Cultural Embodiment and the Enigmatic Identity of the Lovers from Lamanai

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Excavations approximately twenty years ago at Lamanai, Belize, uncovered a burial that we believe is still unique in the Maya world. The burial, of three individuals (figure 7.1), lay in a grave dug as part of the rebuilding of the stair of Structure N11-5 during the Late Postclassic period, probably circa AD 1450–1500. At the time, David Pendergast (1989: 1) described it as "the most interesting and enigmatic burial of the 900 or so [he] had recorded," and none of the approximately 200 that he recorded afterward altered this description. The unique quality of the burial lies in an expression of affection not yet found elsewhere among either ancient Maya burials or artistic representations (see Houston 2001). A man, seated against the wall of the grave, was accompanied by a woman at his right side, with her left arm wrapped around his shoulders. In the bend of her right knee lay a newborn. Because their position in death evoked obvious sentiment, they became known as "The Loving Couple."

There is universal curiosity about how closely ancient people resembled us in their feelings and experience of the world. Bioarchaeological research has been quite effective in reconstructing similarities and differences in the physical characteristics of people (Buikstra and Beck 2006) and in their health, material living conditions, and technological abilities, but understanding the personal lives of ancient people presents a greater challenge. Our ability to identify with the sentiment expressed in this couple creates a sense of kinship that compels us to learn more about them. The purpose of this chapter is (1) to reconstruct the biological and social identities of the Lamanai lovers within their cultural context and (2) to promote the movement from traditional osteobiography to social biography for the purpose of better understanding social identity.

Figure 7.1. The burial of N11-5/7A (man in foreground), N11-5/7B (woman with arm around man), and N11-5/7C (baby at woman's knee) at Lamanai, Belize (photo by David M. Pendergast).

Identity and Embodiment in Bioarchaeology

Contemporary postprocessual archaeological theory for some time has fostered the exploration of personal meaning through concepts of agency, identity, and personhood (e.g., Dobres and Robb 2000; Fowler 2004; Hodder 1986; Tilley 1999), but it is still unusual to apply such approaches in osteological analyses. Forms of art and the artifactual traces of people, rather than their actual bodies, have constituted the main sources of data for postprocessual research. Within this paradigm, individuals are viewed as actors who can and do exercise agency to deal with a variety of social contexts, rather than as passive receptors; in addition, the human body is seen as a place for playing out social and political negotiations (Fowler 2004; Joyce

2005; Thomas 1996; Yates 1993). Evidence for these interactions is found in body disposal facilities, grave goods, and body treatment. Although cultural behavior has a profound impact on biology (Goodman and Leatherman 1998) and can be read in skeletons (e.g., Buikstra and Beck 2006; Larsen 1997), the majority of postprocessual burial analyses have been informed mainly by the mortuary body, as an object that has been culturally treated, rather than the biological body. In this chapter we examine the way in which identity and personhood are constituted in current archaeological theory and how they are investigated. We advocate the integration of biological life history with mortuary data for enhancing reconstructions of social identity.

Chris Fowler (2004) states that personhood, or identity, is realized through relationships with things, places, nature, and other humans. Although both biological and social aspects of identity are observable in the body, the use of biological identity in postprocessual archaeology does not often extend beyond the social meaning of age and sex in particular contexts, such as activity restrictions placed on age groups or a particular gender. Although it is understood by bioarchaeologists that culture plays a role in creating the forensic individuation of osteobiography, the social meaning of personal identities is often forgotten in favor of epidemiological meaning. We argue that osteobiographical data such as individual histories of food consumption, disease experience, physical activity, and movement across the landscape should be put to greater use for inferring social identity.

Social identity is derived from social and political interactions and plays a major role in the formation of personal biography and identity (Fowler 2004). The body is typically used to reconstruct identity through analyses of *in vivo* modifications of its (1) surface (e.g., tattoos, piercing, and scarification), (2) form (e.g., parts such as foot binding, cranial modification, or the entire body, such as weight gain or loss), or (3) composition (e.g., highly selective diets) (see also Duncan, this volume, and Torres-Rouff, this volume). Interpretations of identity are typically derived from preserved text and pictorial media (Joyce 2000; Meskell 1999; Meskell and Joyce 2003) and from ethnographic analogy. The bodily incorporation of social meaning and personal expression through these kinds of symbolic embellishment and alteration is referred to as "embodiment" (Csordas 1990, 1999).

Embodiment can be a conscious or subconscious process, but both result in the use of the body to demonstrate cultural and/or individual identity. Such identities are often meant to be visible and are easily observed in public. Others are hidden from public view and therefore have only personal

meaning. Because identities are contextual, they can also change from one point in life to another. Modification of the body is a biocultural act, but social meaning is not simply conferred through surface alteration of tissues or morphological alteration of specific body parts. Embodiment can also mean the incorporation of culture into the deeper structure and composition of the skeleton. Connecting the cognitive and cultural being with the biological one can be accomplished with methodologies that move from gross morphology to increasingly fine levels of analysis, such as microscopic structure and chemical composition.

