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Peer reviewed|Thesis/dissertation
The Politics of Death and Identity in Provincial Tiwanaku Society (A.D. 600–1100)

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy

in

Anthropology

by

Sarah Irmelin Baitzel

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Professor Katharina Schreiber

2016
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Chair

University of California, San Diego

2016
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ACKNOWLEDGMENTS

I owe thanks to the many individuals and institutions in the U.S. and in Peru that have been a part of this dissertation research.

I am profoundly grateful to my graduate advisor and doctoral committee chair, Dr. Paul Goldstein, for many years of guidance, teaching, patience, and field adventures. My graduate career began, and ends, in Moquegua, where Dr. Goldstein generously invited me to participate on his project 10 years ago. He introduced me to the Tiwanaku colonies, their mysteries, anthropological riddles, and fascinating material remains, and to many of the people who have become close friends since. I am profoundly grateful for the opportunity he gave me to conduct my dissertation at Omo M10, a site that is as dear to him as it has become to me. I thank him for the long hours spent discussing the intricacies of data and Tiwanaku history, for tirelessly sharing his knowledge of archaeological method and theory, and for edits and feedback on the grants and publications that are the foundation of my career.

Over the course of my graduate career, Dr. Geoffrey Braswell has become a valued advisor and friend. I have especially appreciated his feedback on academic writing and style; it has made me a stronger writer and more critical thinker. Thanks to his generous offer I was able to expand my horizons of Latin America’s antiquity during my final year in graduate school. I will always remember our discussions of theory and much else that took place on surfboards along the California coast, and the unique, archaeology-packed travels in Mesoamerica and South America.

My thanks are also due to Dr. Guillermo Algaze for his much needed advice, calm attitude, and optimism throughout the different stages of my graduate career. His
graduate seminars not only introduced me to the wonderful world of Mesopotamian archaeology, but also taught me to see the past from different scales and perspectives, and across the longue durée. I am deeply grateful to Dr. Christine Hunefeldt for taking me under her wing, for involving me in exciting new interdisciplinary projects and opportunities, and for many afternoons of Kaffeeklatsch about Andean culture and history. I want to thank Dr. Katharina Schreiber for opening the world of Andean archaeology to me, and for seeing me through to the end of my schooling.

My graduate colleagues have been an essential part of making my time at UCSD a positive and fun experience, whether in the field, lab, library or coffee shop. I am deeply indebted to Nancy for being her friend and for helping me make San Diego my home; to Alicia for her hugs and good sense of humor during the tough times; to her, Andrew, Matt, Giacomo and Beth for sharing the joys and pains of field and lab work; to Ben, Misha, and Mikael, for encouraging conversations and keeping things interesting along the way. I also thank Nikki Gee for her organizational skills, kind words and patience. Thanks also Dr. Alicia Muñoz from the UCSD Language Program for her friendship, support, and good sense of humor.

This dissertation would not have been possible without the support and help of many individuals in Lima and Moquegua. I want to thank those who came to excavate with me in the Moquegua in 2010 and 2011 (and to eat cheese-and-avocado sandwiches for weeks on end): Barbara Carbajal, Cameron Clegg, Camila Capriata, and Allisen Dahlstedt, and the students of the 2010 and 2011 UCSD Archaeological Field School.

Over the course of this dissertation research, the staff of the Museo Contisuyo in Moquegua tirelessly offered their support in terms of advice and logistic. More
importantly, they became part of my archaeological family, and I consider myself very fortunate for working with them, celebrating birthdays together, and sharing many, many ice creams, *dulces*, and cake. Profound thanks are due to Patricia Palacios for taking on many of the lab work that arose from the project, for helping in the field and with conservation of textile materials, for welcoming me into her family; to Antonio Oquiche, Julio Pinto, and Yamilex Tejada for being friends and helpers. Thank you to Luis Gonzales at the Ministry of Culture office in Moquegua for his patience, knowledge and good humor. I would like also to acknowledge the hard work of my tireless team of local archaeologists: Justina Mamani, Flora and Gumercindo Quispe, Pedro Alvarez, Richard and Wilson; and to my collaborators in the lab: Rosalia Choque, Karina and Nicasio, and Evelin Lopez.

During my fellowship year at Dumbarton Oaks, I had the great privilege of being a member of a scholarly community that welcomed me, challenged and supported me intellectually, and showed me the wondrous world of Byzantine Studies and Washington, D.C. I am deeply grateful to Dr. Gary Urton, for his friendship, curiosity and pestering, and for making me think about the Andes and Tiwanaku in new ways. I want to thank Dr. Colin McEwan and Dr. Michael Maas for their advice, smiles and wise words, which were always welcome. I thank Federica Marchesi and Nawa Sugiyama for giving me a home in D.C.

Dr. Nicola Sharratt and Dr. Antti Korpisaari generously shared their advice and insights on the topic of Tiwanaku mortuary archaeology with me over the years, and their seminal works on the topic were an invaluable resource for forming the thoughts and conclusions presented in this study. Dr. Michael Moseley and Dr. Susan deFrance, Donna
Nash and Ryan Williams provided encouragement and logistical support throughout my fieldwork.

Thanks to the Pinto Navarrete family of Moquegua, who patiently endured the coming and going of archaeological remains over the two years I lived in their house. I want extend special thanks to Andrew Mitchell, for generously taking me into his home at Conde for many years, and especially Ina, who I miss dearly for her sense of humor, for making me feel like family, and for the many meals and conversations we shared over the years. Moquegua will not be the same without her. Thank you also to many others who, though not listed, are not forgotten.

I owe the most gratitude to my family, without whom this would not have been possible: to my brother and sister, for their love and laughter reminding me of what is important in life; to my father, for his love, inspiration, and vision, for showing me that everything imaginable is possible, and that the imagination is limitless; and to my mother, for her unconditional love and endless patience, for not questioning my choices, and for believing in my dream, happiness, and success: this dissertation is for you.

Chapter 6, in part, containna material as it appears in “More Than The Sum of its Parts: Dress and Social Identity in a Provincial Tiwanaku Child Burial” in Journal of Anthropological Archaeology 35:51-64 (2014) by Sarah I. Baitzel and Paul S. Goldstein. The dissertation author was the primary investigator and author of this paper.
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ABSTRACT OF THE DISSERTATION

The Politics of Death and Identity in Provincial Tiwanaku Society (A.D. 600–1100)

by

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Studies of early state societies often focus on macro-level dynamics of social diversity and inequality, overlooking the importance of complex social relationships and experiences of the people who lived in these societies. Debates about the nature of the Tiwanaku state (A.D. 500–1000), the earliest expansive polity in the south-central Andes (Bolivia, Peru), hinge on understanding the relationships between its constituent individuals and lineage groups. Tiwanaku funerals that propagated popular ideologies of reciprocal feasting, reflected personal histories of the deceased, and marked social
boundaries through style and space present one avenue of study of life in early state societies. In this dissertation, I examine 309 burials from cemeteries at the provincial Tiwanaku center of Omo M10 in the Moquegua Valley (southern Peru). The unprecedented size of this sample, new sampling methods, and outstanding preservation of burial assemblages shed new light on Tiwanaku funerary processes, and redefines the range of normative and non-normative Tiwanaku mortuary practices.

Variability of grave assemblages and tomb structure styles at Omo M10 highlights the social construction of age and gender identities in Tiwanaku society. Over the lifecourse, individuals acquired economic and social capital. Textile and food production and consumption marked gendered spheres of practice and entangled Tiwanaku men and women into relations of duality and complementarity. For Tiwanaku kin communities living at Omo M10, cemeteries presented discrete spaces for commemorating ancestors and cultivating shared memories, within the broader ideological parameters of Tiwanaku mortuary practices. A non-Tiwanaku cemetery at Omo M10 indicates, for the first time, multiethnic interactions of Tiwanaku lowland groups with coastal populations. Overall, the burials provide little evidence for institutionalized social stratification in provincial Tiwanaku society. Maintaining the autonomy of kin group mortuary practices, the state instead appropriated non-normative death-related practices through public offering rituals.

As the results of this dissertation illustrate, mortuary archaeology continues to be a versatile tool for multiscalar social analyses, and for elucidating the nature and intersection of personal and community-level identities. This line of inquiry can
significantly contribute to debates about social organization and inequality in ancient states, as ideologies related to death are contested, appropriated, and transformed.
INTRODUCTION

Early states distinguish themselves from other forms of social organization through the institutionalization of social inequality. This raises the question of if and how social identities embedded in physical bodies and practices (such as age, gender, kinship or ethnicity), became subject to ideologies and institutions of power (Chapter 1). Did the social hierarchies of early states arise from existing forms of inequality within or between identity communities? Or did the state—represented by a ruling individual, kin group, or class—create or seize alternate sources of power? In this dissertation I seek to investigate these issues, which carry significant implications for our understanding of early states, through the study of Tiwanaku (A.D. 500–1100), the earliest expansive state to emerge in the Andean high plateau of western South America.

Archaeologists have proposed that the institutionalization of social hierarchy at the city of Tiwanaku occurred during the 5th and 6th centuries A.D., when an elite class was in control of craft production and monumental construction (e.g., Janusek 2004; Kolata 1993, 2003; Chapter 3). Public rituals and the propagation of a shared ideological and artistic canon played a central role in representing and distinguishing social diversity in unranked and ranked relationships. Anchored in familiar performances of everyday life, production, and exchange, large-scale rituals and ideologies hosted and organized by elite persons or groups encouraged the many sub-communities living in Tiwanaku’s capital to share in a common sense of “being Tiwanaku” without the evident use of force.
At the same time, rituals presented a principal form of maintaining economic and social autonomy in many aspects of community life.¹

The pervasiveness of integrative social forces of Tiwanaku culture reached beyond the heartland of the capital city to include its colonial enclaves on the eastern and western slopes of the Andes. Hundreds of kilometers away from the Tiwanaku capital, Tiwanaku-affiliated populations living in enclaves in the Cochabamba and Moquegua valleys in modern-day Bolivia and Peru, respectively, maintained their highland lifeways over many generations (Anderson 2013; Goldstein 1989, 2000b, 2005). The colonization of the temperate Middle Moquegua valley by Tiwanaku highlanders at the end of the 7th century A.D. was likely motivated by the agricultural potential of the region for maize cultivation providing fermented corn beer or chicha, a staple in Tiwanaku community and state-level rituals (Goldstein 1989, 1993b, 2005). Until the collapse of the state at the end of the 11th century A.D., Tiwanaku Moquegua residents maintained a strong affinity with their highland origins through migratory, culinary, production, ritual, and mortuary practices (Blom et al. 1998; Goldstein 1989, 2005; Knudson 2008).

