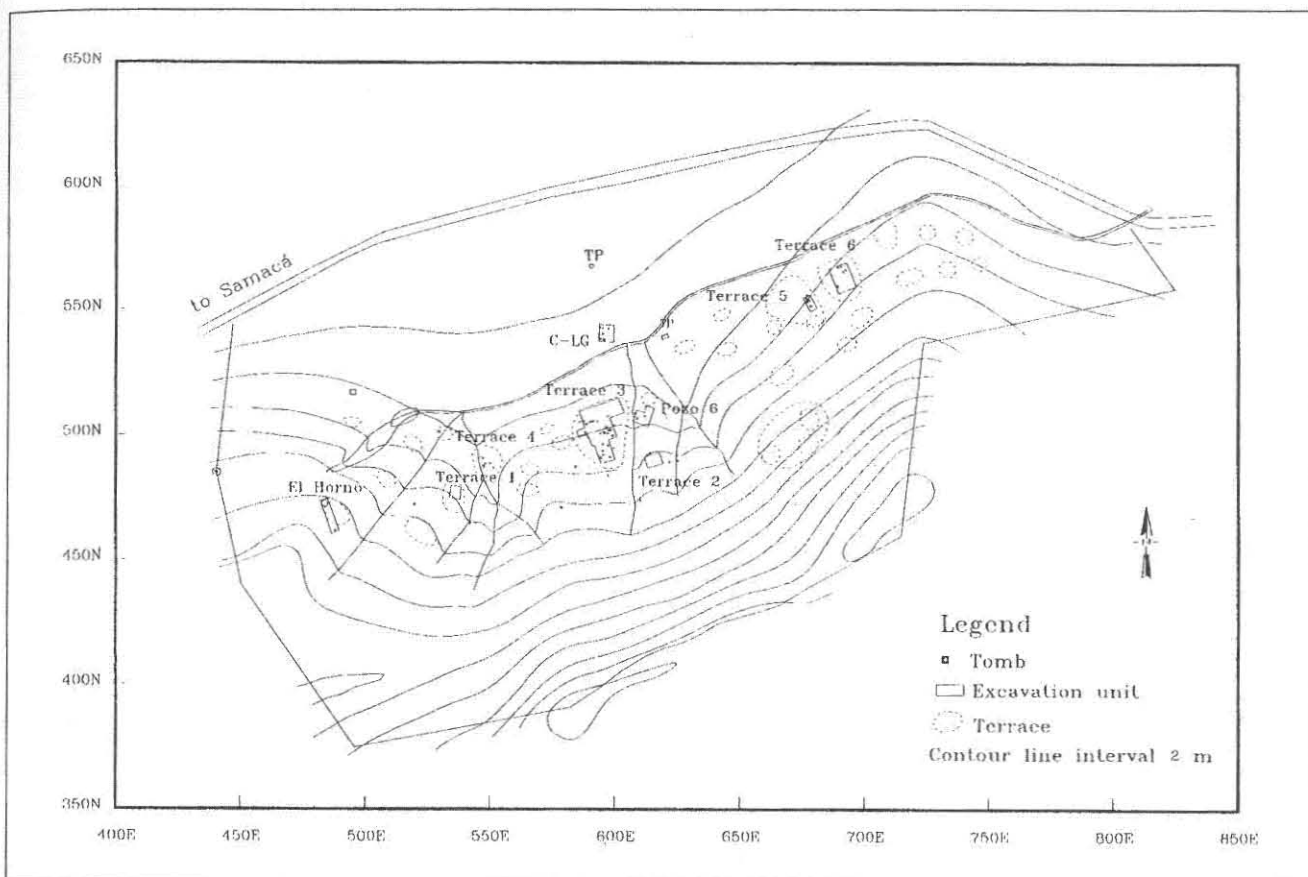


Figure 5.3 The archaeological site of Marín

ture from randomness in the distribution of these terraces within the settlement of Marín ($R = 1.059$ $p > 0.5$).

From 1986 to 1991 excavation units totaling about 650 m² were placed throughout the site so as to collect samples representing different areas of the settlement (Boada 1987b; González-Pacheco 1991). Excavations on small artificial terraces uncovered postmolds and the earthen floors of circular houses. Although the excavations yielded many interesting features and artifacts, I will focus here on only the burial evidence.

Groups of tombs were found within residential units or in house middens and drainage canals formed by the drip line of the roof (figures 5.4, 5.5). Given their association with the remains of houses, burials are assumed here to represent the remains of household members (Boada 1987b; González-Pacheco 1991).

Most of the tombs contained single burials, except for three cases in which later interments had disturbed the original burials. Three different grave shapes were identified: two types of pits with a circular horizontal cross section (with and without a small chamber) and pits with an oval horizontal cross section. Some graves contained additional "furniture" such as rocks placed at the entrance of the burial or at the entrance of the chamber. The depth of the tombs varied from 10 to 170 cm. The position of the corpse was related to the shape of the

grave. Oval pits had bodies placed in a lateral fetal position, while circular pits without chambers contained skeletons in a vertical fetal position (figure 5.6), except for one case in which the skeleton was in a dorsal fetal position. Circular pits with chambers contained bodies in either a vertical fetal or horizontal fetal position.

The treatment of the corpse also varied. Although all skeletons were placed in a fetal position, some were wrapped in cotton textiles and tied with cords, as shown by imprints on clay layers sometimes present between the textile and the corpse before it was wrapped with textiles. Other interments exhibited a more complex treatment (figures 5.7, 5.8): the bodies were in a seated position on a thin clay layer covering a piece of cotton textile and then wrapped with the textile and plastered with a wet mixture of clay and organic ash. Finally, the bundle was wrapped with additional textiles and tied with cords. Some corpses were wrapped in a net and others in a blanket. In a variation of this treatment the corpse was plastered up to the hip, leaving the torso, upper limbs, and head uncovered, the entire body then wrapped in textiles. Others seem simply to have been wrapped in textiles without clay or ash plastering. Several females, males, and infants had been sprinkled with red ocher at the time of burial. There seems to have been no preferred body orientation, with bodies oriented toward all cardinal points including the zenith (Boada 1987a,