Fowler (2004) notes that substances used in the processes of cultural embodiment provide expressions of social relations and worldview and may be controlled or distributed differentially. Food is among these substances. It is imbued with ideological and social meaning related to its preparation and presentation. The biological act of eating is therefore also a social act, and the chemical composition of food becomes incorporated in our tissues along with all of its social meaning. Hence we are what we eat both biologically and socially. The food that we eat can be either a conscious or an unconscious expression of identity, and part of that identity is how it positions us in terms of nature, place, and other humans. The most direct and detailed reconstructions of food consumption are done with chemical analyses of tissues (especially isotopic analyses), because dietary inferences made from gross morphology or various imaging techniques depend on malnutrition to manifest abnormality.

Social and biological identities also include individual relationships with place. Dietary regimes are closely tied to the physical environment, but so too is the isotopic composition of the water we drink. The climatic and physiographic variability of different environments results in different oxygen isotopic compositions of water that become incorporated into body water and then into the skeleton. The embodiment of place through local water consumption cannot be considered a conscious or a social act of identity expression, but movement between or among landscapes is almost always a conscious and social act that does become embodied in our skeletal chemistry. Oxygen isotope analysis enables the production of landscape bioarchaeology, which includes the reconstruction of individual histories of geographic relocation, which not only create identity but are almost always tied to some form of social process.

Personal identity is also constituted by what people do and how they physically experience the world, such as their state of health and degree and type of physical activity, both of which can be embodied in skeletons.

Although part of *in vivo* identity can involve the individual perception of health or illness, and state of health is certainly related to what people do, people do not as a rule attempt to embody illness as a biocultural act. Similarly, neither skeletal embodiment of one's occupation through repetitive physical activity nor embodiment of single traumatic events resulting from violence or an accident is normally a conscious act. By contrast, altering the physical appearance of the body for cosmetic or identity reasons is a purposeful biocultural act.

Bodies are found in a wide variety of burial or disposal contexts, often containing items of material culture that can have social biographies of their own. The articulation of personhood with material culture in mortuary contexts can be quite tenuous. For example, although objects may be placed in graves to symbolize individual origins or associations with other locations, such evidence of place must still be indirect. Only the skeleton itself can provide direct evidence of either origin in a different location or geographic relocation during life. Furthermore, one cannot assume that the cultural components of a burial (such as the artifacts, facility, burial position, and location) reflect the status of the deceased in life, for it is the living who dispose of the dead and who decide on the mortuary treatment, including the objects to be included in the burial facility. As Fowler (2004) notes, the "person" is socially dissolved by death and then reconstituted by others.

Methodology: An Introduction

Age and sex determinations, differential diagnoses of pathological conditions, and identification of anomalous muscle use were made using well-established criteria (Buikstra and Ubelaker 1994; Ortner 2003; Stone and Stone 1990). The use of oxygen isotope ratios measured in skeletons to identify diet and geographic relocations is based on the premise that "we are what we eat and drink," because our tissues reflect the isotopic composition of the food we consume and the water we imbibe. Previous publications provide details on the theoretical basis and methodology used in isotopic analyses (White et al. 2000, 2002).

Oxygen Isotope Analysis

Briefly, the oxygen isotope composition of water varies with climate and environment and is incorporated into bones and teeth during the process of mineralization (Longinelli 1984; Luz et al. 1984). Bone continually remodels and reflects the last several years of life; but remodeling is faster in