Knowing that Tiwanaku people in the heartland and provinces were accomplished artisans, traded widely across the region, and engaged in feasting and ceremonies, we still grapple with the most basic questions of how members of Tiwanaku society experienced life and death as individuals, members of kin communities, and subjects of the state. What were the meaningful social distinctions made in the context of Tiwanaku life, how

¹ Andean, and in particular Tiwanaku, archaeologists often describe prehispanic social organization as resembling the ayllu, a kinship system others believe was only promoted and formalized under Inca rule. In Chapters 1 and 3 I provide a more detailed discussion of approaches and critiques of the ayllu model in Andean archaeology.
were they expressed materially and internally experienced? What did being of a certain age or sex, family or ethnic group entail for the individual members of Tiwanaku society, in particular in terms of their status in life? How did individuals relate to members of their family and community, and to the Tiwanaku “state” as an ideological construct that was made reality through the shared beliefs and practices that bound together people who lived dispersed across the diverse environments of the Andes? The answers to these questions will bring us closer to understanding the sources of social and political power and inequality within a network of social heterogeneity, thus contributing directly to current approaches to early Andean state not as monolithic but fractious and situational constructs (e.g., Stanish 2013:161).

**Mortuary Approaches to Identity and Social Organization**

In the prehispanic Andes, kinship and community extended beyond the spaces of the living to the tombs and cemeteries of the deceased (Dillehay 1995; Eeckhout and Owens 2015; Shimada and Fitzsimmons 2015). The living recognized, respected, and required the power of the dead. It follows that the above questions about Tiwanaku life cannot be answered without taking into consideration funerary rituals as extensions of social memories and practice, but also as rituals during which inequalities and power could be created and contested by ritual actors (e.g., Bell 1997). Studying the variability of funerary rituals at distinct levels of society—the individual, the community, and the state—I seek to comprehend how Tiwanaku people perceived and represented themselves in death as stakeholders of power as members of multiple identity communities.
Mortuary archaeology is a singularly fitting tool for a multi-scalar approach to social identity and organization (Chapter 2). Aside from written texts or iconographic depictions, burials remain the only way to identify specific individuals of any status in the past. Funerary rituals are normalized “rites of passage” that take place throughout the life of the family and community. Most immediately, mortuary rituals alleviate emotional responses to death influenced by the personal histories of the deceased and his or her connections to the community (e.g., Murphy 2011; Tarlow 1999). Mortuary rituals are also imbued with meaningful actions and symbols that set them apart from mundane, daily activities (Carr 1995; Hodder 1982; Parker Pearson 1999). As such, they may idealize or contest the social order through representations and symbols that must be understood within the broader context of landscape, bodies, and material culture (e.g., Chesson 2001; McGuire 1982; Rakita and Buikstra 2005).

Together, the time, space, and materials involved in the treatment and commemoration of the dead form a particular burial style. Their temporal dimension includes the sequence of events preceding burial, the interment event or events, and sometimes post-interment activities. The location and organization of burial spaces with regard to other features in the landscape can provide information about access to resources, affinity, or symbolic meaning. Lastly, analysis of material objects used in conjunction with the body and burial space throughout the interment and post-interment phases are also subject to the ritual norms and the choices of the mourning community. Similar to the broader concept of material style used in archaeology (e.g., Carr 1995; Wiessner 1990), patterned variability in burial styles reflects group boundaries and offers participants of burial rituals an opportunity to represent themselves in a certain way as
similar or different in relation to other groups. Variability in burials styles also reflects social inequalities and non-normative patterns of social exclusion in ritual practices.

The distinction of normative and non-normative burials relates to ideologies about the deceased’s role in life and death (Parker Pearson 1999). Normative burials include the range of mortuary treatments extended to individuals who lived and died as recognized members of the group. The degree of variation in normative burial practices may reveal broader social structures of identity, organization and inequality. In contrast, non-normative burial may present rare deviations from common burial patterns, and shed light on the characteristics or circumstances that exclude or exempt persons from receiving normative funerary treatment.

**Tiwanaku Mortuary Archaeology**

The use of burial analysis as a source of information about Tiwanaku social organization and identity is relatively recent (Chapter 4). The earliest mortuary samples resulted from sporadic excavations of tombs at provincial Tiwanaku cemeteries that had often been heavily looted (Bandelier 1910; Bennett 1936). Later studies focused on small numbers of burials—often fortuitous discoveries—in residential and elite contexts in the capital, hinterland, and provinces, as well as on offering contexts associated with monumental buildings (Bermann 1994, 1997; Couture 2003; Couture and Sampeck 2003; Janusek 2004; Kolata 1993a).

More recently, systematic mortuary analyses of cemeteries in the *altiplano* (Korpisaari 2006) and in the Moquegua and Cochabamba valleys (Anderson 2009, 2013;
Blom, 1998; Buikstra 1995, Döllerer 2013; Goldstein 2005; Goldstein and Palacios 2009; Owen 1997; Sharratt 2011; Vargas 1988) have been able to establish a thorough understanding of normative Tiwanaku funerary processes. Burials associated with Tiwanaku settlements across the southern Andes were single-individual below-ground interments in pits and stone-lined cists. Tiwanaku burials were commonly placed in discrete extramural cemetery areas that were used by self-contained kin groups, as indicated by the expected distribution of children, male and female adults. The physical remains of the deceased were typically placed in seated-flexed position oriented toward the east, and accompanied by a small number of grave offerings consisting of serving and cooking vessels, items of personal adornment, or tools.

Some archaeologists have argued that age, sex, and social status had bearing on the types and quantities of grave offerings found in Tiwanaku burials (Bermann 1994; Döllerer 2013; Goldstein 1989, 2005; Korpisaari 2006; Sharratt 2006). One of the main points of interest in these studies has been the assessment of social status based on relative investment in burials, i.e., numbers and types of objects, in particular objects made from rare materials, funerary dress and tomb structure types, associated with elite residential and monumental contexts. Nevertheless, small sample sizes, poor preservation and unsystematic sampling have precluded existing studies from reaching more definitive interpretations about mortuary representations of Tiwanaku social identities. The reported homogeneity of normative Tiwanaku burials stands in contrast to the observations made based on data from domestic and monumental contexts that Tiwanaku state society was socially diverse and stratified. Inequality between individuals and communities was, at least, partly, expressed in the more elaborate burial treatment and offerings of elites at
Tiwanaku and even within smaller Tiwanaku settlements in the highlands and lowlands (Couture 2003; Money 1991; Goldstein 2005). On the other end of the spectrum, a small number of non-normative burials containing partial human remains and bodies in unusual body position (flexed facedown or on their side) or location (intramural, near monumental architecture) have been tentatively identified as representing sacrifices, offerings, individuals excluded from society, or ancestor figures (Blom et al. 2003; Couture and Sampeck 2003; Goldstein 2005; Korpisaari 2006).

In what follows, I present data that expand, strengthen, and challenge some of these conclusions, seeking an understanding of mortuary rituals as expressions of identity and as sources of positive and negative social power. I investigate mortuary expressions of social variability in Tiwanaku society at multiple scales of analysis: burials (individuals), cemeteries (communities), and the site (within a regional culture, social and state structure). To do this, I focus on the site of Omo M10, a primary regional center among the colonial Tiwanaku enclaves of the Middle Moquegua Valley of southern Peru (Goldstein 1989, 1993a, 2005). Despite the distance between the Tiwanaku capital and the Moquegua valley, the site of Omo M10—with its temple, town, and presently 14 Tiwanaku-affiliated cemeteries—presents a microcosm of the social landscape of the Tiwanaku capital, diversity and hierarchy. In light of the unparalleled preservation conditions and the spatial organization of the Omo M10, the site presents an excellent case study for a multi-scalar analysis of Tiwanaku social identity and organization.

I propose two overarching and contrasting research hypotheses to frame my investigation of Tiwanaku mortuary rituals at Omo M10 (Chapter 4):
If mortuary variability (in terms of style and wealth) correlated positively with biological age and sex, then individual relationships and abilities had more impact on life experiences than kinship or class. Conversely, if mortuary variability (in terms of style and wealth) correlates positively with cemetery boundaries, then kinship or community identity were the most significant characteristic for shaping individual experiences.

The analyses and interpretations I put forth in this dissertation to evaluate these hypothesis are based on a broad range of materials from comparable numbers of burials excavated in 13 distinct Tiwanaku-affiliated cemeteries, and one contemporaneous non-Tiwanaku cemetery at Omo M10. The burial sample from Omo M10 presented in this dissertation represents the largest problem-oriented research sample of scientifically excavated Tiwanaku burials to date. The hyper-arid climate of the Moquegua valley offers an additional advantage for the detailed reconstruction of Tiwanaku funerary processes and materials because textile, basketry, and other artifacts made from fragile materials are well preserved in this region. Furthermore, rather than sampling visible, isolated burials, the mortuary excavations at Omo M10 conducted in 2010–2011 used area trenching to identify a more representative sample including smaller, less visible tombs and to expose cemetery surface areas and evidence of extra-burial activities.

The analysis of burial contexts at Omo M10 contributes a new level of detail of body treatment and funerary dress, and of the broad array of offerings that were deemed part of normative Tiwanaku burials before, during, and after interment. The use of open-area trenches allows me to definitely identify evidence for prolonged interactions with the dead, a practice that has for a long time been considered an elementary aspect of Andean
communal ritual, but had been refuted in the case of Tiwanaku until recently (Goldstein and Palacios 2007, 2009; Isbell and Korpisaari 2015). The view beyond the tomb also shows that diversity in funerary practice was not limited to the grave itself; it was more deeply embedded in the broader ritual conduct of communities.

Based on the data recovered during the excavation and analysis of 231 burials at the Omo M10 site in 2010–2011 (and 69 additional burials recovered in 1984 and 1987), I seek to address the following questions in this dissertation as a step toward addressing the question of diversity and inequality in Tiwanaku:

1. What were the various stages, practices, and material components of Tiwanaku mortuary ritual? Is it possible to distinguish between normative and non-normative burials, and to identify the causes of divergent funerary treatment? (Chapter 6)

2. How were Tiwanaku burials modified to acknowledge the personal histories, identities, and status of the deceased in relation to their age and biological sex? (Chapter 7)

3. Did burial styles mark social identity at the kin group level, and if so, did they communicate social inequalities between kin communities? (Chapter 8)

4. What role did funerals and other death-related practices play as performances of identity and power among different factions within and beyond Tiwanaku society (e.g., kin groups, state agents, other ethnic groups)? (Chapter 9)

I argue that Tiwanaku funerary variability at Omo M10 illustrates that mortuary expressions of social diversity in Tiwanaku society was subtle compared to the pervasive, uniform ritual patterns associated with Tiwanaku cultural identity. Normative and non-normative burial styles alike marked the identity of groups living away from their
homeland in contact with others who did not share their customary treatment and interaction with the dead.