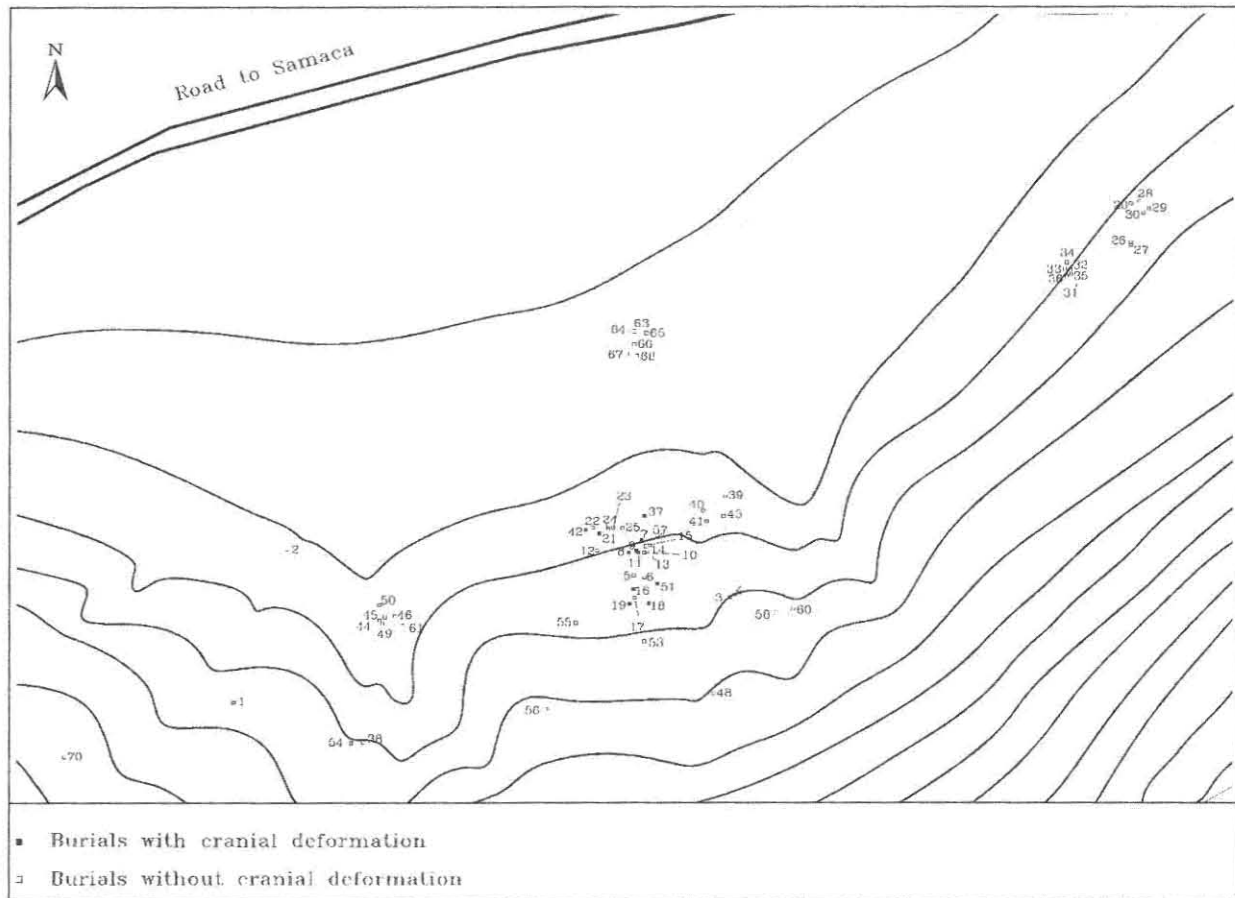


Figure 5.4 Distribution of burials at Marín

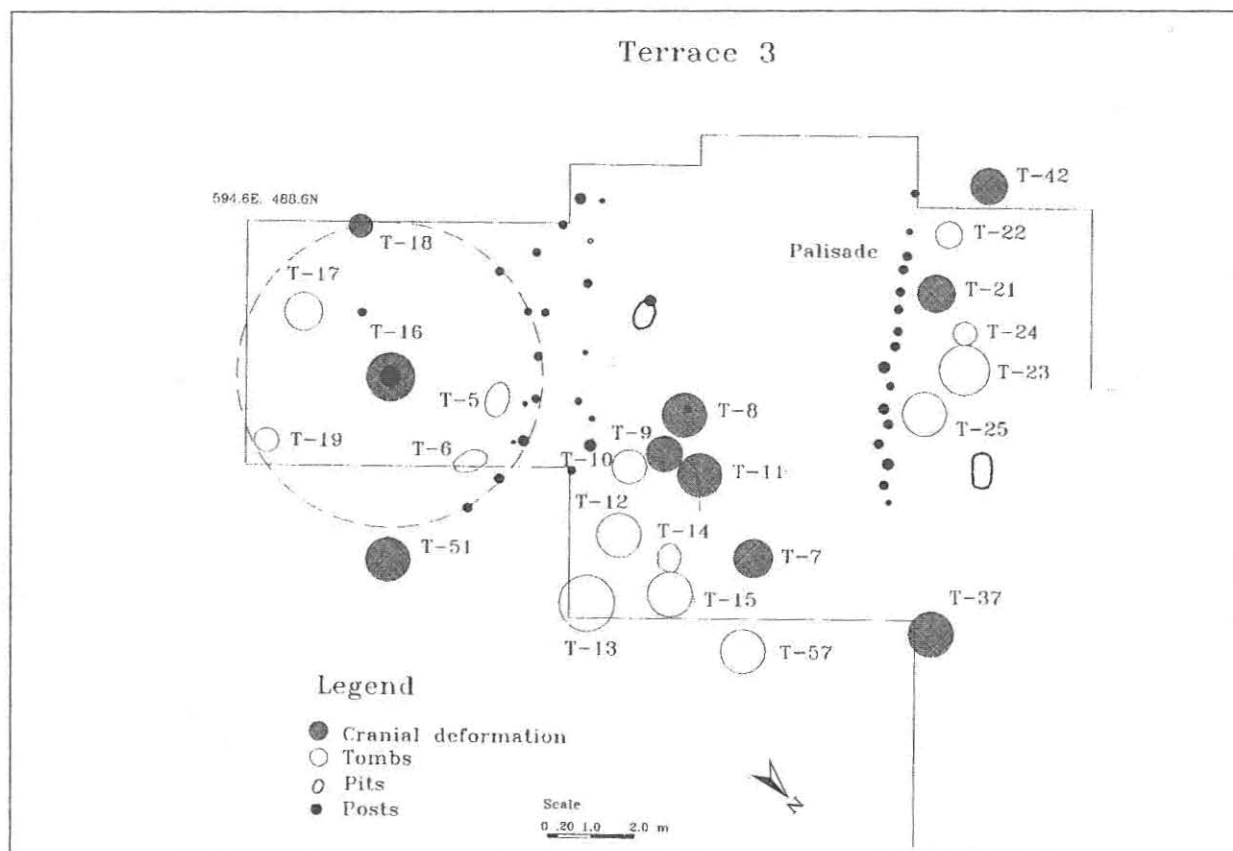


Figure 5.5 Terrace 3, showing locations of main features

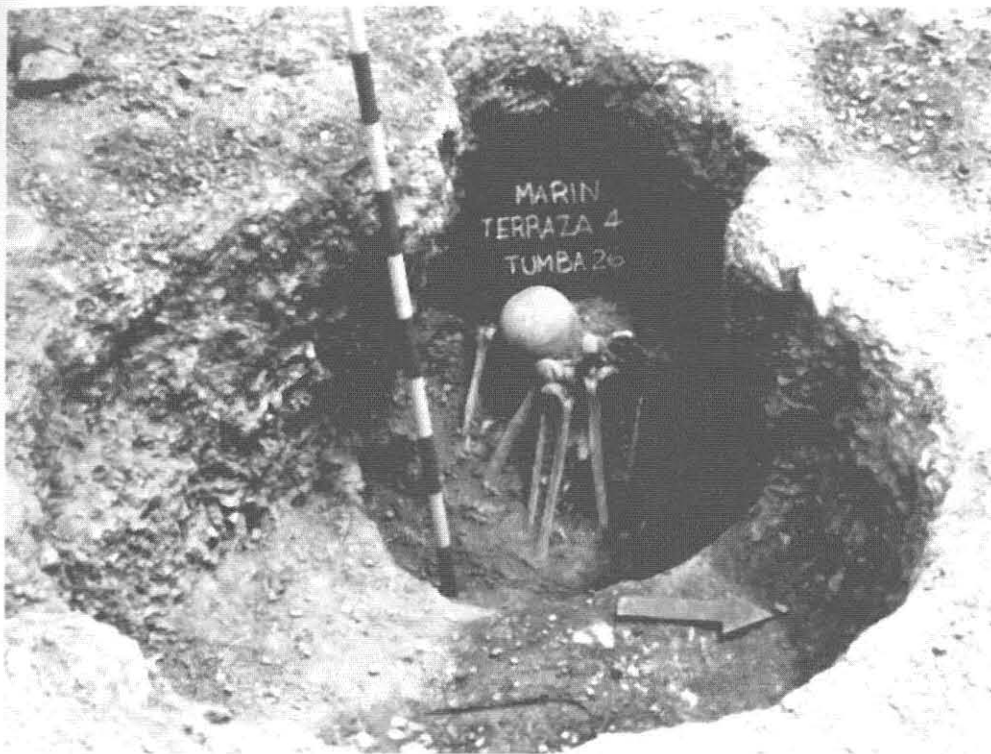


Figure 5.6 Shaft tomb with the skeleton in vertical fetal position



Figure 5.7 Bundle burial with plaster of clay and ash

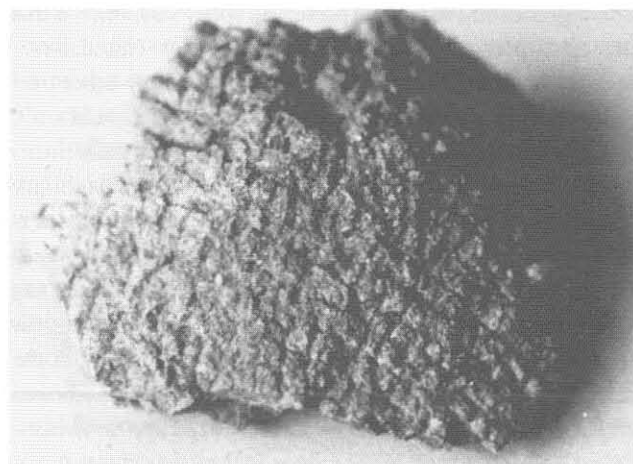


Figure 5.8 Textile impressions in the clay-ash plaster of the bundle burial

1987b). Ethnohistorical accounts describe provision of food and corn beer by the kin of the dead to accompany body preparation prior to the funeral (Simón 1981, 3:406–407).

It is possible that some of the corpses were subjected to smoke drying for slow desiccation. Chroniclers described this custom as a stage of the mummification process performed on high-ranking persons. Bodies were placed in the fetal position on a platform (*barbacoas*) and smoke-dried while some resins (*moca*) were burnt as incense during the process (Simón 1981, 3:406–407). Some bodies were eviscerated, although this

practice was not common (Cárdenas 1990). The body was then wrapped in fine decorated textiles and tied with cords. The bundles were taken to a special hut where the mummies were kept (Simón 1981, 3:261, 407). The practice of mummification within the group inhabiting the area can be traced back to at least the ninth century AD; a mummy dated to that time was found in the Valle de Leiva just 20 km away from Valle de Samacá (Holden 1989:7). Mummification was also practiced well after European contact, as shown by the finding of an eighteenth-century mummy (Cárdenas 1989:123).

Although the nature of the human remains at Marín does not allow us to say whether mummification was in fact practiced there, the burn marks left on the elbow of one of the skeletons recovered indicate that at least the desiccation procedure was carried out. Although this possibility had been considered before and almost discarded because of a lack of evidence, these burn marks make us reconsider the possibility of slow desiccation as part of the funerary ritual.

Three excavation units yielded information relevant to understanding the burial data within the social space of the settlement (table 5.1). The excavation of terrace 3, the largest of the settlement, yielded postmolds of a large house 7.40 m in diameter (Boada 1987b; figure 5.5). House posts ranging in diameter from 0.12 m to 0.26 m were located at one meter intervals, some reinforced by thinner posts placed in a double line outside and inside the house. The postmolds from the uphill section of the house were not preserved due to severe erosion. A line of larger postmolds (ranging between 0.20 and 0.30 m in diameter) was also found down the slope in front of the house. Although only part of the alignment was excavated, the postmolds seem to have been part of a palisade surrounding the house. Tombs were found inside and outside the palisade. Significantly, some well preserved skeletons found on this terrace display artificial cranial deformation (tabular oblique; figure 5.9), a characteristic not found in any other part of this or other settlements in the Valle de Samacá (Boada N.D.).