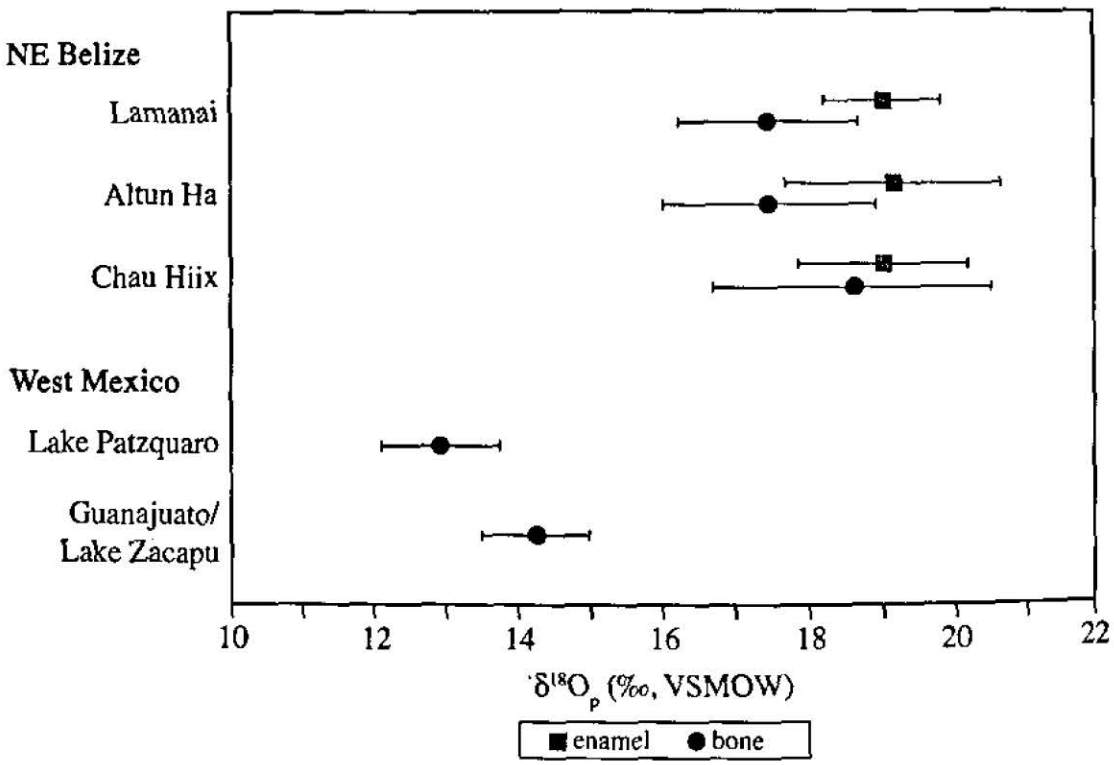

Figure 7.2. Baseline means and ranges of $\delta^{18}O_p$ values for sites in West Mexico and Northeast Belize (VSMOW = Vienna Standard Mean Ocean Water). Lake Patzquaro sites include Tzintzuntzan, Urichu, Tocuaro, Atoyac, and Teremondo. Guanajuato and Lake Zacapu sites include Portales, Guadalupe, Los Nogales, Palacio, and Milpillas.

children, so they will isotopically reequilibrate to new places more quickly than adults. Enamel permanently records water imbibed during its formation, so individual relocations can be identified by comparing enamel with bone or one tooth with another.

Intrasite variability in the Maya area is about 2‰ (per mil) among control samples (figure 7.2) and can be caused by seasonal climate, use of different local water sources, consumption of imported foods with high water content, and the presence of breastfeeding children, who are enriched in ^{18}O because their water source is mother's milk (Wright and Schwarcz 1998; White et al. 2000). Because environments can have overlapping $\delta^{18}O_p$ values, this single line of evidence is not always sufficient for a definitive identification of regions of origin.

Phosphate ($\delta^{18}O_p$) is analyzed here because it is generally better preserved than carbonate (McArthur and Herczeg 1990). Based on the mean crystallinity index (CI) for bone (2.8 ± 0.11) and enamel (3.0 ± 0.13), and the lack of correlation between $\delta^{18}O_p$ values and CI (Pearson's $r_{bone} = 0.366$, $n = 8$; Pearson's $r_{enamel} = 0.385$, $n = 7$), we infer that recrystallization did not adversely affect the $\delta^{18}O_p$ values (table 7.1). A lack of correlation between $\delta^{18}O_p$ values

Table 7.1. Isotopic Data for "The Loving Couple" and Some Postclassic Contemporaries at Lamanai, Belize

Burial Number	Sex	Age (yrs)	BONE $\delta^{18}O$ (‰)	BONE YIELD[a] CO_2	BONE YIELD[b] Ag_3PO_4	BONE CI[c]	ENAMEL TOOTH	ENAMEL $\delta^{18}O$ (‰)	ENAMEL YIELD[a] CO_2	ENAMEL YIELD[b] Ag_3PO_4	ENAMEL CI[c]	$\delta^{13}C$ (‰)	$\delta^{15}N$ (‰)
Contemporary Burials													
N10-1/2	M	50–60	17.4		1.5	2.8	M1	19.2	5.0	1.7	3.1	-9.8	10.0
N10-2/40	F	A	16.4	4.9	1.4	2.8	M2	19.2	4.9	1.6	2.9	-9.0	10.1
N10-2/42	F	A	16.3	5.0	1.4	2.7	M2	19.8	4.8	1.6	3.1	-9.1	8.9
N10-4/31	F	A	17.5	4.9	1.4	2.7	M1	18.3	4.8	1.7	2.9	-9.2	9.2
N10-4/31	F	18+	18.6	4.9	1.4	2.9	M3	19.6	4.7	1.8	3.2	-9.9	8.5
Mean			17.2		1.4	2.8		19.2				-9.4	9.3
St. Dev.			0.9					0.6				0.4	0.7
Loving Couple													
N11-5/7A	M	35–50	17.4	4.9	1.4	2.8	M3	19.5	4.7	1.8	2.9	-10.1	9.6
N11-5/7B	F	20–35	16.9	5.0	1.2	3.0	M3	18.7	4.8	1.7	3.1	-9.0	9.2
N11-5/7C	U	NB	16.5	5.0	1.2	2.7	NA	NA	NA	NA	NA	NA	NA

Source: $\delta^{13}C$ and $\delta^{15}N$ values from White and Schwarcz (1989).

[a] CO_2 YIELD (in μ moles/mg Ag_3PO_4).

[b] Ag_3PO_4 = silver phosphate. Ag_3PO_4 YIELD (in mg produced/mg starting material).

[c] CI = crystallinity index.

and phosphate yield (Pearson's $r_{bone} = 0.346$, $n = 8$; Pearson's $r_{enamel} = 0.038$, $n = 7$) also indicates the absence of preferential recovery of one isotope over the other during phosphate precipitation.

Although diagenesis does not appear to have altered the oxygen isotope composition of this material, the $\delta^{18}O_p$ values of enamel are consistently higher than those of bone by 1–2‰. A bone-enamel difference would normally be interpreted as evidence for relocation, but it is improbable that everyone in this sample relocated. Because these data create some uncertainty about sample integrity, we interpret the $\delta^{18}O_p$ values with caution, particularly those from the more diagenetically susceptible bone.