I propose that in provincial Tiwanaku society, normative death-related practice and ideology remained the domain of kin communities. The scarcity of status differentiation in community burials furthered the integrative effect of mortuary rituals intended to create social memories and affinities through acts of feasting with the dead. In that sense, death-related beliefs and practices presented a force that counteracted the centralizing effects of elite control that took place in other ceremonial and residential contexts. Rather than building power from the integrative normative burial practices, the state limited its interaction with death and human remains to new practices of power using non-normative burial practices to create a potent form of state-organized ritual practice.

Overall, I find that social diversity and inequality correlated more with individual experiences of age and gender, and to a certain degree kinship, at least in provincial Tiwanaku society. Nevertheless, the evident use of non-normative practices seemingly independently of age, gender or kinship leads me to believe that the Tiwanaku state created alternative forms of social inequality and power that established new hierarchies beyond the level of the community.

The social and ritual dimensions of Tiwanaku mortuary practice provide information about the diversity of social identities that existed within ancient (Andean) state society, and about the manner in which these identity categories interacted with one another in the context of funerals and commemoration. The results of this dissertation demonstrate the utility of detail-oriented microanalyses and systematic sampling
strategies of funerary contexts to elucidate the role of time and space in the treatment of the dead. Because death and burial are events inseparable from the life experiences of individuals and their communities, the materialization of emotions, the acknowledgement of personal histories and creation of social memories, and the enactment of ideologies of death present powerful, contested forms of identity and expression. As a result, they are sources of identity and power that offer potent sources in the institutionalization of inequality in early states. The study of mortuary rituals offers a unique perspective into the salience and depth of inequality and state power in ritual contexts that gave meaning to the lives and deaths of individuals and communities in the past. Mortuary rituals should not be dismissed as peripheral or symbolic to the human experience, but need to be given careful consideration as we seek to understand the nature of ancient societies.
CHAPTER 1: THE ARCHAEOLOGY OF STATES, COMMUNITIES, AND SOCIAL IDENTITY

Introduction

The study of the state is one of the oldest endeavors of archaeology. Debates about the nature, structure and function of the state accompany all schools of theoretical thought and continue through the most profound paradigm shifts in the discipline. To list only a few examples, archaeologists have approached the study of the state as part of long-term socio-political dynamics (e.g., Feinman and Marcus 1998; Smith and Schreiber 2005; Stein 2001); as ideological constructs (Demarest and Conrad 1992); as economically driven (e.g., Smith 2004; Stanish 1992); and as hierarchical (Service 1975), heterarchical (Ehrenreich et al. 1995; Stein 1998, 2004), and centralizing (Flannery 1999). Increasingly, however, archaeologists have become interested in the impact of the state on human experience. This includes the ways health and diet change under the auspices of the state (e.g., Bray 2003; Tung 2012), and how craft production is linked to the everyday life ways of state subjects (e.g., Costin 2001; Inomata et al. 2001).

Under the neo-evolutionary paradigm, Service (1975) and Fried (1967) both argued for non-kin-based social classes as a defining feature of state-level societies, as opposed to chiefdom-level societies where hierarchies of power are embedded in the kinship structure. Marxist approaches to the study of early states claimed that the formation of social classes led to the dissolution of kinship structures (Patterson and Gailey 1987). These observations and statements raise the question as to how exactly
kinship gave rise to or conflicted with newly created social classes. How do class formation processes build on, oppose, or even disintegrate kinship hierarchies? What kinds of social inequality and power remain part of kinship, and which are appropriated or newly created by social classes?

To answer these questions it is necessary to consider a number of factors, including the definitions of concepts like class, power, authority, and elites. While Marx’s definitions of class are based exclusively on the unequal distribution of resources (1970), Weber offers an alternative in the form of status classes that are based on the monopolization of ideals and immaterial prestige (1947:428). Marxist applications of the class concept have been problematic for the study of pre-industrial societies (Crone 2003; Fallers 1973; Trigger 2003). The distinction of power as based on economic inequalities, and authority as social power embedded in social roles (Dahrendorf 1959) may help to differentiate between parallel co-existing social hierarchies. It allows individuals to participate simultaneously in different hierarchical power structures, because social classes are not mutually exclusive.

Considering the problems encountered by sociologists and historians who study class relations, it comes as no surprise that there is a similar lack of agreement among archaeologists about the nature of early states and their societies (Claessen and Skalnik 1973; Marcus and Feinman 1998; Yoffee 2005). Any attempt to define early states either as complex social structures or historical processes only demonstrates the importance of analyzing the individual components of which these structures and processes exist. One of these is social stratification, whose study has been laid to rest with the decline of
Marxist archaeology in the 1970s and 1980s, but which needs to be reconsidered in light of new theoretical and methodological advances in archaeology and elsewhere.

According to Marxist archaeology, kin relations did not entirely disappear upon the emergence of social classes. They were stripped of the power that was inherent in the social roles and positions of kin structures, while the newly formed social classes appropriated and recreated social hierarchies of inequality (Patterson 1986b). Discontent with the Marxist model has been voiced from within and from outside this school of thought, showing particular concern about the conflation of social heterogeneity and inequality as two discreet processes (Adams 2001; McGuire 1983).

Moving away from the by then highly problematic use of the class concept in search of less controversial models, Crumley and a number of other archaeologists proposed alternative ways to approach social organization and social relations (Blanton et al. 1996; Brumfield 1995; Crumley 1995; Stein 1998). Crumley’s (1987, 1995) “heterarchy” model allows for inversions and alterations of hierarchies, and a generally more flexible social structure of dynamic relations. Blanton’s (1998) “dual-processual” model distinguishes between the structural “corporate” and personalized “network” power relationships (also Blanton et al. 1996), a distinction that vaguely resembles the differentiation between power and authority. Finally, Stein’s “conflict-based model of society” (1998) moves beyond heterarchy and focuses even more on dynamics networks of power relationships. Here, hierarchies and heterarchies counteract each other leading to competitive social interactions and society-wide conflict. All of these models certainly open up new possibilities for the study of social organization by highlighting the importance of dynamic social relationships. Yet, they also all avoid the concrete concept
of class and the effects of class formation on kinship structures, which do not help to understand the interaction of class and kinship hierarchies.

In several archaeological case studies, researchers have explored new terrain by adapting old concepts to new data or by building new models. Most remarkable in this area are Gillespie’s adaptation of Lévi-Strauss’ “house society” (2000a, 2000b) for Classic Maya society, Akkermans and Schwartz’s (2003) proposition of a “tripartite” power structure in 3rd millennium B.C. Syria, and Southall’s (1988) “segmentary” states in India and Africa. They all stress the role of kinship as an “organic” source of social inequality in early states.

This alternative approach to the study of ancient states leads me to shift my focus on early states away from structural or functional perspectives. Instead, in this dissertation I will approach the state as an “imagined community” that impacts the human experience at the level of the individual and finds expression in the practices and meanings that emerge from human relationships and interactions. Early states form out of pre-existing social relationships of inequality and affinity. These structures, in turn, cannot be separated from structures of inequality related to kinship, gender, age, and ethnicity.

Although created for the study of the modern nation state, Benedict Anderson’s concept of the “imagined community” (2006:7) provides as useful way of conceptualizing early states. Early states are “imagined” because most of the members of these polities will never know each other personally. At the same time, they constitute communities based on what Anderson terms “comradeship,” and what I would perhaps describe as cultural affiliation, that is, a recognizably similar way of acting and thinking
of the world. In ancient states, the sense of community and state was embedded and enacted in daily practices, public performances, and material reproduction. The state, then, forms just one more set of “collective agencies” (Routledge 2008:7) in which individuals participate, in the same way they also participated in identity communities related to their kinship, gender, etc.²

In this chapter, I examine the utility of the “imagined community” for conceptualizing the experience of social identity. Drawing on anthropological discussions of social memory, ideology, and style, I propose that these processes form the basis of social identity. Communities are the result of salient social identities when individuals come together in mundane or meaningful situations (e.g., ritual) in which identity relationships of inequality and affinity are experienced, transformed, and reinforced. I introduce the concept of the *ayllu* as the dominant model of Andean social organization, and explain how its structural particularities and multiple recurring social relationships are materialized in the context of ritual practice. Lastly, I define and discuss some of the

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² Anthropologists have proposed the term “cultural citizenship” (Rosaldo 1994) to describe the social identity that associates subject members of the state assume with one another outside the legal-political context of the nation-state. Although cultural citizenship has been primarily discussed in the context of modern nation-states and participatory democracies, but it is also adaptable to the emergence of early states, and applicable more broadly as the “everyday processes whereby people, especially immigrants, are made into subjects of a particular nation-state” (Ong et al. 1996:737). Ong and colleagues define cultural citizenship as “the cultural practices and beliefs produced out of negotiating the often ambivalent and contested relations with the state and its hegemonic forms that establish the criteria of belonging within a national population and territory. Cultural citizenship is a dual process of self-making and being-made within webs of power linked to the nation-state and civil society” (1996:738). In that sense, the state is a participatory phenomenon (Turner 2001) that absorbs, appropriates and undermines existing ideologies and power structures related to ethnicity, kinship, and gender (e.g., Patterson and Gailey 1987).
most prevalent forms of social identity that shape the human experience, and how these have been studied in archaeology and, in particular, the Andes.

1.1 Community and Social Identity in Archaeology

1.1.1 Communities and Identity

Communities are temporary and situated constructs based on collective experiences, memories, and actions that form the basis of social identity. Communities can therefore, in the broadest sense, be considered the lived experience and manifestation of social identity. Functional and structural models of community have imposed a sense of permanence and stability on the concept that is not always compatible with the fluid and fleeting nature of community. Canuto and Yaeger have proposed that a community is an “ever-emergent social institution that generates and is generated by supra-household interactions that are structured and synchronized by a set of places with a particular span of time” (2000:5). Definitions such as this are too embedded in households and economic practices.