Excavations at unit C-LG, located at the foot of the hill, uncovered postmolds and the sealed dirt floor of a circular house 5 m in diameter (González-Pacheco 1991). Four anthropomorphic figurines and an atlatl made of *tumbaga* (an alloy of gold and copper) were found near the postmolds. The objects may have been used in a household-level ritual since they appear to have been left hanging from wall posts or the roof at the time the house was abandoned (González-Pacheco and Boada 1991). Elsewhere, these kinds of objects do not appear in burials but rather in caves, or springs or in the countryside as offerings (Falchetti 1989). In contrast, ceramic fragments, stone tools, and bones were found in abundance outside the house. Two hearths were also found, one outside the house and the other between two wall postmolds. Broken deer bones were found in and around the fire pit outside the house; none were found around the other hearth, suggesting functional differences in the use of the fire pits. Six burials were uncovered inside and outside the house (González-Pacheco 1991).

The last unit of excavation, El Horno, on the western side of the hill, also yielded interesting information. The soil, a thick layer about 50 cm deep, had a high ash content and an unusual texture similar to the plaster applied to corpses as part of the funerary treatment. The high content of burned vegetal material at that location is possibly associated with the preparation of corpses for the mortuary ceremony. The inference of a ceremony performed at this location is reinforced

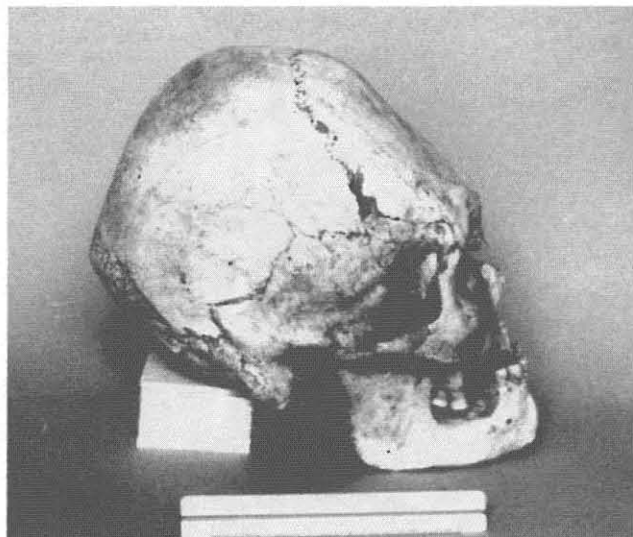


Figure 5.9 Skull with cranial deformation

Table 5.1 Excavation units and features*

UNIT	AREA (M ²)	HOUSE DIAM.	BURIALS*	PITS	HEARTHES
Terrace 1	22.5	2.5			
Terrace 2	33.5		2	3	
Terrace 3	231.0	7.4	24	2	
Terrace 4	80.0		6		
Terrace 5	94.0		6		
Terrace 6	40.0		5	1	
Pozo 6	42.0		4		
C-LG	65.0	5.0	6		2
El Horno	40.5	3.0	2	1	

*Ten additional burials were exposed in bulldozer cuts.

by the discovery of a unique ceramic cup decorated with a serpent motif. Nearby, seven postmolds outlined the circular plan of a small (3.0 m diameter) structure which may have had a funerary function, although this conclusion remains tentative until the analysis of associated assemblages has been completed. Two burials were also found in the El Horno unit. In addition to the thirty-one burials found on terrace 3, El Horno, and C-LG, a total of thirty-four of burials were excavated in dispersed areas of the settlement.