Carbon and Nitrogen Isotope Analysis

Reconstruction of ancient diets begins with isotopic variation that exists among plants and trophic levels (for a more detailed review of the principles and interpretation of paleodietary isotopic analysis, see Ambrose 1993). Since most humans are omnivores, their collagen $\delta^{13}C$ values ($\delta^{13}C_{col}$) reflect the plants and animals they consume. All plants fall into one of three photosynthetic categories (C_3, C_4, CAM) that have different $\delta^{13}C$ values. Most wild plants, trees, nuts, fruits, and vegetable cultigens are C_3 and have the most negative values (modern average is -26.5‰; O'Leary 1988). On the other hand, C_4 plants have less negative $\delta^{13}C$ values (modern average is -12.5‰; O'Leary 1988). Maize is the most regularly consumed C_4 plant in Mesoamerica.

Marine/reef resources have $\delta^{13}C_{col}$ values that emulate C_4 plants. Therefore nitrogen-isotope ratios in collagen ($\delta^{15}N_{col}$) are used to correct possible misinterpretations of diet by establishing the trophic level and source of dietary protein (DeNiro and Epstein 1981; Schoeninger 1985). The lowest $\delta^{15}N$ values are found in legumes and blue-green algae and the highest in marine mammals (Schoeninger 1985).

Although the Lamanai diet was less dependent on maize than were other regional diets (figure 7.3), it consisted of large quantities of C_4 sources that likely also included C_4-consuming animals such as dogs or deer and C_4-like marine resources (Coyston et al. 1999; White and Schwarcz 1989). The $\delta^{15}N_{col}$ values indicate that significant quantities of marine foods were consumed. Given the available diversity of resources, diets were quite uniform (table 7.1).

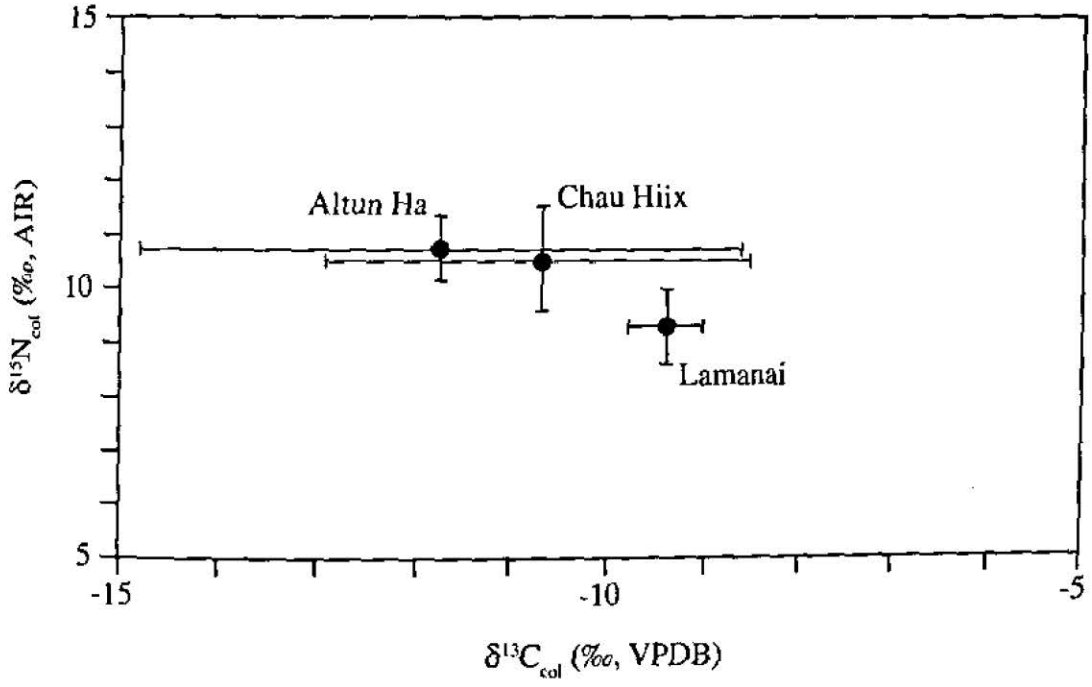

Figure 7.3. Comparison of Postclassic period $\delta^{13}C_{col}$ values for sites in Northeast Belize (VPDB = Vienna Pee Dee Belemnite) (Chau Hiix data from Metcalfe 2005; Altun Ha data from White et al. 2001 and Olsen 2006).

Description of the Skeletons

The Man (N11-5/7A) of "The Loving Couple"

Originally suspended around the man's neck (but fallen onto his lower body) was a pair of copper tweezers of west Mexican style, with circular blades that probably served as a badge of rank or status. They were still displayed this way in western Mexico at the time of Spanish contact. He was also wearing a shell horse-collar ornament on his right forearm (perhaps originally worn on his upper arm). Such ornaments have been found in different contexts elsewhere, but this burial makes clear the way in which they were used (Pendergast 1989).