Moving away from more traditional definitions that link community to specific places, forms of interactions or biological relationships like kinship, I broadly define community here as a temporary collective of people connected by a common style of expression, sense of belonging, and memories reproduced through shared ordinary and extraordinary experiences. Although communities can become institutionalized through formalized boundaries, they are often no more than “combinations of momentary series, constituted by the common circumstances of situated individuals” (Fahlander 2003:32).
As a result, communities are the time and place in which social identities are created and reproduced.

Social identities formed in the interaction between individuals and their social environment, that is, the group or community. “Even if each identity creation takes place individually, its point of reference is in each case a group, whose goals, norms, role expectations, and social image the person wishes to make his or her own” (Müller-Schleessl and Burmeister 2006:11, translation by the author). The group acts as the focal point through which an individual comes to identify as a member. At the same time, the individual embodies the community through language, thought, or action (Assmann 1992:139).

Breaking down the dichotomy of individual and group identity, Assmann distinguishes between individual, personal, and collective identity, of which the first refers to the individual’s consciousness, the second to his or her particular role in society, and the third to the conceptualization of the group with which its members identify (1992:131–132).  

To archaeologists, individual identity is lost at death, but personal and collective identities can be accessed even after death presuming that collective identities are reified in “stable behavioral patterns of association” (Lamont and Molnár 2002:168). These patterns of association can occur in the context of *habitus* and ritual practices as they shape material style, space, and even human bodies (Meskell 2004:21).

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3 Similar to Assmann’s distinctions of a personal, social and collective identity, Harré has proposed the concepts of individual-based, or personal, age, describing the time during which the individual is perceived as a physically present member of the group, and social age, the time during which the individual or a social extension of him/her (e.g., memory) exists (Harré 1991).
Like communities, social identities are situational and may “alter depending on context and audience” (Cohen 1985; Insoll 2007:6; Jenkins 2004). Because members of an identity community possess multiple social identities, community identities are internally diverse. This diversity may de-emphasize the temporary importance of certain types of identities. For example, national identities are less important within the country during times of peace. Identity expression is strongest at the community frontiers, in situations that make the identity category salient, necessary, and conscious (MacInnes 2004:533). At the same time, positive self-identification of group members in the context of interaction with the other strengthens social cohesion (Friedkin 2004:410; Jenkins 2004:106).

Compared to the internal diversity of identity groups, the state of “alterity,” or otherness, presents a stable and permanent state (Jenkins 2004:18; Lau 2012:9). In contrast to members of the identity community, “the other,” whether an individual or a group, does not possess internal diversity. They are primarily defined in terms of what they are not. Alterity as a process occurs at different levels of society (Lau 2012:5). Social exclusion of individuals may entail the temporary isolation of persons from the group for reasons associated with their age, gender, health, appearance, or manner of death (Hallam et al. 1999:18; Hubert 2000:4). Other states of alterity are more permanent; ethnicity, for example, is based on the fundamental distinctness of the other in terms of language, origin, and culture.

Defining and excluding the “other” presents a way of establishing power over another identity community. Here, I define inequality as the social relationship that arises between individuals or groups as one realizes their interests at the expense of another. In
archaeology, power is most often discussed in terms of the unequal distribution of wealth. Smith (1987:309–316) offers a number of material correlates for the identification of physical wealth in ancient households that can be expanded to other types of contexts, for example burials. Materials that are positively associated with wealth include furniture, clothing, cooking and serving wares, religious items and non-utilitarian luxuries. Adding to this, Pygyn specifies that wealth objects have an exchange value and are often made from rare materials (1998:98). Wealth object often also have a symbolic value.

Nevertheless, inequality can also be based on differential access to immaterial wealth, such as knowledge or craft abilities (e.g., Inomata et al. 2001). These can allow their possessors to gain power and status in society. For example, Andean ritual specialists are highly regarded by their communities because they ensure the wellbeing of people, life stock and farmland. But the manner in which they are compensated for their services does not allow them to accumulate physical wealth (Bastien 1978:64). In archaeological contexts, prestige may be difficult to identify because it is not always expressed through material wealth. Nevertheless, social value attached to non-wealth objects can reflect alternate source of status and inequality in ancient society. The social value of an object is “created within a community [that] decides which products are valuable and which ones are valuables” (Pygyn 1998:98). In this dissertation, I therefore distinguish between two sources of power that are materially constructed: unequal access to materially valuable “wealth” objects—which may create relationships of inequality—

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4 Smith cautions that the use context of any of these objects may alter their meaning and role as wealth indicators (1987:316).
and “prestige” objects of social (but not necessarily economic) value that point to the social status of their owners.

To understand the construction of material and social value in the past, it is necessary to consider ideology as a means to reinforce and promote social identity communities. On the one hand, ideology includes religion and worldview as a conceptual framework through which people and groups relate to the physical world. On the other hand, ideology also includes the beliefs and representations about social identity and relationships (Love 2000:226). Ideology acts as a powerful tool for integrating divisive social groups, for example, in the case of the medieval Norse sagas about mythical kings (Bagge 1991:200). The production and materialization of ideology, when appropriated by a single individual or group, presents a source of power (Baines and Yoffee 2000:13; DeMarrais et al. 1996). In their effort to control the means of ideology and power production, elites develop a specific style, a “high culture” (Baines and Yoffee 2000:16). This complex system of material and symbolic production that is regulated and controlled but elites, but not necessarily impenetrable (Inomata et al. 2001:331).

DeMarrais and colleagues present the example of Moche rulers who portrayed ceremonial activities and rulers’ images on ceramic vessels as means to legitimize their rank and to create horizontal linkages among rulers (1996:26). Materialization of ideology also entailed the acquisition of goods that lay beyond the reaches of commoners. Helms has argued that “the acquisition of goods from geographically distant places [by elites] in effect repeat[ed] the unifying, organizing stabilization and constructive acts of the original mythical creators and builders of the ordered universe” (1993:168). In the Moche state, as in other Andean complex societies, the ability to acquire *Spondylus*
princeps, a material associated with the ocean, water, fertility and the cyclical floods of ENSO events, would have bestowed supernatural power on its owners.

1.1.2 Social Identity, Style, and Symbols

Style is “a way of making or decorating material culture and [other] active component of group definition” (Hegmon 1992:528). Style, together with symbols, reproduces power, inequality, as well as identity and community. For example, Morris points out the utility of style as an ideological tool by stating that “the essence of the state is that it can define, produce and distribute the styles that symbolize sociopolitical units, whether ethnic units or units of rulers and ruled. We cannot overemphasize the power and importance of the various aspects of style in helping to create, promote, and legitimize state authority” (Morris 1995:432).

As a form of nonverbal communication, style is used to negotiate identity and to legitimize power (Wiessner 1990:106-108). It is the material expression of knowledge, aesthetics and values pertaining to a particular social group. Style becomes a potent tool in the hands of the state that can be manipulated to communicate dominant values, legitimize inequalities, and materialize elite power. Style ranges from minute artistic details, like the execution of certain iconographic motifs on everyday objects, to the entire range of choices reflected in the material assemblage and architecture of a social group.

Style is manifested through recurrent patterns in different media, or through distinctive sets of cultural practices. Stylistic changes across space are considered markers of contemporaneous social boundaries. Across time they reflect significant shifts
Different stylistic attributes may relate to distinct cultural and social factors. Wiessner (1983) distinguishes between emblemic and assertive style. The former indexes a social group, for example, the emblemic imperial tocapu tunics worn by Inca administrators. The latter reflects the artist’s individual identity, such as maker’s marks on ceramic vessels (Hegmon 1992:523). Objects often possess several stylistic attributes (Carr 1995:165) that simultaneously index multiple social identities. Dress, in particular, may communicate status through the quality of raw material and fineness of production, ethnicity (through color, design, or the manner in which the garment is worn), while the garment shape or function may signal the wearer’s association with a particular gender or craft group.

Like style, symbols communicate identity and ideology. On the one hand, symbols generate a shared sense of belonging among those who can successfully reproduce and meaningfully interpret them (Cohen 1979, 1985:15; Jenkins 2004:138). “Material symbols are essential to [the] process of social reproduction and alteration. Symbols signify – in fact, they constitute – institutions, social categories, and goals of action; their use in social life generates their meanings [and] the process of interpretation may itself change the meaning of the symbols” (Emberling 1997:280). Because symbols are changeable (Geertz 1980:135), it lies within the power and intentions of the communicator and the audience to agree on the particular meaning of a symbol. For example, the depiction of the eagle in antiquity was a symbol of Roman imperial power, and rings, aside from being bodily adornments, can be interpreted as insignia of power or symbols of marriage.
The ability to interpret and meaningfully reproduce styles and symbols is restricted to members of the same identity community. Only members of the community have access to the shared social memories necessary to participate in the mundane and ritual events that recreate community identity and boundaries consciously and unconsciously.

1.1.3 Social Memory and Ritual Practice

Identities are founded on a collective, or social, memory that creates affinity through a set of real or imagined experiences (Assmann and Czaplicka 1995:128). Social memory provides a framework of knowledge and social relations that allows individuals to “base [their] experiences on a prior context in order to ensure that they are intelligible at all” (Connerton 1989:6). Affinity created by shared memories is used to differentiate fellow community members, that is, those who share those collective memories, from outsiders who do not.

Based on Durkheim’s concept of “collective consciousness,” Maurice Halbwachs (1992:38) argued that memories are stored in the minds of individuals, but originated in the social interaction and communication between group members. They do not arise from individual experiences, but from the participatory recollection of social actors. Collective memory serves the similar purpose as style and symbols in the context of social interaction. They articulate a social consciousness and sense of affinity that reproduces social cohesion and preserves cultural knowledge (Assmann and Czaplicka 1995:130). Not only can communities access and reproduce social memories. They can
also reshape them, because they are situated in landmarks (e.g., people, places, objects, language, or texts) that can be manipulated (Halbwachs 1992:175).