Analysis of Marín Tombs and Contents

There are 65 tombs with recorded information, although not all variables could be recorded for each tomb (appendix 5a). The human skeletal sample that could be sexed was composed of 71% (30) females and 29% (12) males. There were twenty-three sexually indeterminate individuals (2 adults and 21 subadults). It is extremely unlikely that the sample of burials from Marín was randomly drawn from a population with an even 1:1 sex ratio ($t=2.97$, $df=41$, $p>0.01$). Several factors might explain this including polygyny and the differential disposal of

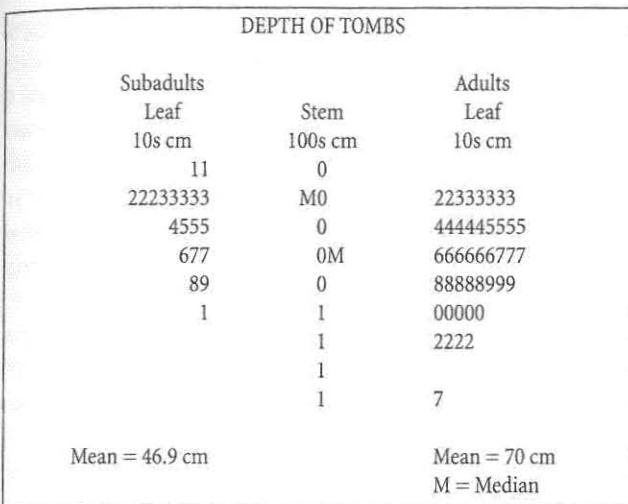


Figure 5.10 Stem-and-leaf plot of tomb depth, subadults vs. adults

males (for example, as a result of mummification or male infanticide).

Burial data were first analyzed along the age dimension. Then, data were analyzed against the sex dimension and, finally, against two variables: cranial deformation and wealth. For these tests, identifiable females and males, along with indeterminate adults, were grouped under the label of "adults" while age cohorts such as infants and adolescents, none of whom could be sexed, were labeled "subadults." When standard error is given for a category, the error range is calculated at a 95% confidence level. For this analysis, an estimation (Cowgill 1977) or a scalar approach (Drennan 1996:160–163) was used. In this approach differences within a sample being examined are expressed in terms of probabilities that range in a continuum from very high to very low. In this way, what is being examined is not seen in terms of "yes" or "no" (as the null hypothesis approach does) but rather in terms of probabilities.

The analysis of investment of energy measured through the relationship between the depth of the burials and age was first explored using a back-to-back stem and leaf plot. Figure 5.10 shows that adult graves were on average deeper than those of subadults. Among adults, there is one outlier case of a skeleton buried in a very deep tomb. A significance test made on this sample excluding the outlier indicates that the difference in mean depth of tombs between the two age groups is still very significant ($t=2.63$, $df=61$, $p=0.011$). With regard to the possible significance of such a difference, a significant difference was also found between body position and tomb depth, with seated corpses buried in deeper graves ($t = -6.27$ $df = 61$ $p = 0.001$) than bodies laid out horizontally. It may be that size differences between adults and subadults have something to do with differences in tomb depth, but although these find-

ings point to a functional rather than symbolic/ideological determinant of grave preparation (at least certain depths), other factors to be discussed later clearly suggest an association between high-status and deep graves.

Body treatment was also examined against age groups, although one aspect should be discussed first. It is assumed that complete wrapping in a layer of ash requires a greater expenditure of energy than partial wrapping or no use of ash. This assumption is based on the fact that complete wrapping involves a greater number of steps, makes use of more materials, and is more time consuming. Of the sixty-five burials, 57% ($N = 37$) have evidence of complete ash plastering and wrapping with textiles, 23% ($N = 15$) have partial ash plaster and textiles, 17% ($N = 11$) have no evidence of plaster, and 3% ($N = 2$) were buried within large cooking pots. Within age categories, 53% ($N = 23$) of the adults and 63% ($N = 16$) of the subadults had complete ash plastering and wrapping in textiles. Despite the greater expenditure of energy associated with such treatments, the high frequency does not point to clear status markers for wrapping and plastering.

The relationship between age and wealth, as measured by the number of grave goods, was first examined using a back-to-back stem-and-leaf plot. For the purpose of the analysis, beads were counted as single necklaces, whether they were found in a burial as a single bead or in the thousands. Other objects, such as emeralds and marine snails, were counted individually since they were not present in large numbers. Figure 5.11 illustrates that both subadults and adults display a similar distribution of grave goods. Each includes a large group associated with a median of two grave goods, as well as a small group representing much wealthier individuals. In other words, each age category includes a few individuals that are wealthier than the majority. A *t*-test following the removal of 6 outliers in the two groups indicates that the difference in the mean number of grave goods between adults and subadults is of extremely little significance ($t=-0.51$ $df=57$ $p=0.609$). A very similar result was obtained with the outliers included in the data set ($t=-0.460$ $df=63$ $p=0.647$), a finding to be expected since both samples display a similar distribution. Peaks are located at about the same value and the two samples share a similar proportion of outliers with similar values. Peebles and Kus's (1977) "subordinate dimension" predicts differences in the number of items between adults and infants, something that was found not to be significant in the Marín sample.

Another way to assess wealth was to focus on the presence versus absence in the graves of a total of eighteen categories of objects. This was done to compensate for the fact that objects found in large numbers, such as necklace beads, could distort the results. For example, in a given tomb containing 3 ceramic vessels, 1 foreign vessel, 6 emeralds, 300 shell beads, and 15 bone beads, the total category count would be five. In this way, greater wealth would be associated with the higher

numbers of object types identified in the graves. Again, the difference in the number of object categories between adults (2.0 ± 0.5) and subadults (2.4 ± 0.8) was also of very low significance ($t=-0.85$ $df=63$ $p=0.397$).

A significance test was also performed on the number of foreign objects. Again, beads were also counted as single necklace whether a single bead or a large number were found. The difference in the mean number of foreign objects between adults (0.95 ± 0.6) and subadults (0.9 ± 0.4) was also of extremely low significance ($t=0.005$ $df=63$ $p=0.996$).

Energy expenditure analysis performed on the sex dimension was first explored using a stem and leaf diagram (see figure 5.12). The graph shows that the graves of males are slightly deeper than those of females. However, a statistical test indicates that such differences have low significance ($t=-1.12$, $df=40$, $p=0.266$), suggesting no preferential investment of labor in the tombs on the basis of sex. Significantly, male tomb depth is highly variable, with some shallow and one very deep. This variability indicates that much more energy was invested in the grave of one male (located at terrace 3) than in those of all other males and females in the sample. The 50 cm difference in depth between the tomb of the terrace-3 male and the rest of the buried individuals is more apparent when we note that an additional 1.5 days of excavation were needed to reach the level of the skeleton. Soils at the site are extremely hard so that the additional depth was not quickly reached. Body-treatment analysis indicates that complete ash plastering and textile wrapping was more frequent among men ($N = 8, 67\%$) than women ($N = 15, 50\%$), although a one-sample Chi-square test indicated a very low significance ($\chi^2=0.961$ $df=1$ $p=0.327$). Partial ash plastering and wrapping was found in similar proportions in both sexes, although the absence of ash plastering was more common in women ($N = 7, 23\%$) than in men ($N = 1, 8\%$). (The application of a chi-square test in this situation would be somewhat inappropriate given that more than one-fifth of the filled cells are considered sparse, that is, with values of less than 5.)

The possible relationship between wealth and gender was also explored using a stem-and-leaf diagram (see figure 5.13). The graph shows a very similar distribution in the number of grave goods between men and women. The two sex categories share the same median, as well as a similar proportion of outliers. What is important to notice in the diagram is that very few individuals of either sex category are wealthier than the others. A significance test after having removed these outliers indicates that the difference in the mean number of objects between females and males has low significance ($t=-1.190$ $df=36$ $p=0.242$). The results are even less significant if the test is made using the entire sample ($t=-3.75$ $df=40$ $p=0.709$) because of the spread of both distributions. Wealth was also evaluated by considering the total number of categories present in the tombs. Again, the difference in the mean cat-

NUMBER OF OBJECTS IN TOMBS		
Subadults Leaf	Stem Objects	Adults Leaf
XX	0	XXXXXX
XXXXX	1	XXXXXXXXXXXX
XXXXX	M2M	XXXXXXXXXX
XXX	3	XXXXXXXXXX
XXX	4	XX
	5	XXX
X	6	
	7	X
	8	XX
XX	9	
	10	X
Mean = 2.9 Objects		Mean = 2.6 Objects
		M = Median

Figure 5.11 Stem-and-leaf plot of number of objects in tombs, subadults vs. adults

egories present in female and male tombs has extremely low significance ($t=-0.48$ $df=40$ $p=0.631$). With regard to the number of foreign objects in the graves, the difference between females and males was also of very low significance ($t=0.29$ $df=40$ $p=0.770$). Thus, none of the above analysis points to significant gender based differences in wealth or energy expenditure.