This man was between 40 and 50 years old and was 164.3 to 166.7 cm tall. An appliance had been fitted to flatten the back of his skull, producing a very broad (brachiocephalic) skull and an extremely vertical occipital region. During excavation, it appeared that his face was deformed (Pendergast 1989), but this impression was not confirmed by subsequent lab analysis. He had, however, suffered from nonspecific maxillary sinusitis, which was in the process of healing at death. Differential diagnosis of healed or healing porotic hyperostosis present on his frontal, parietal, occipital, and zygomatic

bones indicates that he may have been iron deficient. Active degenerative joint disease was evident on the articular tubercles of his temporal bone, and there was a mature but benign fibro-osseous tumor in his left mandible between the lower premolar and first molar.

His teeth were in remarkably good condition for his age, although periodontal disease and attrition were pervasive. He had only two carious teeth, no abscesses, and small-to-moderate amounts of calculus. Linear enamel hypoplasia in both upper second incisors records the experience of a systemic stress event when he was approximately 3.5 years old.

His postcranial bones bear witness to trauma and infection that might be associated with his death. The right tibia exhibits nonspecific periosteal reactions related to an ossified subperiosteal hematoma. These were in a state of healing at the time of death and suggest trauma followed by infection. Both fibulae also had nonspecific periosteal reactions resulting from inflammation or infection. There were active lesions in the navicular and medial cuneiform bones of his left hand, for which a differential diagnosis suggests possible mycotic infection.

An examination of his muscle attachment sites indicates that he was engaged in strenuous and repetitive physical activity. He did a lot of work with his upper body and squatted with his feet flat on the ground. His shoulder complex shows that he did something that squeezed his shoulders together. On the medial clavicle there were large attachments of the costoclavicular ligament and large grooves for the subclavius muscle. These are both bilateral but suggestive of greater need for stability, and perhaps trauma, on the right side. On the lateral clavicle, the trapezoid and conoid ligaments were very well developed. Both are involved in absorbing stresses to the upper limb. Attachment sites for the deltoid muscles in the humerus are very well developed in association with stresses on the shoulders, and development of the anterior fibers suggests working with the arms outstretched. All of the muscle attachments on the intertubercular groove of the humerus are very well developed. These muscles are all medial rotators. Of these, the pectoralis major is quite well developed and may have been responsible for keeping the arm in a flexed position while the humerus was rotated. Lack of elbow joint modification supports the premise. Although the upper arm was rotated in either a flexed or outstretched position, lack of elbow joint modification indicates that it was not involved in repetitive bending. In addition to the medial rotation of the humerus, there are massive insertion sites associated with pronation and supination (pronators teres and quadratis) in

his forearms (radii, ulnae) (figure 7.4a). There is a bony build-up on these sites (particularly the left) that could be consistent with fracture callus, but radiographs have ruled out this possibility. The presence of some periosteal reaction on his right radius, however, suggests that this region might have been irritated by an external force. Wearing heavy bracelets such as the one he was found with and those seen in artistic depictions of high-status individuals throughout ancient Mesoamerica might have caused this. Lack of radial tuberosity involvement and large supinator crests on the ulna (figure 7.4a) further suggest that his forearm was extended when he supinated his forearms.

In both hands there are huge attachment areas on his first and fifth metacarpals (opponens digiti minimi) for the muscles involved in medio-lateral squeezing of the palm (figure 7.4b). The complementary muscle attachment area on the thumb was not nearly as large. In conjunction with development of the attachment sites for the flexor digitorum superficialis and profundus, the action would be consistent with a grip similar to that used with a screwdriver. This suite of anomalies is consistent with the application of either tensile or compressive forces through relatively straight arms, while gripping something and turning both the upper and lower arms medially.

Muscle markings on the lower limb are a little easier to interpret. He squatted repetitively with the full sole of his foot planted on the ground. The only observable (right) tibia has a well-defined squatting facet on the anterior aspect of the distal metaphyseal area (figure 7.4c). Further evidence for squatting is found in the muscle attachment sites involved in frequent rising from a squatting position. These include bilaterally large insertion sites of the gluteus maximus, well-defined gluteal tuberosities, tibial tuberosities associated with the quadriceps femoris, bilateral enthesiopathies on the anterior surface of the patella, and hyperdevelopment of the soleus muscle attachment areas on the fibula.

There is also an interesting example of activity-related dental wear between his upper and lower first left incisors. This location shows evidence of localized wear consistent with continual abrasion from a hard, rounded substance, such as cording, as it is passed between the teeth while they are closed. This anomaly strongly suggests that he used his dentition as a tool. Combined with the backward stretch of the head and neck evident in the clavicle, it appears that he may have been gripping and pulling some kind of cord with his incisors.