Collective memories are not of equal value, and the decision to recall or revive them depends on the broader context of interaction related to the expression of identity or community. Memories can be appropriated and re-interpreted to lay claim to the past (Radley 1990:46). For example, the use of Roman ornaments in Anglo-Saxon burials transformed their foreign cultural association into magical properties; they were considered valuable burial offerings despite having been dispossessed of their original past and history (Eckardt and Williams 2003:165). Dominant collective memories can become part of ideological projects when they are “the memories of some subset of [society], particularly of [groups] with access to the means of cultural production or whose opinions are more highly valued” (Olick 1999:338). The potential impact of social memory projects can be seen in the nation-building projects of the 19th and 20th century through the writing and performance of fictive memories and histories (e.g., Kohl 1998; Trigger 1989). Examples of this process include the appropriation of Gustaf Kossinna’s theories of race and diffusion by the German National Socialists, and that of the concept of *ethnos* by Soviet archaeologists. More recently, the inaugurations of the first indigenous presidents of Bolivia and Peru, Evo Morales and Alejandro Toledo, respectively, at archaeological sites of great cultural significance (Tiwanku, Bolivia and Machu Picchu, Peru) demonstrate how memories, history and the past, real or fictive, continue to play an important role in the performance of power. Therefore, remembrance—that is, process of remembering and making conscious reference to the past (Assmann 2011:20)—is also tied to broader dynamics of ideology and social power.
Social memories are accessible and changeable though conscious interactions with places and objects as mnemonic devices. These interactions, or social activities, take the form of “commemorative ceremonies and bodily practices” (Connerton 1989:7, original emphasis). On the one hand, social memories may be created through habitual recurrent practice, material, and style (Radley 1990:53). Style can transform objects into mnemonic devices that consumers associate with the knowledge and history of the craftsperson or group who created the object. Social memory making can also constitute a more explicit, conscious effort through the preparation, implementation and use of specific places, activities, objects and symbols in reference to the past (van Dyke and Alcock 2003:4).

One example of memory objects is heirlooms. They are different from other objects because of “their mnemonic quality, as a gateway to recapturing experiences and the satisfaction of relationships with loved ones” (Radley 1990:50). Heirlooms can be tools, ornaments, or weapons, but their defining characteristics are often their portability and ease of distribution, inheritance by kin, and their antiquity (Lillios 1999:242). Heirlooms may be crafted from valuable raw materials or have a symbolic value. In archaeological assemblages, they stand out as strikingly anachronistic, as, for example, the Classic Period jade objects with date glyphs found in post-Classic Maya ritual deposits (Joyce 2000:206). Heirlooms are stylistically conservative, easily recognizable and appreciated by those who curate and conserve the object. In societies where authority was centered on chiefly individuals, heirlooms were inalienable possessions that signaled ruler status, effectively turning the heirloom into a symbol of legitimacy and proximity to the ancestors (Mills 2008).
To form or erase collective memories, people interact with space much in the same way as they do with objects. More permanent than heirlooms, places of social memory and meaning are linked to the “product and expression of the self […]. When places are actively sensed, the physical landscape becomes wedded to the landscape of the mind” (Basso 1996:55). As places become imprinted on the mind, they ultimately shape ideas, practices, and material culture. Modifications of the social and natural landscape can reflect the ability of ancestors to perform extraordinary tasks of labor and construction. For example, Mississippian mounds were inscriptions in space; their construction was an “earth-moving event” creating sites of memorialization that continued to set the stage for ritual practices for many centuries (Pauketat and Alt 2003:161-162). In comparison to these large publicly oriented memory places, spatially restricted memory practices, such as ancestor veneration at house altars or around tombs, were designed to perpetuate small-scale, group-specific memories (e.g., Lillios 2003:146). Offering deposits present yet another way in which space and objects construct collective memories. Valuable objects placed in caches, burials, and architectural constructions at the site of Chaco Canyon in the southwestern U.S. encouraged remembrance and forgetting (Mills 2008:106). Knowledge of these hidden valued goods created bonds between the participating members of the group rituals at the time of deposition. Knowledge of the interred objects could eventually become a source of power and identity in the hands of the event participants.
1.1.4 The Archaeology of Ritual

Archaeologically, we can observe the creation of social memories indirectly through style, symbols and daily practices, or more directly through the manifestations of ritual events that leave behind material traces. Rituals provide contexts in which communities can perform identity often with specific objectives of reiterating or changing social roles, affinities, or boundaries. Here, I follow Rappaport’s definition of ritual as “the performance of more or less invariant sequences of formal acts and utterances not entirely encoded by the performer” (Rappaport 1999:24). The effectiveness and validity of ritual are grounded in the repetition of previously performed, collectively remembered acts. Even though rituals are formal and rule-bound, they usually allow for some degree of variance in form or style. This variance ensures that rituals retain their relevance to the audience, but it also creates opportunity for ritual actors to manipulate the process.

Rituals are constituted from symbolic objects, gestures, and words that are familiar to the participants of the event. “None of the elements constituting [ritual] is unique to ritual, the relations among them are” (Rappaport 1999:26). Objects and symbols used in rituals are often familiar to the participants from non-ritual contexts. During ritual, they temporarily acquire new meaning; they become part of theatrical presentation and performance in front of an audience of spectators that validates the ritual event (Inomata and Coben 2006:15).

Because rituals produce the collective values, memories, and identities held by the community of ritual participants, they can reduce or heighten social tensions and power
relationships (e.g., Bell 1992:197). Turner called the sense of community or affinity that arises from the collective participation in ritual *communitas*. During *communitas*, members of a group evoke emotions and sensations of belonging, while normative social relations become temporarily suspended. This condition, according to Turner, is created in the context of ritual, but may persist and become institutionalized and structured (normative *communitas*, Turner 1977:132). As individuals partake in the performance of ritual, as actors or audience, they partake in a network of symbolic communications. As members of this network, they reshape the collective identity and its memories that bind them to other participants.

The archaeological study of ritual is not without problems. Oftentimes, archaeologists identify rituals based on the lack of functional explanations for certain artifact forms or deposits. For example, offering deposits on large and small scales, such as described above, which serve no clear economic or practical function, are often explained as the result of ritual or symbolic activities. Recently, archaeologists have advocated more rigorous approaches to the study of ritual that take into consideration the materiality and performance aspect of ritual (e.g., Insoll 2011; Kyriakidis 2007). Changes in ritual practice, the context of material and space, and the agency of ritual actors shed light on the social impact of ritual, its use as a power strategy and the expression of identities.

In Andean archaeology, the performance of rituals and the discriminate use of objects and human bodies during ritual activities is a persistent part of daily life within the household and beyond (e.g., Benson and Cook 2013). Most often, ritual activities observable in the archaeological record include offering deposits made in association
with dedications of built spaces (e.g., Brown Vega 2015; Gambao Velásquez 2015; Verano 2008). The nature of social spaces also serves as a proxy for understanding ritual, symbolically meaningful practices (e.g., Coben 2006; Moore 1996). In a few cases, it is even possible to identifying ritual actors directly through iconographic evidence, for example on Moche fineline ceramics and friezes (Bourget 2001). Archaeologists often point to the reciprocal relationships between humans and objects, and the living and the dead as the principle organizing structure expressed and materialized by ritual acts in the Andes (e.g., Bray 2009:363).

In sum, communities are groups or collectives of individuals that relate to each other through a shared social identity. The root of this social identity is the memory, personal and collective, that individuals draw on to revive their sense of affinity with others in particular circumstances. Communities are not always permanent or relevant and can be invoked temporarily, especially when members are faced with an “other” that threatens the integrity of group boundaries. Social identities, in particular in the context of unequal power relationships, can entail an ideology that uses the collective memory and other means, such as style or symbols, to strengthen community cohesion. The style and symbolic meaning of objects and practices can be used and manipulated to display and reinforce ideology, identity and community. This is particularly salient in the context of ritual, an event specifically built around elements of ideology and identity to bridge the mundane with the sacred and to continuously renew the practices and collective memories that form the basis of the community.
1.2 Social Identity and Ritual in the Andes

1.2.1 Social Organization and History of the Andean Ayllu

The preceding sections of this chapter have shown how different social identities and relationships in early state societies shaped the experiences of individuals, and how archaeology can approach to study these topics through patterns in style over time and space. We cannot begin to understand the complexity of life in early states without accounting for the currents of power and affinity that run through society as individuals embrace and disengage with identities related to ethnicity, kinship, gender, and status. Because this dissertation focuses on the Andes, it is important to consider some of the underlying principles of modern Andean societies. Here, I focus on the ayllu as one of the most common and persistent forms of social structure and identity found in the Andes today, and one that has been most popular, and critiqued, in Andean archaeology (e.g., Isbell 1997; van Buren 1996). Because the ayllu presents a particular, historically embedded social structure, I do not claim that it predates the Late Intermediate Period in the Andes, or that it offers a direct correlate for Middle Horizon social organization. My discussion of the ayllu as an example of Andean social organization is intended to illustrate how ritual, identity and social organization relate and build on one another.

The ayllu is the most widespread indigenous social structure in the Andean highlands today. The earliest documentation of the ayllu is the visita (inspection) of the Chucuito province in the Lupaqa kingdom (Collasuyo/Lake Titicaca) by Garci Diez de San Miguel (1964[1567]:F.104r., 124v.). Diez de San Miguel observed that leaders of the Lupaqa kingdom had resettled populations to lowland valleys to cultivate crops that were
sent to the Lupaqa capital in the altiplano. Based on Diez de San Miguel’s and other colonial accounts, John V. Murra (1975 [1972]) proposed a “vertical archipelago” or “ecological verticality” model, in which highland groups maximized their access to resources through the direct colonization of distinct ecological niches of the Andean territory. In this way, endogamous groups gained access to a variety of products from the highlands (camelids, salt, tubers), the lowlands (maize, peppers, fruit, coca), and the coast (fish and guano) (Murra 1975[1972]:12), without losing territorial claims through exogamy. While residing in the outlying colonies, members of the ethnic group maintained their status, full group membership, and landholdings in the homeland. These types of colonies were established in areas with great agricultural potential and near source of raw materials (Bastien 1978:6; Murra 1975[1972]:16). Because of the limitations of the natural landscape, different ecological niches were often colonized by multiple ayllus, resulting in the co-residence of different social groups (“archipelago”); according to Murra, these “could well be outliers of distinct highland polities, contemporary but differing in their cultural components” (1975[1972]:15). Twentieth-century ethnographic studies of ayllus from Aymara and Quechua communities in Peru and Bolivia reveal how identities of kinship and gender form part of recurrent social structures expressed through rituals and shared memories. Definitions of the ayllu emphasize four components: kinship, hierarchical nested organization based on descent, territory, and ritual.

Kinship is the primary organizing principle for defining group boundaries. Residency and group membership are patrilineal, with women moving between groups of parentage. Nevertheless, because of parallel inheritance, women and men inherit property
and land through female and male descent lines, respectively (Zuidema 1973). Family groups are integrated into increasingly larger units along structures of complementary highland/lowland regions and upper/lower moieties (Bouysse-Cassagne 1986; Platt 1982). These are often referred to as maximal, major, minor, and minimal *ayllus*, which range from extended kin groups to large regional polities of several thousands of people (Platt 1986:230).