Interestingly, however, there appears to have been some association between object types and gender in the burials. Atlatl and drug paraphernalia, such as ceramic spoons and bone sticks, were associated with a few of the adult males, suggesting their possible distinct roles in society (for example, hunters or warriors, shamans). Spoons are likely to have been associated with the use of hallucinogenic drugs such as *yopo* and tobacco, the consumption of which was documented by the chroniclers (Simón 1981). Bone sticks might have been associated with the consumption of coca leaves. Kogi men in the Sierra Nevada de Santa Marta (Colombia) presently use similar implements to retrieve the calcium from a gourd which is then mixed in the mouth with the coca leaves, a procedure which releases the alkaloid (Reichel-Dolmatoff 1985c). Spindle whorls, associated with female burials, were also scarce, indicating that spinning probably was not a specialized pursuit in this settlement.

The third type of analysis examines the possible relationship between social differences and two variables: cranial deformation and wealth. An examination of the raw data immediately directs the attention to ten individuals (15%) with cranial deformation. The association between cranial deformation and other variables appears to define one of the most conspicuous social groups in the sample. The following analysis is directed at identifying differences in the degree of en-

ergy investment and wealth between the group of individuals exhibiting cranial deformation and the group that lacked such a feature. Figure 5.14 is a stem-and-leaf plot of tomb depth for each group. The graph shows both medians located relatively far from each other with the cranial deformation group characterized by deeper tombs. One such burial containing a male with cranial deformation is particularly deep, indicating a greater expenditure of energy. A significance test indicates that the difference in tomb depth between these two groups has an extremely high significance ($t=-4.18$, $df=62$ $p=0.0005$). Those who were buried in fetal seated position consumed more labor in the construction of the tomb, and this is a distinctive feature of the group with cranial deformation. The most common body treatment in both categories is the practice of complete ash plastering and wrapping in textiles, although these are slightly more common in the group with cranial deformation ($N = 6$, 60%) than in the other group ($N = 31$, 56%). (The use of a chi-square test would be inappropriate with this small sample.)

Of the sample of individuals with cranial modification, 70% were buried in pits with circular horizontal cross-sections, 80% were buried in a fetal seated position and 70% were oriented toward zenith. In contrast, the group without artificial cranial modification displayed greater variability in tomb shape, while 78% ($N = 43$) were buried in a fetal horizontal position with no particular body orientation, and 20% ($N = 11$) were buried in a fetal seated position. The original burial position of one disarticulated skeleton (2%) is unknown.

A back-to-back stem-and-leaf plot shows that the individuals with cranial deformation tended to be buried with fewer objects, with none of them having more than 5 objects (see figure 5.15). A t -test indicates that the difference in wealth between these two groups has very high significance ($t=2.198$ $df=63$ $p=0.032$). Removing a single outlier in the cranial deformation group and the six wealthiest individuals from the group without cranial deformation, the difference in wealth between the two groups is even more significant ($t=3.049$ $df=56$ $p=0.004$). With regard to the number of object categories, the difference between the two groups following the removal of two outliers (one for each group) also has a very high significance ($t=3.038$ $df=61$ $p=0.003$).

The second group to be analyzed is composed of the 6 individuals that have the largest number of grave goods. This wealthy group is clearly visible in figure 5.11 and is composed of four adults (3 females and 1 male) and two subadults (2 infants) who have between seven and ten objects. The individuals of the wealthy group do not present particularly strong association with any type of tomb shape. None of them was buried in seated position but rather 83% ($N = 5$) were buried in fetal horizontal position and 17% ($N = 1$) had no identifiable position. Body treatment for the wealthier group does not differ very much from those without wealth. Wealthy in-

DEPTH OF TOMBS		
Females Leaf 10s cm	Stem 100s cm	Males Leaf 10s cm
	0	
333322	0	3
5554	0	4445
777666666	M0	
9888	0M	8899
00000	1	
22	1	22
	1	
	1	7
Mean = 68 cm		Mean = 80.8 cm M = Median

Figure 5.12 Stem-and-leaf plot of tomb depth, females vs. males

NUMBER OF OBJECTS IN TOMBS		
Females Leaf Occurrences	Stem Objects	Males Leaf Occurrences
	0	X
XXXX	1	XX
XXXXXXXXXX	M2M	XXXX
XXXX	3	X
XXXXXXX	4	X
X	5	XX
	6	
	7	X
XX	8	
	9	
X	10	
Mean = 2.8 Objects		Mean = 2.5 Objects M = Median

Figure 5.13 Stem-and-leaf plot of number of objects in tombs, females vs. males

dividuals were not clustered in any particular area of the settlement but rather they were buried across the settlement.

In sum, the group of ten individuals with cranial deformation, all of whom are interred on terrace 3 at the center of the settlement, is strongly associated with a number of variables, including seated position and zenith orientation of the body, deeper pit tombs with circular horizontal cross-section, and very few grave goods. A contrasting but small group is composed of six wealthy individuals without cranial deformation and whose tombs are dispersed across the site. None of these six wealthy individuals was buried on terrace 3 at the center of the settlement.

Discussion of the mortuary variability

The analysis of burials from Marín shows the complexities of the social organization of this site. There are two high-status groups that stand out from the population. The first one is a small group of individuals representing both sexes and all ages that appear spatially circumscribed in the center of the settlement. Those individuals show special body position and deeper tombs, and cranial deformation, an additional feature that makes them different from the rest of the population. Performed at an early age, this deformation indicates a special rank that is ascribed from birth for females and males. No wealth is present in these burials, however. The second group, composed of 6 burials, also included females, males, and infants which are wealthier than the rest and have larger amounts of long-distance trade goods. Infants with more abundant burial goods have often been interpreted as indicating an ascribed right that comes through birth (Binford 1971; Peebles and Kus 1977). These wealthier burials do not share the characteristics of the former group (spatial circumscription, cranial deformation, body position, and zenith orientation of the body). The fact that these wealthier burials were not clustered suggests they were not from the same immediate kin group, as opposed to the group of individuals with cranial deformation, who appear to be members of the same kin based on their spatial circumscription.

It is interesting that these two sets of burials, although both possibly reflecting ascribed rank, do not use the same status markers. Initially, this behavior was interpreted as marking equivalencies between social groups, symbolizing horizontal social distinctions. However, manifestations of ascribed status are more probably indicative of vertically ranked social differentiation. Although neither prestige goods nor the amount of energy invested in burials is extremely large, it is clear that there is a modest degree of social differentiation.

It is proposed here that the first group noted above and characterized by artificial cranial deformation had the higher social rank at the settlement of Marín. This is based on the fact that the funerary ceremony associated with these individuals suggests larger, although modest, investments of energy in digging deeper tombs. Also, the larger house (described above) located at the center of the settlement, a privileged location, is associated with this group (see figure 5.4).