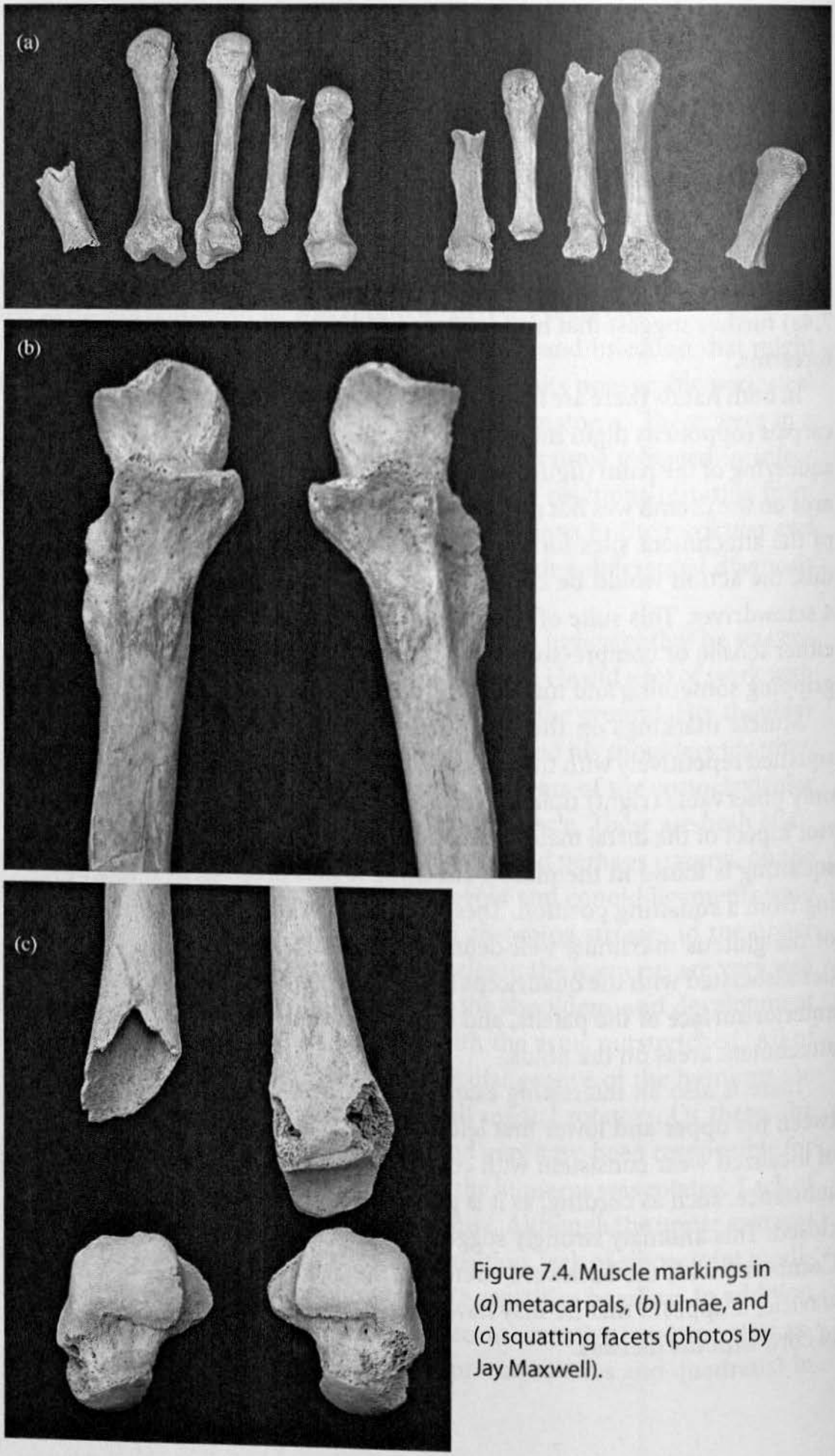

Figure 7.4. Muscle markings in (*a*) metacarpals, (*b*) ulnae, and (*c*) squatting facets (photos by Jay Maxwell).

The Woman (N11-5/7B) of "The Loving Couple"

Like her companion in death, the woman also shows cultural evidence of west Mexican origin. Her hair had been formed into a braid or queue, bound in cloth (since largely decayed), and encased in a group of five copper-tin bronze rings. This hairstyle was common in ancient western Mexico and is still seen there today (Dorothy Hosler, personal communication, 1989).

The woman was much younger, between 20 and 25 years old, and 152.1 to 153.9 cm tall. Although her skull is fragmentary, the form of the remaining elements does suggest the same style of cultural modification exhibited by her companion. Poor preservation precludes any further observation of pathology in the cranial bones, but 30 of her teeth were preserved. They show minimal wear, periodontal disease, and calculus. None of her teeth have abscesses, and only 3 have caries. The location of linear enamel hypoplasia in all of her second and third molars indicates that she experienced a severe stress event when she was just over six years of age and another around the age of ten.

Her right fibula shows nonspecific periosteal reaction that was healing at the time of death and is suggestive of some form of infection. The interfaces between lumbar vertebrae 1 and 2 and lumbar vertebrae 3 and 4 have lesions that could represent either herniations or Schmorl's nodes, but it is unclear if they were active or healed at death. If healed, they are more likely to be Schmorl's nodes and represent some form of exertion during adolescence, such as carrying heavy loads on the back. In addition, an active resorptive lesion in the eleventh thoracic vertebra may indicate the early stages of infection or cancer.

The Baby (N11-5/7C) of "The Loving Couple"

Bone measurement indicates that the age of this infant was about 34 weeks of gestation, but the child shows signs of a systemic infection that could have resulted in a growth deficit. Both orbits exhibit multiple layers of new woven bone that also covers 33–75% of the surfaces of all observable long bones and the left ilium. It is likely that the nonspecific infection in the mother's skeleton was transferred to the baby.