The integration and nesting of kin groups into larger structures is conceptualized through proximity to and common descent from a shared (mythical) ancestor. Ancestors of greater antiquity bestow higher social status on their direct descendants than those more recently deceased (Doyle 1988; Zuidema 1973:19). Positions of authority, cargo and tribute payments are rotational and nested (Rasnake 1986:665); local leaders defer to regional ones, while regional leadership alternate between moiety leaders. *Ayllu* identity is also tied to place (Arkush 2014:202), as mythical ancestors included caves, springs, rock outcrops or other significant natural landmarks. Because territory plays a significant role in determining economic resources and social status of *ayllus*, the interaction of *ayllus* through exchange and marriage periodically causes disputes over landownership between different factions or moieties. Conflicts are settled through ritualized fights called *tinkuy* in the context of large ceremonies and festivities (Platt 1986:231).

1.2.2 Ritual Life in the Andean Ayllu

In modern *ayllu* life in the Andes, rituals structure time, space, activity and relationships (Bastien 1978:70). Periodical gatherings of *ayllu* members who live dispersed across the Andean landscape are embedded in rituals of feasting and dancing.
Abercrombie has argued that *ayllu* rituals constitute "complex and poetically organized sequences of drink dedications known as 'memory paths' by which human beings recall and address the gods [; memory paths are] keys to the genealogies of gods and men, social structures, and the meaning of events [and become] a form of historical consciousness with remarkable properties" (Abercrombie 1998:113-114).

Feasting, drinking, and burning are fundamental to *ayllu* rituals (Bastien 1978:136). They materialize the fundamental relationship of reciprocity that binds members of the group to one another, and to the natural and supernatural landscape in which they live (Abercrombie 1998:346; Rasnake 1988:226). Rituals restore the social order by joining opposing but complementary social elements of male/female or upper/lower (Bastien 1978:37; Bolin 1998). During feasts, sponsors, often the wealthiest members of the community, are expected to provide food and drink, typically *chicha* (and other types of alcohol) and coca, but also llamas, candy, etc. Libation offerings, called *ch’alla*, comprise the essential form of offering and entail the pouring of *chicha* on the ground before consumption. Abercrombie observes that:

> libations must be carried out in gender parallel, the performance also links each pourer with his or her opposite gender complement [Shared drink] incurs a debt of obligation in the recipient(s) of the gift, who must reciprocate at some point in the future … By participating in the rite, the sponsor and pourer become (or reaffirm) their roles as *ayni* to one another, co-participants in a gifting relationship, and both seek to establish (or reestablish) a similar relationship with the gods (1998:349).

The same ideological principle applies to the ritual spilling of animal blood, during which the earth is invoked to partake in the consumption of the slaughtered llama or alpaca, a symbol of the livelihood of the community (e.g., Abercrombie 1998; Bastien 1978; Bolin 1998). Bolin describes the sacrifice of llamas among Cusqueño herders, during which
blood is collected in the kero and spilled on the ground as gifts to the mountain and earth deities, to create balance and guarantee fertility (Bolin 1998:54).

Burnt offerings also possess regenerative powers (Abercrombie 1998:361). The power of the offering is enhanced by the material and symbolic quality of its contents. Offerings that combine different elements from diverse geographical origins, such as coca, llamas, shells and fruit, are considered particularly potent (Bastien 1978:55). They reflect the complementarity embedded in the highland-lowland dichotomy of ayllu territories.

Rituals are presided over by specialists of both genders who are classified as either healers or diviners, each equipped with a highly specialized set of skills, tools, and knowledge. Shamans, or yatiris, possess innate abilities to communicate with the supernatural realm and are consulted in the context of illness, festivities, childbirth, weather predictions, etc. Ritual specialists are often not paid for their services, as “religious and political leadership is not personal power nor should it accrue to the holder’s gain” (Bastien 1978:64). Instead, they are expected to use the items given to them in the context of the ritual ceremony.

Ayllu rituals emphasize reciprocity and complementarity. They mark hierarchical and lateral group boundaries through distinct resources, styles, symbols, and space. Nevertheless, there may also exist significant differences in the internal differentiation of ayllu members depending on the type and location of the settlement (enclave vs. ayllu center), the status, gender, or age of the participant. The abundance of high-quality and symbolically charged resources that were included in offerings and feasts reflect their social value and expected return. Ayllus represent the convergence of social identity and
collective memory, ideologies of kinship, and descent into social relations and
inequalities.

1.1.3 The Ayllu and the State

Modern *ayllus* show a high degree of autonomy in articulating with the state. Platt observed that prior to the Bolivian agrarian revolution of 1952, in the region of Potosí, chiefs collected half-yearly contributions from *ayllus* under their jurisdiction to pass on to the national Treasury. In a "Pact of Reciprocity" between *ayllus* and the Bolivian state, “the payment of this ancient tribute was the recognized form to legitimize their possession of the land" for the *ayllus* (Platt 1982:156). In this situation, local *ayllu* leaders acted as intermediaries between the community and the state, ensuring communal integrity. Likewise, Rasnake argued “even when the state no longer cared whether or not these Andean social groupings continued to exist, *ayllu* structure was retained by indigenous populations largely as a strategy consistent with their conception of the relationship with the state, based on the idea that [tax payments] would ensure their autonomy” (Rasnake 1986:676). In other regions, governmental agendas and policies have negatively affected to the coherence of the *ayllu*, splitting communities and attaching them to external structures of authority (Bastien 1978:32); surprisingly, the internal social relations of ayllu members continue in spite of such political re-organization.

This suggests that the *ayllu* presents a social structure that can articulate with external organisms like modern nation-states and the Inka state, perhaps due to the flexible multi-scalar nature of *ayllus* in a nested and inherently hierarchical segmentary
structure. Because relations within the *ayllu* are based on the idea of mutual benefit and reciprocity, the willingness to engage with greater entities that offer potential gain is built into the expectations of minimal lineage groups. I would therefore argue that participation in a state-like project, as long as it operated within and through an ideology of reciprocity and mutual benefit, may have presented an attractive prospect to *ayllus* in the past, as well.

### 1.3 Ethnicity, Gender, and Age Identities in Archaeology

The study of social identities in the past is made possible by patterns of material culture styles across time and space. Synchronically, archaeological studies can identity and compare stylistic assemblages at local and regional scales, within sites and across long distances. Synchronic variability in stylistic patterns elucidates the presence and activities of different social groups (e.g., age or gender) within the household, between kin groups at the community level, and between ethnic groups or states. Across time, change in style at any spatial scale may reflect changing identities. Ethnicity and kinship, gender, and age present the most persistent and ubiquitous social identities that shape the human experience. Here, I will define these concepts and discuss how they have been applied to archaeology and in the Andes. Ethnographic and ethnohistorical studies also supply additional evidence about social identities in the Andes that, when applied critically, shed light on culturally persistent ideologies and social structures.
1.3.1 The Study of Ethnic Identity in the Past

Ethnicity is a collective cultural identity that extends beyond kin or residential community (Jones 1997:1). Like the state, ethnic identity forms imagined community. Members of the same ethnic group are joined by a sense of affinity that is created by a collective memory of real or fictive group origin and history (Barth 1969:15–16; Cohen 1978:385; Jones 1997:84). Although ethnic identity is based on extended kinship relation, it is in reality produced through a shared field of symbolic communication and practice that connect people in different localities and time through shared practices relating to language, foodways, ritual, religion, etc. (Barth 1969:10-11; Dietler and Hayden 2001; Emberling 1997:302). This “field” of practices channels the social interactions and habitus of group members, providing a framework of values and normative practices that is understood and perpetuated by member of the group (McGuire 1982:163), and that creates an ethnocentric hierarchy of social value.

Ethnicity is generally considered a categorical form of identity. Only rarely may individuals belong to several ethnic groups at a time. Outsiders challenge the stability of the group. Ethnicity is expressed in the context of interactions with others, so that emphasis on group-specific practices and symbols is often most pronounced along ethnic boundaries (Emberling 1997:306; Shennan 1994:14). Occasionally, ethnic identity

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5 Archaeologists often use “ethnicity” when talking about cultural group as a regional identity or supra-regional identity marked by a particular material style and patterns of practice. Acknowledging its historical uses and modern social implications in relation to nationalism, here I use the term only to refer to social groups at the highest level of discernible cultural difference. As such, ethnic groups are internally diverse, containing other social identities like age, gender, and status.
becomes synonymous with social status and relationships of social hierarchy, especially as ethnicity takes on a political meaning within state societies (Emberling 1997:304). Subjugated foreign groups may occupy subservient positions as slaves. Conversely, alterity may become a source of power, as in the case of the “stranger-king” (Sahlins 2008). In these senses, ethnic identity constitutes part of the dominant ideology and is used to legitimize the unequal distribution of power.

Ethnic identity is strongly defined by ideology and social memory. Because ethnic differences (language, diet, dress, etc.) are not always visibly marked, they must be enacted and performed. Such performances of ethnicity become relevant in the context of interactions with other ethnic groups. In contrast, within the group itself, ethnic identity is often unpronounced in favor of other, more pertinent identity categories. Although ethnic identity has a strong bearing on the cultural practices of any social group, cultural practices become part of ethnic identity as this identity category gains relevance vis-à-vis other, non-members of the group. I propose that for the same reasons, ritual may not play an important role in the performance of ethnic identity, because outsiders do not understand the meaning of ritual activities, other than in as a display of community identity. Within ethnic groups, however, rituals may be used to relieve tensions between kin communities, for example.

Archaeological studies of ethnicity often focus on frontier regions or borderlands, where interactions between different ethnic groups can incite the performance of ethnicity more than in the heartlands of culture areas, or on enclaves of ethnic groups within a homogeneous culture group, often a city or state. One example of this are the provinces of the Roman Empire (e.g., Mattingly 2004) where small groups from the core
of the empire into the provinces reinforced relationships of dominance in the everyday interactions between conquerors and conquered. In contrast, the ethnic enclaves like the Oaxaca barrio at Teotihuacan (Cabrera and Gómez 2008), exemplify the persistent ethnic identity of foreign populations over several generations. In these cases, archaeologists have made clear distinctions between ethnicity, as a cultural construct related, but not limited to, kinship. For example, Manzanilla (1996) hypothesizes the presence of corporate kin-based residential groups at Teotihuacan; Gillespie (2000) proposes house societies as a kinship model of social organization in ancient Maya states. These examples show that kinship can be an important aspect of social organization in early states, but that kinship is not synonymous with ethnicity and warrants study in its own right (e.g., Ensor 2011).