Other features also make the large house a special structure. It seems to have been surrounded by a rectangular palisade, a feature that was described in the historical documents as a privilege of chiefs and "*hombres principales*" (Anónimo 1988:177; Simón 1981, 3:184). No hearths or storage pits were found either close to the house or within the excavation units, a trait that suggests that such a large house may have been used to store goods temporarily to be given away quickly. The absence of fire pits and large storage pits seems unusual for the house of a chief who is supposed to be engaged in fre-

DEPTH OF TOMBS		
Cranial deformation		No cranial deformation
Leaf	Stem	Leaf
1s cm	10s cm	1s cm
	1	89
	2	00035
	3	00000000035
	4	000004
00	5M	00006
	6	0000005
	7	45577
50	8	0000
	9	0004
750	M10	05
	11	0
00	12	05
	13	
	14	
	15	
	16	
0	17	
Mean depth= 98.7 cm M=Median		Mean depth= 56.0 cm M=Median

Figure 5.14 Stem-and-leaf plot of tomb depth, cranial deformation vs. no cranial deformation

NUMBER OF OBJECTS IN TOMBS		
Cranial Deformation		No Cranial Deformation
Leaf	Stem	Leaf
Occurrences	Objects	Occurrences
000	0	00000
00000	M1	00000000000
0	2M	000000000000
	3	0000000000000
	4	00000
0	5	00
	6	0
	7	0
	8	00
	9	00
	10	0
Mean= 1.2 objects M=Median		Mean= 2.9 objects M=Median

Figure 5.15 Stem-and-leaf plot of number of objects in tombs, cranial deformation vs. no cranial deformation

quent social affairs. Rather, it is very likely that cooking was not performed in the large house but in neighboring houses of the same compound with the food delivered to the large house. Chroniclers of the sixteenth century describe a sexual division of houses (the male's house and the female's house, see chapter 4), particularly for chiefs who usually were polygynous. Females, among other tasks, cooked for the chiefs, so it is possible that cooking was done in females' houses (Tovar 1980:51-53). The absence of cooking and storage fa-

cilities (present in the rest of the houses of the settlement) suggests that the large house was probably used for social affairs such as entertaining visitors and storage of goods necessary for gifts. In sum, terrace 3, where the group of individuals with cranial deformation was buried, probably was a compound of various houses enclosed by a palisade in which the larger house was the residence of the higher ranked male. However, neither the house nor the burials at terrace 3 yielded evidence of wealth.

The immediate question that emerges from this picture is how this high-status lineage, in which status was ascribed but in which there was no accumulated wealth, managed to obtain and maintain its status. One possibility is that this might have been a group of ritual specialists that maintained their high status by performing ceremonies and had control over esoteric knowledge. This possibility could explain why this group is so poor. However, not a single bit of evidence of ritual paraphernalia was found in any burial, the large house, or in its immediate surroundings.

Two other possible strategies by which the group with cranial deformation could have maintained its high status were ancestor worship and gift-giving. Although I do not think they were the only ones used, they are the ones for which I find more support in the archaeological record and ethnohistorical accounts.

As noted before, the evidence indicates that this group had ascribed status acquired through inheritance. But in addition to an inherited right that entitled these individuals to hold a high social and political position, this lineage seems to have practiced ancestor worship to reassert such high position.

The mortuary variability described for Marín reveals multiple stages of the funerary program, likely representing diverse social dimensions associated with status differences. One of the funerary stages that strongly suggest the practice of ancestor worship is the mummification of certain individuals. Although we do not have direct evidence of mummification performed at the site, such practice has been widely documented in the nearby area by ethnohistoric documents and occasional finding of mummies, so there is no reason to believe that mummification did not take place in Marín.

One of the arguments proposed to explain the importance of mummification among Muisca societies is that it represented an opportunity for the elite to show their capacity to mobilize goods and energy in a kind of social competition for prestige (Langebaek 1992). Competition, as proposed here, was part of the mortuary ceremony when economic resources were displayed actively, particularly prior to the burial, but mummies, since they remained within the community, played a much more active role after the mortuary ceremony. Chroniclers mentioned the mummification of principal individuals such as warriors, but they did not specifically include individuals such as chiefs and priests. Not all chiefs seem to have

been mummified since descriptions were devoted to the burials of paramount chiefs, who were interred with lots of grave goods, several wives and servants (Castellanos 1886:65–66). In fact, mummified individuals of high status included females, males, and children, whose remains have been found in different parts of the Muisca area (see Cárdenas 1989). As seen in this chapter, mummification served more direct political agendas that go beyond the display of the elite's capacity to produce more resources than the rest of the community. The Muisca mortuary complex in general reflects a great emphasis on ancestor worship. It is known from ethnohistorical documents (Simón 1981, 3:254, 261; Castellanos 1886, 1: 183) that ancestors were conserved by mummification and stored within the settlement and in caves spread all over the region. The ones remaining in the village were visited and asked for favors and offered goods through the priest's service. On other occasions, mummies were carried in litters to the battlefield and exhibited to frighten the enemy while inspiring their warriors (Castellanos 1886, 1:98). Some scholars point out the importance of mummies in legitimizing the social status of their descendants but they do not explain how and why such mechanisms are used (that is., Langebaek 1992; Londoño *n.d.*). I will expand this topic in two dimensions: political status and land use rights.

Ancestor worship has been interpreted as a mechanism by which individuals directly reinforce their descent from a known ancestor to legitimize claims such as leadership inheritance (Salomon 1995) and also to establish land use rights (McAnany 1995). It is very likely that such claims had been made in the Muisca area particularly under the unstable political environment such as the one described at the beginning of the chapter. Within the Valle de Samacá region (and probably throughout the Muisca region) these claims could have been made through both females and males. Based on historical documents (Broadbent 1964; Londoño 1983; Villamarín 1972) the Muisca kinship system has been described as a matrilineal descent system with avunculocal residence. When the couple got married, the woman left her village to reside in her husband's which was the same as her husband's mother's brother (ego's maternal uncle). This residential pattern maintained the group of males together in spite of the matrilineal system. Leadership was usually inherited through the maternal line, passing on from the leader to his sister's son (Broadbent 1964; Simón 1981, 3:389; Londoño 1983, 1985). The maternal uncle performed the task of actually educating his sister's sons when they had grown enough to go to reside with him (Villamarín and Villamarín 1975:175). The maternal uncle's role was particularly crucial when he was the leader and exerted his right to educate his sister's sons, a long and tedious process for those candidates in the line of inheriting leadership (Castellanos 1886, 1:67; Simón 1981:389).

The most critical moment for those candidates in line to

inherit the chiefdom occurred at the moment of the chief's death. At this moment it was crucial to establish the most direct connection to the ancestor through a direct line in order to claim and legitimize leadership by evoking rights inherited from the ancestors. This claim was facilitated by the fact that mummies were being kept in shrines within the settlement and ancestry could be traced by establishing links between the candidates and their ancestors before the ancestors' (mummified) eyes. Mummies were actually present, known by their names and played an active role by legitimizing a candidate's position. Londoño (N.D.) argues that a chief increased his power (derived from the shrine with or without mummies) when he inherited the shrine upon his ascension to chieftain status.

Ancestor worship may also have had a parallel purpose. Ancestral links might have also been used to claim land-use rights. Although little information is available, the data suggest that these rights were also inherited through the maternal line (Villamarín 1972:101–102, Londoño 1983:63). Although women had to leave their village as soon as they got married, lands might have been used by her family, such as by her sons (Londoño N.D.), if grown enough to live with the maternal uncle, brothers, and/or maternal uncle. By this mechanism, both kinsmen and land were kept in the same place. It has been proposed that the *uta* and the *sybyn* were kinship units as well as territorial units (Rozo 1978; Villamarín and Villamarín 1975; Londoño 1983). As land-use rights were acquired through inheritance, tracing links with the ancestors made it possible to have access to land. Female mummies would have been crucial for the establishment of lines of descent and to legitimize claims over land use rights in a very direct manner.