Discussion

The placement and age of the baby would suggest that it had been born. There are two other lines of evidence indicating that the young woman was the mother. Their bone oxygen isotopic compositions are very similar (table

7.1—the small difference could be accounted for by analytic error), and they both show signs of infection. The healing fibula and the possible infection in the woman's vertebra, combined with the extent of infection found in the baby, indicate that she had been fighting illness for a long time. At 34 weeks, the baby would have been premature but viable. It is not possible to determine if it was stillborn or died shortly after birth. Its sickened state, however, could have resulted in lower than normal weight and height, making it older than 34 weeks, possibly even full term. The fact that the baby was not a secondary burial suggests that it died around the same time as the mother. Furthermore, being buried with its mother in this special context indicates that despite its newborn state it (and perhaps babies in general) had status and value in the eyes of the community and that the mother-infant bond was recognized as important. This baby did not live long enough to establish or embody an identity on its own or act as an agent, but its presence and position in this burial indicate that even as a baby it had a social identity.

There are many conceivable circumstances for the cause of the mother's death. The most natural speculations, however, involve complications from childbirth or the observed infection(s). Other explanations for her demise cannot be ruled out, but if she met a violent death such as suicide, execution, or murder it did not leave marks.

In terms of a biosocial persona, she was probably not high in status, and her hairstyle indicates that she may have come from western Mexico. The two acute health crises in her childhood may have made her "frail" or more susceptible to disease and early death, as per the predictions of the Osteological Paradox of James Wood et al. (1992). Although it is unclear whether some of the lesions in her lumbar vertebrae are a consequence of infection or of carrying heavy loads during her adolescence, either could have added to her frailty. The possibility that she regularly bore heavy loads on her back evokes a more specific persona for her social identity, one that is also consistent with her poor childhood health and suggests origins from a relatively low social status. Furthermore, her stature at 152.1 to 153.9 cm is lower than female averages for the region and time period, which range from 155.1 to 156.4 cm (Glassman and Garber 1999; O'Neal 1997). And yet in death she was placed in a location that would not normally be attributed to a low-status individual. It is possible that she had gained status from foreign identity or from her association with the man around whom her arm was draped. None of her isotopic values are anomalous with individuals assumed to be local to Lamanai. Previous research (Coyston et al. 1999; White and Schwarcz 1989) has demonstrated that the Lamanai diet has dis-

tinctively high $\delta^{15}N$ values, reflecting its proximity to aquatic and marine resources. Although west Mexican diets were also maize based, they did not contain the marine component found at Lamanai (Cahue 1999). Similarly, the oxygen-isotope compositions of both her bone and third molar do not match those of any west Mexicans yet analyzed (unpublished data).

There is an intriguing conflict between the chemical composition (δ values) of this woman's tissues and the forms of cultural embodiment (such as hairstyle and possibly cranial modification) that she expresses. We can only speculate on the reasons. The most likely explanation is that she was brought to the site at a very early age, before nine years, when her third molar began to form. She might also have been a second-generation (or more) immigrant, maintaining her identity for honor or simply copying a style she admired (although we assume that the latter behavior may not have been generally tolerated).

The social identity of the man is just as enigmatic. The skeletal morphology and material culture evidence would suggest that he was a foreign elite individual who engaged in a specific repetitive physical activity. He had survived trauma to his lower limbs long enough for infection to appear.

The active maxillary infection suggests that he was not in very good health at the time of his death, and the presence of iron deficiency indicates a past, and possibly ongoing, chronic condition. Dietary insufficiency is only one of many causes of iron deficiency anemia. Among the Maya, this condition is often associated with heavy maize dependency (for a review, see Wright and White 1996), but his $\delta^{13}C$ value indicates that he consumed the least amount of maize among his comparison group, none of whom exhibited the same lesions. Insufficient iron consumption is also unlikely, because his $\delta^{15}N$ value indicates that he would have consumed considerable meat (including marine resources) from a fairly high trophic level. In fact, he had the highest $\delta^{15}N$ value in this sample. It is possible that his iron deficiency was caused by parasitic infection associated with the consumption of aquatic and marine resources and common in this area in both ancient and modern times (White et al. 2006). The status indicated by his copper adornment did not buffer him from this condition and may, in fact, have exacerbated it. Nonetheless, the anemia does not appear to have seriously affected his growth and development, as he was just slightly taller (at 164.3 to 166.7 cm) than his male contemporaries of the region (163.9 to 165.2 cm) (see Danforth 1994; O'Neal 1997).

Cranial modifications are an expression of group rather than individual identity, as they are an adult intervention in childhood growth (see also

Duncan, this volume; Torres Rouff, this volume). The lambdoidal flattening cranial modification stands out against the dominant fronto-occipital style practiced at Lamanai (White 1996), which suggests that he may in fact have been born elsewhere. This style of cranial modification has been reported for sites in Michoacán (Carot 2001; Pereira 1999), so both the cranial modification and the west Mexican style of tweezers that he wore point to a west Mexican origin. His seemingly normal-to-tall body height in the face of nutrient deficiency could also be explained by origins from a genetically taller population. Unlike his partner, he shows no other sign of childhood stress except for a hypoplastic dental defect consistent with weaning stress around the age of 3.5 years. The inability of status to buffer weaning stress is also found at other Maya sites (see Storey 1992). As one of the oldest individuals in the sample, it is remarkable that he lived as long as he did (40–50 years).