Andean archaeologists have approached the study of ethnicity through patterns of material culture, such as ceramic and textile styles, settlement patterns and body modification from a local and diachronic perspective (e.g., Reycraft 2005; Stovel 2013:10–14). The principal challenge to studying ethnicity in the ancient Andes, as elsewhere, has been to correlate degree of difference observed in material styles and production technologies with ethnicity, rather than with other types of social identity based on kinship or residential groups (e.g., Bawden 2005; Vaughn 2005). The most

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6 Archaeologists (in the Andes as elsewhere) tend to replace the terms “cultural group” and “culture” with “ethnic group” and “ethnicity,” (e.g., Reycraft 2005:5) or substitute “ethnicity” itself with the more vague word “identity” (Janusek 2005). This creates two problems: unlike the value-neutral terms “culture” and “cultural group,” “ethnicity” carries implications about the identification processes and assignment of social value that are potentially associated with differences in cultural assemblages. The use of the term “identity,” on the other hand, misses the specific social conditions and contexts created by ethnic differences.
Effective studies of ethnicity have focused on frontier regions where the co-presence of two or more culture groups has shown how material style was used to express and reproduce social boundaries between ethnic communities. This includes Oakland’s (1992) and Torres-Rouff’s (2009) studies of burial textiles and cranial vault modification at the regional trade oasis of San Pedro de Atacama, where variability in dress style and head shape between communities reflect deeply rooted cultural differences reinforced through interregional networks.

Goldstein has proposed that Andean social units known as *ayllus* are “comparable to the broader concept of ethnicity” in the complexity of their definitions (2005:29). Like ethnic groups, they are kin-based, based on shared practices and a perceived sense of origin and place. Unlike ethnic groups, *ayllus* are also defined by their particular social structure of nested hierarchies of moieties (e.g., Albarracin-Jordan 1996). The reciprocal, complementary, and recurrent relationships between minimal, minor and maximal *ayllus* distinguish them from generalized types of segmentary social structure. I argue that *ayllus* at the highest level of integration—including both moieties or maximal *ayllus*—form an ethnic group, because together they form a whole or *yanantin* that describes “wholeness through duality” (Platt 1986). As a result, I propose that “vertical archipelagos” in the Andes resulted in the creation of multi-ethnic spaces of “island communities.” The residents of each group settled within a particular ecological zone would recognize each other as being of the same origin as the local indigenous population. Ethnic boundaries in the Andes, past and present, can therefore be found not at points of complementarity or nested hierarchies, but at the edges where one group’s internal variability is no longer intelligible to the other group.
1.3.2 Gender Identities in Archaeology and the Andes

Gender is a primary structuring principle of social life. It is culturally constructed, socially embodied, and performed (e.g., Gilchrist 1999:80). Conditioned by the social body, gender identity is also linked to other identity categories like age and status (Díaz-Andreu 2005; Gilchrist 2009:1042). It provides a “basic, structuring principle [that frames] the primary parameters” for understanding the world (Díaz-Andreu 2005:17), while ideologies and perceptions of gender find expression in bodily practices and the gendered use of materials and space (Nelson 2006:9).

Looking for spatial or stylistic patterns in material assemblages that formed through regular, regulated and recurrent practices may serve as a realistic starting point for understanding gender in archaeological contexts (Gero 1992:16; Stig Sorensen 2000:85). The role of gender in the context of social hierarchy and inequality must be approached with special care. Our own cultural dispositions toward gender complementarity and equality may cause us to turn a blind eye to gender hierarchies or dichotomies (Gilchrist 1999:52). Nevertheless, masculine and feminine domains of power and authority may vary across contexts of cultural performance (Gero and Scattolin 2002:158). Performances of gender hierarchies may also not be relevant in all situations. Nevertheless, scholars have cautioned that the attempt to identify and explain gender constructs and relationships in the past should neither result in the exclusive search for women (Meskell 1999:86), nor should it ever be considered the central principle of social identity (Geller 2009:70).
Identifying gender in the past can present methodological challenges. Determining biological sex does not give direct access to gender identities (Gilchrist 2009:1031). Our own binary construction of gender in terms of male and female based on biological sex makes it difficult to conceive of gender as a continuum or an impermanent condition, but many ethnographic and historical examples illustrate the complexity of gender as a situational and relational practice.

Gender is becoming increasingly a popular subject in archaeology around the world, and with this development, methodologies and theoretical models become more developed. For example, Ardren (2006:5) has pointed out that the study of women in ancient Maya society requires a “conjunctive approach” of multiple data sources (material, textual, iconographic records) to reconstruct the nuances and multi-faceted gender experiences. Women throughout ancient North American societies held key economic roles, acquired status, held religious positions, and were otherwise present in all aspects of daily and public life (Claassen 1997:84).

Gender in modern and ancient Andean societies has been described as considered innate and enacted, complementary and hierarchical. The following discussions are based mainly on evidence form ethnohistorical and ethnographic descriptions, because archaeologically gender in the Andes remains an understudied topic. Based on the illustrations and descriptions of Guaman Poma and on Colonial legal documents of indigenous leaders, Carolyn Dean (2001:148) has argued that Andean gender concepts revolved around a shared state of androgyny organized through a dichotomous, oppositional relationship. This androgyny shaped gender development throughout the individual’s lifetime and defined the interactions between members of the opposite sex.
Dean proposes that femininity was innate, meaning that women were women, whereas masculinity was created in the context of acting masculine and was thus something that would be have to be continuously recreated through masculine actions (2001:165). Femininity, according to Dean, was therefore first present in young children; masculinity was asserted through male-associated activities like hunting and herding.

As children in Andean societies mature and become increasingly productive contributors in the community, Andean gender roles become defined through dress and spheres of activity. Women stay closer to the home, men venture farther away, although both take equal shares in the responsibilities of family and community life. Yet, men more commonly hold political office, perform public duties, and engage in long-distance trade ventures. Andean divisions of production and reproduction along gender lines reflect notions of difference, complementarity, and hierarchy. During feasts and ritual ceremonies in Inca and modern Quechua society, women’s tasks include the production and distribution of the fermented corn beer (chicha) that is served and consumed by the men who host and attend the event (e.g., Cobo 1990[1653]:148; Gero 1992; Jennings and Chatfield 2009). Although this may appear to reproduce hierarchical, private and public, subservient and dominant structures, some have argued that as producers and distributors of chicha women hold equal, but not identical, power as men in community politics (e.g., Bray 2003:132).

Another gendered activity with significant social meaning and implications is weaving (e.g., Arnold and Espejo 2012; Cereceda 1986; Costin 2013:180). Weaving is a highly valued skill, because cloth in Andean societies is essential to the display of status, kinship, and gender (e.g., Rowe and Meisch 1998). Cloth production provides women
with an opportunity to accumulate economic and social capital (Franquemont and Franquemont 1978). Dean has argued for the “convergence” of Andean dualistic gender categories in old age. Males, lacking the capabilities to perform their masculinity, take on increasingly feminine characteristics, whereas women become more androgynous in appearance and demeanor (2001:163-165).

In sum, gender identities in the Andes and elsewhere are constructs that develop from the interaction of physical bodies and activities within a realm of social expectations and norms. They are deeply embedded in social relations of inequality, and become expressed in the context of daily and ritual tasks conducted in different spatial spheres. In that sense, communities, real and imagined, related to gender identity appear to arise specifically in the context of physical interactions between bodies and objects (e.g., craft activities, feasting), and during the interactions of different gender identities.

1.3.3 Age Identities in Archaeology and the Andes

Like gender, age is highly contingent on the physical characteristics of the individual, and age identities are most consciously expressed as individuals of different ages interact. Studies of childhood experiences in the past and present negate Western notions of children as passive or unproductive members of society. Personhood and social identities emerge from socialization, “the process through which cultural information is transmitted across generations” (Baxter 2005:3). Therefore, age becomes a determining factor in the acquisition of other social identities like gender and status. Childhood represents the cultural construction of maturation in accordance with the physiological and mental developments of the child. “The general abilities and means of
children of different age stages will, by and large, affect their agencies in other ways than adults” (Fahlander 2011:15), a fact that must be considered when studying the social roles and identities of children.

In contrast to children, elders have received comparatively little scholarly attention among archaeologists, which perhaps reflects a trend in Western societies to socially marginalize this age cohort. Archaeological discussions of older age are made difficult, because skeletal age determinations in older adults are imprecise and often lead to systematic underaging \(^7\) (e.g., Wood et al. 1992). Ethnographic accounts suggest that elders, as keepers of social memories and tradition, were afforded particular social status and power, sometime similar to that of ancestors (e.g., Kopytoff 1971). Moreover, life spans may have been much longer in the past than previously thought, and old adults often contribute significantly to domestic tasks (e.g., Hawkes and Blurton Jones 2005:118).

Archaeologically, children have mainly been considered in the context of burials as indicative of structures of inequality. Recent investigations into their lifestyles and social roles have painted a more complex picture of children as individuals with an identity and agency who partake in the economic and social life of the group (e.g., Baxter 2005:11; Meskell 1999:11; Sofaer 2000:8). Although children’s contributions to family life and household economies may not be visibly apparent to archaeologists, material

\(^7\) Bioarchaeologists are increasingly cautious about the implications of biological age determination on the interpretation and contextualization of social age categories, as the awareness about the complexity of biological aging processes rises (Sofaer 2011). Additional confusion in aging and age-related archaeological interpretations is caused by the indiscriminate use of biological age (indicated by skeletal and dental features) and the chronological age grades used by archaeologists.
remains of toys and miniature objects point to socialization processes in the past (e.g., Park 2005; Crown 2002). The potential for using burial contexts and iconographic depictions of children is reflected in studies on childhood in the Old and New World. For example, Meskell (1999:172) has argued that New Kingdom Egyptian society recognized childhood as a distinct identity divided into age-grades and reflected in differential mortuary treatment. In Aztec Mesoamerica, gendered dress and activity spheres of boys and girls diverged as children matured (Joyce 2007).