The situation described applies to high rank lineages where mummification was their prerogative, but what happened at the local level or to the commoners for whom mummification was not allowed? Ancestor worship was also important for lower status lineages, and there is some evidence that might be associated to this practice. The practice of burying the dead within or near the house indicates that links with the ancestors probably legitimized more assertively the current social position than any other material base, as seems to have been the case for the Valle de La Plata as described by Drennan (1995). There is additional evidence that suggests ancestor worship was a generalized practice including the commoners. In one of the houses of Marín a set of four goldwork anthropomorphic figurines and one atlatl were found. Females, warriors and weapons were depicted and kept in the house, probably as representations (as sorts of portraits) of ancestors. Londoño has noted a clay figurine described by the natives as the representation of the chief "*capitán*", Don Alonso (Ibarra y Porras Mexía 1594:253 in Londoño N.D.). Anthropomorphic figurines have not been found in mortuary contexts

but rather as offerings in caves and fields (Falchetti 1989; González-Pacheco and Boada 1991).

Ancestor worship also seems to have been expressed in other ways. One way was through the association of individuals with textiles. Textiles displayed a great variety in length, weaving technique, color, design, and use as clothing and were important in exchange and tribute within the Muisca region (Boada 1989; Cardale 1986; Cortés 1990; Langebaek 1987; Londoño 1990). Mummies were wrapped in textiles. In one recorded example found near the Valle de Samacá, a mummy was wrapped in a textile decorated with anthropomorphic figures (Broadbent 1985). Such designs, painted by native priests and their nephews, were strongly forbidden by the Spanish (Restrepo Tirado 1928:65 in Casilimas and López 1987:43) and could not be used for dress because of the symbolic meaning they conveyed (Friede 1976, VI:460). Although the Spanish did not understand their meaning, it is likely that these figures were related to depictions of ancestors and used as identity symbols by which the wearer's status was immediately recognized.

Leadership, particularly in the absence of tools which guarantee obedience such as coercive force or control over basic resources, needs to be reinforced by the recognition and loyalty of followers. Although leadership was inherited and probably reinforced among the Muisca by ancestor worship, such a prerogative by itself, contrary to the generalized expectation, was not sufficient to maintain leaders in their office, or to sustain their prestige. Other ways to legitimize social and political status had to be developed. One such mechanism may have been gift-giving. Leaders at Marín probably were gift-givers. The archaeological evidence supporting such an idea is that the group with cranial deformation is associated with a house which is the largest of the settlement and which does not have any evidence of domestic activities. The function of the house seems to have been directed toward social affairs. In addition, this group of high status has no evident wealth, while some other individuals scattered through the settlement display greater wealth. Such a distribution could result from a leader giving away prestige goods to other members of the society in order to maintain alliances and loyalties, and to repay social obligations.

The evidence presented here strongly supports the idea that ascribed status was present at Marín, and the scenario described reflects a society where the social hierarchy was based on prestige. Marín emergent elite were probably gaining political ascendance by distributing goods to the point that they became impoverished and had fewer goods than the rest of the population. The fact that Marín elite did not retain goods for their own consumption and were not able to appropriate for themselves part of the goods to be buried with the dead during the mortuary ceremony reveals the small economic control they exerted.

What is distinctive in this case is that the social and political status of the elite does not seem to have been strong enough to be supported by virtue of its inherited rank alone. There is also no evidence whatsoever of control over basic resources and wealth. Instead, the elite at Marín seem to have been competing for political ascendancy through the economic mechanism of giving gifts. However, gift-giving systems are also very unstable mechanisms to maintain status (Sahlins 1963:291–293), and both ancestor worship and gift giving (and probably other strategies), probably were used by the elite to maintain their high status and prestige. None of these strategies on their own may have been sufficiently strong to ensure the maintenance of such high status, but several different strategies used in combination enhanced the likelihood of success.

Ethnohistoric documents of the sixteen century describe mummification of high-status individuals and also of chiefs engaged in generous distributions to other chiefs, high-ranked individuals, and commoners (Simón 1981, T.III:405). Although such distributions were likely more complex than what we have seen in Marín, the documentary evidence for mummification and distributions support the interpretation of the archaeological record offered here.

Conclusion

In general terms, the burials of Marín offer a depiction of an elite impoverished as a result of a political system which relied on prestige gained through gift giving. Another factor that diminished the elite's economic capabilities may have been their relationship to a higher ranked political center. Small local communities, as part of larger political systems, are burdened by obligations to higher political centers, which extract resources. Ancestor worship seems to have played a very important role as a mechanism to legitimize ascribed social and political status at Marín. Elite, however, in spite of having an ascribed status that entitled them to hold the higher positions, engaged in other strategies to maintain their political and social positions. Political and social status in Marín's elite depended on active competition for prestige through gift-giving as opposed to control over goods and basic resources.

It is likely that a higher degree of social differentiation is represented in the central village of the valley. However, what

has been envisioned through the study of mortuary variability in Marín might be taken as a reflection of a general trend. In the fourteenth century the political system of the valley seems to have been strongly based on prestige competition through giving gifts and leadership legitimation through an ideological base. Although much more complex, the political organization of the sixteenth century described by the chroniclers seems to represent great continuity of the trends found for the fourteenth century. The description of the chroniclers about a very complex society in the sixteenth century leaves a very short time for such complexity to emerge. A future investigation will be directed to analyze if, how and why such social complexity actually developed in the valley. Leadership was strongly founded in ancestor worship, but the economic basis is still little known and is a basic aspect that will be the topic of future research. The development of ancestor worship within the region and the concurrent conditions that favored such expression is another aspect for research.