As with the woman's, the man's diet and water consumption are consistent with the local population. If he did come from elsewhere, he must have arrived before his third molar began to develop (i.e., under nine years of age, like his mate). His possession of foreign high-status adornment and his young arrival at Lamanai would suggest that his status was ascribed rather than achieved, assuming that his identity was not redefined by those who buried him. Although his physical characteristics could not have been altered after death, they are equivocal. The cranial modification indicates residence in a foreign location at a very early age. The diet indicates possible continued high status after arrival. His iron deficiency could be consistent with a high-status diet, but his infection is probably not.

His survival to "old" age is consistent with high status, but his strenuous physical activity is unexpected. Although his muscle markings indicate occupational activity, we cannot be sure that the actions involved were carried out simultaneously. Nonetheless, one activity that could explain his suite of activities is weaving. Although women were primarily responsible for weaving fabric in ancient times (e.g., Beaudry-Corbett and McCafferty 2004; McCafferty and McCafferty 1998) as they are today, it is possible that men were involved in weaving elite products, such as the heavier mats that symbolized kingship and were used on thrones. Heavy fibers would have been necessary for mat weaving, which could account for the strong muscle markings. These could have included imported maguey, as used in Mexico (Parsons and Parsons 1990), or perhaps local palm. Linda Manzanilla (personal communication, 2006) has postulated that male weavers in Mexico were engaged in the production of high-status or specialized products, but

there is also some evidence of elite men being involved in such a craft. For example, a male weaver, identified by a weaving needle, was found among foreign individuals at the Merchants' Barrio, Teotihuacan (Spence et al. 2005). This activity would also be consistent with Takeshi Inomata's (2001) recent suggestion that Maya elites produced specialized crafts that functioned to concentrate their prestige, political power, and artistic aesthetic and further separate them from lower-status individuals who were responsible for the majority of craft production. He suggests that elite products were imbued with ideology, power, and esoteric knowledge and used as currency for elite competition. Inomata views them as a hyper-expression of group identity that illustrates Pierre Bourdieu's (1984) concept of cultural capital for enhancement.

Although much attention is given to artifacts in mortuary contexts, little has been paid to using the skeleton to identify their possible producers. The elite-crafted products described by Inomata (2001) were made of substances that preserve well, such as shell and lithics. The importance of organic products is not reflected in the archaeological record because of poor preservation, but the body of N11-5/7A illustrates the potential of the skeleton to bear witness to the creation of a product that has not survived. Even though N11-5/7A had high status, he may have been weaving or making mats for someone of higher rank, and his product(s) could have been buried with the receiver. Hence only his body would remain to signal his identity.

Conclusions

The investigation of this "family" raises as many questions about their identities as it does answers. They form a meaningful social unit with a distinct identity among the other burials at the site, but each individual has its own biosocial identity. We still cannot explain why they were given such unusual mortuary treatment (including location and particularly body position), whether it reflected their position in life, whether the expression of sentiment imposed on their bodies after death was a reflection of their feelings during life, exactly what kind of activity the man was engaged in so repetitively, why they were living at Lamanai, and what caused them to die at the same time and be buried together. The combination of biological and material culture data does, however, allow us to make some fairly safe assumptions.

All suffered some ill health at the time of death, which is likely to have been the cause of death of the baby. Both the man and the woman were

probably foreigners who were brought from west Mexico at an early age. The man had high status when he arrived and was able to maintain it even in a foreign land, perhaps because he was a highly specialized artisan with esoteric knowledge. The age difference between him and the woman indicates that he must have been in the community for about 20 years before she arrived, which hints at the possibility of a long-term relationship between the two regions. One wonders if she was brought from their homeland at his request.

Although the couple became dietarily assimilated into their new biocultural environment, their artifacts indicate that they preserved some symbols and practices of their homeland culture. The man was regularly engaged in a repetitive physical activity that probably had something to do with his social or political role in the community. Alterations of his skeleton indicate that he may have been a weaver of heavy fibers. Both the man and the woman had also experienced some trauma to the lower limbs, which they had survived for some time before death. The limitations of isotopic data as a basis for identifying foreigners are also illustrated by this case. Even in the absence of artifactual evidence, isotopic compositions have been used successfully in many Mesoamerican cases to demonstrate variable geographic origins and life-history movements across landscapes (Spence et al. 2004, 2005; White et al. 1998, 2000, 2002; White, Longstaffe, and Law 2001; White, Pendergast, et al. 2001; White, Spence, et al. 2004; White, Storey, et al. 2004). Here, however, they are only able to provide evidence of long-term residence at the site.

These burials have features (including artifacts and cranial modification) that represent conscious acts of cultural identity and embodiment, but the physical activities, health, and chemical composition of the individuals constitute unconscious expressions of embodiment that are no less revealing of culture. Indeed, the very fact that they are not intentional implies a sort of objectivity that can only be left to science.

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