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Appendix 5a

Marín site: Data base of variables associated with tombs

TN	X	Y	AGE	SEX	DC	SHP	OR	DTH	POS	TRT	RED	FF	TCE	TFC
1	520	472.2	6	F	A	PO	180	20	FD	SEC	0	0	1	0
2	530	501.6	1	ND	A		270		FD	ECZ	0	0	1	0
3	614	492.4	1	ND	A	PO	240	25	FD	ECZ	0	1	0	0
4	615	493	1	ND	A	PO	50	18	FD	SEC	0	0	0	0
5	596	496.6	10	F	A	PO	236	33	FD	SEC	0	0	0	0
6	598	496.2	2	ND	A	PO	120	20	FD	ECZ	0	0	0	0
7	597.4	503.4	9	F	P	PC	Zth	100	FS	ECZ	0	0	0	0
8	595	501	6	F	P	PC	Zth	120	FS	ECZ	0	0	0	0
9	596.8	501	6	M	P	PN	Zth	120	FS	ECZ	0	0	0	0
10	598	501	11	F	A	PN	115	60	FD	ECZ	0	0	1	0
11	596.4	501.4	7	M	P	PC	Zth	80	FS	ECZ	0	0	0	0
12	589	501.4	1	ND	A	PC	Zth	110	FS	ECZ	0	0	0	0
13	600	500	6	F	A	PN	Zth	120	FS	ECZ	0	1	0	0
14	598.2	502.2	8	F	A	PO	70	30	FD	SEC	0	0	1	0
15	599	502.4	7	F	A	PN	180	80	FD	ECZ	0	0	2	0
16	596	494	9	M	P	PC	Zth	170	FS	ECZ	0	0	0	0
17	596.2	492.3	1	ND	A	PN	235	60	FD	ECZ	0	0	1	0
18	594.2	492.4	1	ND	A	PN	Zth	74	FS	OLL	0	0	1	0
19	599	491.6	1	ND	P	PC	Zth	50	FS	OLL	0	0	1	0
20	690.2	568	4	ND	A	PN	160	40	FD	ECZ	0	0	2	0
21	589.4	504.6	1	ND	P	PN	150	50	FD	SEC	0	1	0	0
22	588.2	505.7	6	F	A	PC	Zth	90	FS	EPC	0	0	0	0
23	592	505.8	7	F	A	PN	165	60	FD	SEC	0	1	0	0
24	591	505.6	8	M	A	PN	122	56	FD	ECZ	0	0	2	0
25	593.8	505.7	A	F	A	PN	138	100	FD	SEC	0	1	0	0
26	690.2	560.5	7	F	A	PN	Zth	80	FS	EPC	0	1	1	0
27	690.2	560	1	ND	A	PN	52	20	FD	ECZ	1	0	2	0
28	691.8	568.4	10	F	A	PN	15	30	FD	EPC	0	0	0	0
29	693.5	567	7	F	A	PN	230	35	FD	EPC	0	0	1	0
30	692.5	566.2	5	F	A	PC	Zth	75	FS	ECZ	0	0	0	0
31	679.5	552.2	10	F	A	PN	92	80	FD	SEC	0	1	0	0
32	678.6	555.2	5	F	A	PN	215	23	FD	EPC	0	0	1	0
33	677.6	555.4	11	M	A	PN	59	40	FD	EPC	0	0	1	0
34	678	556.6	1	ND	A	PO	160	30	FD	EPC	0	1	0	0
35	678.8	554.4	1	ND	A	PO	272	30	FD	EPC	0	0	2	0
36	678	554	4	F	A	PN	64	77	FD	EPC	0	2	0	0
37	598	508	4	F	P	PC	Zth	105	FS	ECZ	0	0	0	0
38	544.6	464.6	3	ND	A	PN	245	90	FD	EPC	0	0	0	0
39	613.2	511.8	A	ND	A	PO	180	30	FD	SEC	0	0	0	0
40	609	509	8	F	A	PN	3	65	FD	ECZ	0	0	1	0
41	609.6	507	6	F	A	PN	Zth	50	FS	ECZ	0	1	2	0
42	586.8	505.4	8	F	P	PN	40	107	FD	EPC	0	0	0	0
43	612.8	508	1	ND	A	PO	81	19	FD	EPC	0	1	0	0
44	547.6	488	6	F	A	PN	120	60	FD	ECZ	0	0	1	0
45	548.6	488.6	5	F	A	PC	Zth	105	FS	ECZ	1	0	2	0
46	550.5	488.8	1	ND	A	PO	18	30	FD	ECZ	1	0	1	0
48	611	474	6	F	A	PC	201	60	FD	ECZ	1	0	1	1
49	548.2	487.4	10	F	A	PO	190	50	FD	ECZ	0	0	0	0
50	547.6	491	4	M	A	PC	Zth	94	FS	ECZ	1	0	1	0
51	600.4	495	8	M	P	PC	Zth	85	FS	EPC	0	0	1	0
53	598	484	6	F	A	PO	153	40	FD	EPC	0	0	2	0
54	542.4	464.5	4	M	A	PN	Zth	125	FS	ECZ	0	0	0	0

continued

Appendix 5a, continued

TN	X	Y	AGE	SEX	DC	SHP	OR	DTH	POS	TRT	RED	FF	TCE	TFC
55	585	487.5	7	M	A	PO	46	30	FD	SEC	0	2	0	0
56	579.4	471	8	M	A	PO	180	90	FD	EPC	0	0	2	1
57	600.4	504	2	ND	A	PN	200	77	FD	ECZ	0	1	1	0
58	622.7	489.5	8	M	A	PN	70	40	FD	ECZ	0	1	1	0
60	626	490.1	6	M	A	PN	165	40	FD	ECZ	0	1	1	0
61	552	487	1	ND	A	PC	Zth	44	FS	ECZ	0	0	0	0
63	596	543.3	1	ND	A	PC	19	30	FD	ECZ	1	0	0	0
64	595	543.4	1	ND	A	PC	.	50	NA	ECZ	1	1	1	0
65	598.2	543	3	ND	A	PO	160	80	FD	ECZ	0	0	1	0
66	594.8	539.3	1	ND	A	PC	355	30	FD	ECZ	1	0	0	0
67	594.4	539	8	F	A	PN	335	50	FD	SEC	0	0	0	0
68	596.4	538.6	8	F	A	PC	335	60	FD	ECZ	1	0	0	0
70	487.8	461.7	9	F	A	PN	170	75	FD	ECZ	1	1	0	0

TN	E	ME	WRL	CLT	HUE	GH	OV	SHB	AU	RX	COL	ATL	AWL	PAL	SPO	TTL	CTG
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
2	0	0	0	0	0	0	1	289	1	0	1	0	0	0	0	4	4
3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	2
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	1
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	1	1
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
11	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	1
12	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	2	2
13	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	2
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	2
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	1	7	0	15	0	0	1	0	0	0	0	3	4
18	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4	2
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
20	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	2
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
26	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	3
27	0	0	0	0	0	7	1	561	1	0	2	0	0	0	0	6	5
28	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	2
29	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3	3
30	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	2
31	5	0	0	6	0	0	1	6	0	0	1	0	0	0	0	8	6
32	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	2
33	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	2
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1
36	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	3	3
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1

continued

Appendix 5a, continued

TN	E	ME	WRL	CLT	HUE	CH	OV	SHB	AU	RX	COL	ATL	AWL	PAL	SPO	TTL	CTG
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
42	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	2
43	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	1
44	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3	3
45	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	3	2
46	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	3
48	0	0	1	1	1	65	6	1594	0	8	1	0	0	0	0	2	2
49	0	0	0	0	0	0	0	4	0	0	1	0	0	0	0	10	8
50	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	1	1
51	0	0	0	0	2	3	0	0	0	0	0	1	0	0	1	5	4
53	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0	5	4
54	0	0	0	0	0	0	0	47	0	0	0	0	0	0	0	4	3
55	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
56	1	0	0	0	0	0	2	2	0	0	0	0	0	0	0	2	1
57	0	0	0	0	0	6	0	18	1	0	1	1	0	0	0	7	5
58	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5
60	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3	3
61	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	4	4
63	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	1	1
64	0	1	0	0	4	0	2	0	0	0	0	0	0	0	0	3	3
65	0	0	0	1	0	0	2	9	5	0	1	0	0	0	0	9	5
66	0	0	0	0	0	0	0	300	1	0	1	0	0	0	0	9	5
67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
68	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
70	4	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3	1
																8	4

Glossary of variables

AGE: Age cohorts: 1=0-4, 2=5-9, 3=10-14, 4=15-19, 5=20-24, 6=25-29, 7=30-34, 8=35-39, 9=40-44, 10=45-49, 11=50-54, 12=+55 A=Adult
 ATL: Number of atlats
 AU: Number of artifacts of *tumbaga* (an alloy of gold and cooper)
 AWL: Number of awls
 CH: Number of bone beads
 CLT: Number of lithic beads
 COL: Number of necklaces
 CTG: Total number of categories of artifacts
 DC: Cranial Deformation: A=Absent, P=Present
 DTH: Depth of the tomb
 E: Number of emeralds.
 FF: Number of ceramic vessel halves
 HUE: Number of unmodified animal bones
 ME: Number of metates
 OR: Body orientation: Zth=Zenith. Numbers indicate degrees in which the head is directed to.
 OV: Number of sea snails (*Oliva* spp.).

PAL: Number of bone sticks
 POS: Body position: FS= Fetal seated position, FD= Fetal lateral position
 RED: Red-ocher pigment sprinkled on the body. 0=Absent, 1=Present RX: Number of resin beads
 SEX: M=Male, F=Female
 SHB: Number of shell beads
 SHP: Tomb shape: PO= Oval cross-section, PC= Shaft tomb, PN= Tomb with shaft and chamber
 SPO: Number of spoons
 TCE: Number of complete ceramic vessels
 TFC: Number of foreign ceramic vessels
 TN: Tomb number
 TRT: Body treatment: ECZ= Complete ash plaster and textile wrapping, EPC= Partial plaster and wrapping, SEC= Absence of plaster but textile wrapping was likely present, and OLL= Buried within a cooking pot.
 TTL: Total number of artifacts. Beads were not included in this count.
 WRL: Number of spindle whorls
 X: Spatial location on X axis
 Y: Spatial location on Y axis