In Andean archaeology, studies of childhood have focused on children’s bodies in exceptional ritual offerings (Ceruti 2004; Tung and Knudson 2010). In light of this, ethnographic and ethnohistorical sources offer a more complete view that reveals remarkable consistency in the socialization and age-grading of children over the last 500 years. During the first two years of life, Aymara children live in their mother’s care and are subject to the affection of close kin (Buechler and Buechler 1971:24). Children are weaned around the age of two. Around this age, the First Haircutting, clothing or naming ceremony takes place, during which a friend of the family establishes a lasting tie with the family of the child (Bastien 1978:114; LaBarre 1969:124). Around age five, children are assigned gender through clothing and minor household chores, including herding, and taking care of younger siblings. With increasing age and ability, boys and girls take on more responsibilities. Around the onset of puberty (ca. age ten two twelve years), children begin to help with agricultural work, formalizing their economic role in the community. Girls tend to be in charge of food preparation and weaving, while boys partake in hunting and herding. Children do not typically participate in community rituals
until they reach adolescence. Marriage and the establishment of a new household and economic unit signals full membership in the community and the end of childhood.

Inca census data recorded by Felipe Guaman Poma, Martín de Murúa, and Fernando de Castro in the 16th century describes age cohorts that closely resemble the ethnographic descriptions (Rowe 1958:516). The Franciscan priest and chronicler Bernabé Cobo mentioned that age in Inca society was not measured in years but was constructed by the “physical attributes, abilities, and dexterity of the individual” (Dean 1995:121). Guaman Poma’s letter to the Spanish Crown illustrates Inca norms of children’s productive capabilities and gendering through activities and dress. Two major rituals, the haircutting ceremony at the time of weaning and the second naming ceremony at the onset of puberty marked important stages of maturity in the life of children (Dean 1995:121).

In the Andes, children are socialized through economic activities and play. Buechler and Buechler describe how Aymara children imitate adult activities in play (herding, farming, childcare) (1971:27). Among Peruvian highland herding communities, Bolin (2006) noted that children make toys from everyday items and objects found in nature; they observe and manipulate, fashioning miniature homesteads and tools in imitation of the adult environment. Children in rural communities in the central Andes, in particular girls (Franquemont and Franquemont 1978; Sillar 1994), acquire craft skills through observation, trial-and-error, and peer-to-peer instructions. Instead of receiving direct instruction, “children seem to learn by copying what others are doing” (Sillar 1994:52). The same applies to dancing and other ritual activities, where knowledge is primarily acquired through observation rather than direct instruction. Play and toys
prepare children for adult economic and social activities. Rather than inhabiting a separate social realm of immaturity or pronounced dependence, Andean children are raised into the knowledge, skills, and abilities that define their roles as adults.

Adulthood in the Andes is also not a static identity category. Adults pass through a series of biological and social transformations and stages that may be related to fertility, ability, or knowledge. Age-related conditions like menopause, illness, and diseases have significant, irreversible impacts on the roles and activities of older adults. Old adults often enjoy a different social status than younger individuals because of their knowledge; this makes them valuable advisors to younger adults (Claassen 1993:63). In Aymara societies, for example, elderly community members continue to contribute to household economies through herding, spinning, or childcare (Dean 2001:163–165). During rituals and festivities, they consult and hold high places of honor. As a result of their many years of leadership and cargo service to the community, elders are perceived as “whole persons” (LaBarre 1969; Bastien 1978:62).

Unlike gender, ethnicity, and kinship, age identities are inherently impermanent. Whereas relationships of inequality associated with gender and kinship are persistent, all individuals (unless they suffer a premature death) eventually grow to old age. All persons pass through different age groups and experience the changes in relationships between old and young, parent and child, or peers of the same generation. Age cohorts are thus bound to one another by the shared experience of life-cycle rituals, physical maturation, learning and socialization, and social status. The resulting sense of community differs from that of kinship or gender where relationships form a synchronic structure of opposition, hierarchy, or complementarity.
Conclusion

The preceding summary of ethnicity, kinship, gender, and age identities in Andean societies past and present shows that the individuals living in the Andes were part of many identity communities throughout their lifetime. Each identity category is shaped, informed, and constrained by others; for example, gendered activities depend on age and ability, and kinship and gender influence status and power. The *ayllu* as a late prehispanic social formation, which internally structured ethnic groups throughout the Andes, exemplifies how the dominant ideology of reciprocity, found also in gender relationships, was replicated at different levels of a nested social hierarchy. Reciprocity ideologies are, in turn, based on enduring social memories that maintain relationships of inequality and complementarity between individuals and kinship groups, between humans and the landscape, and — as I show in the following chapter — between the living and the dead.

Ancient states were not simply abstract ideas made reality through institutions and laws, but constituted an identity community embodied and enacted by individual member of society. Social identities made up communities of variable permanence, stability and importance marked by an outwardly exclusive but inwardly accessible ideology, collective memory practices, and cultural practices. Social stratification was not limited to elite-commoner class distinctions, but took on the form of power relationships and ideologies situated within each identity community of kinship, age, gender, and ethnicity, ultimately framing the relationships between such groups, as well. Rather than
investigating the structure and function of the early Andean state, I focus here on how ancient states affected the lives and identities of their constituents. How profoundly did inequalities and ideologies related to the state restructure life on a daily basis? How pervasive were other identity experiences and communities related to age, gender, and kinship? How, when and why did individuals and other social communities manipulate material style and practice to gain power or fuel cooperation?

In the case of the Andes, ideology and ritual provide a particularly salient perspective for the reconstruction of lived experiences. According to ethnographic sources, ritual activities give meaning to human interactions with their social and natural environment, enacting and materializing the underlying principles of complementarity and reciprocity that bind the individual components of the Andean world. Age, gender, kinship, and ethnicity are given form in the stylistic variability of ritual activities, places, materials, actors, and audiences (e.g., dress, food, etc.). Because rituals are conservative in nature, decisions to make changes to ritual practice can represent significant changes in social relations and symbolic realms of meaning. The introduction of state-associated materials or practices to long-standing ritual traditions can therefore reflect broader social changes. These changes do not only affect habitual and symbolic practices but also the relationships among the group of ritual participants and between them and the state. If rituals associated with the expression of deeply rooted social identities (kinship, age, gender) are not affected by the dominant ideologies or changes associated with the state, then the presence of the state had little impact on the everyday experience of the individual. Conversely, if rituals are substantially influenced by the ideology and inequality implemented by the state, the impact of the state on the lives of its subject was
profound and transformative. In the following chapters, I propose how mortuary rituals, specifically in the context of Tiwanaku, can be used to investigate identity and community in early states.
CHAPTER 2: MORTUARY ARCHAEOLOGY IN THE ANDES

Introduction

Mortuary rituals form an intersection between individual life histories, social relationships, and cultural ideologies. In the context of death and burial, mourners derive meaning from the manipulation of human bodies and objects. The act of burial serves as a final opportunity to express the nature of emotional and social relationships with the deceased. Funerary rites can also represent the aspects of the deceased’s person that were most valuable and meaningful to society. Through prolonged commemorative practices, the living perpetuate and transform their memories of the dead. Knowledge and access to the physical remains and places of the dead and their memories ultimately become sources for legitimizing and contesting social inequality, marking boundaries, and asserting identity.

Burials are the physical manifestation of the activities, thoughts, emotions, and cultural values of social groups in mourning. As such, they provide a unique archaeological perspective to approach the study of practice, identity, and ideology. Individual burials offer rare insight into the relationship of human bodies, social identities and material culture, something that cannot be gleaned from other types of physical evidence (besides textual or iconographic records). Complementary to this, mortuary populations display variability and patterns in their spatial or material attributes that may reflect social structures or cultural ideologies within which individual burials are to be understood.
In this chapter, I present an overview of the history of mortuary archaeology with regard to its contributions to the study of social identity and social organization. Building on the initial theoretical contributions of processual and post-processual archaeology, I introduce more recent “synthetic” approaches to the study of death in the past that draw on newer theoretical concept (e.g., agency, practice). In particular, I call attention to commemorative rituals (or ancestor veneration) and non-normative mortuary rituals (e.g., sacrifices, “deviant” burials) as two aspects of mortuary practices that contribute to the construction of identity beyond the spectrum of “normative” burial styles.

In the second half of the chapter, I present an overview of mortuary evidence from the prehispanic Andean region. This survey illustrates the regional and temporal variability, but also emphasizes a number of common themes in Andean mortuary ritual. These themes include the recurrent use of space to mark social boundaries, and the existence of prolonged interactions with the dead predating the development of social complexity. I also present example of non-normative practices associated with

2.1 Mortuary Archaeology: A Brief Introduction

The history of mortuary archaeology reflects the major paradigm shifts in archaeological theory. From the scientific approaches of the New Archaeologists, to the subjectivist-interpretive rebuttal of the post-processualists, mortuary archaeology has most recently settled into a more synthetic framework of combining earlier theories with current debates on agency, landscape, embodiment, etc. Throughout these changes, the North American school of mortuary archaeology has maintained a multi-disciplinary
character. Models and interpretations regularly incorporate theories from anthropology, sociology, and art history. Methodologies are adapted from the natural and social sciences, as well as humanities.

Long before the advent of a formalized school or theory of mortuary archaeology, scholars recognized the potential importance of burial for understanding social organization, religion and ideology (Chapman and Randsborg 1981:2–3). With the realization that burials, like other materials, followed recognizable patterns, archaeologists began to study burials more systematically. By the late 1960s, for example, quality and quantity of burial architecture and offerings were understood to relate predictably to “spaces of power” (Ucko 1969:271).

2.1.1 Processual Mortuary Archaeology

In search of laws of social behavior and organization, processual archaeologists of the 1970s turned toward ethnographic analogy and ethnoarchaeology as interpretive aides for understanding the material variability of mortuary, and other, contexts. Based on his comparisons of North American burial contexts, Lewis Binford (1971:17) famously distinguished between two major entities in mortuary analysis: the deceased’s social persona, the “composite of the social identities maintained in life and recognized as appropriate for consideration in death,” and the composition and size of the deceased’s social unit of deceased. The social persona was made up of the age and sex of the deceased, and his or her group affiliation and social rank (the horizontal and vertical social dimension, respectively). Binford found that “the form and complexity of the organization characteristic of the society itself” shaped the formal aspects of burials, such
as body treatment, burial facilities and grave offerings, so that the latter served as diagnostic tools for the study of social organization at large (Binford 1971:23). Although Binford himself admitted that his theory had limitations, it presented an important first step in formulating the non-arbitrary multi-dimensional nature of burial practices.

Around the same time, Arthur Saxe proposed that mortuary practices reflected multiple “identity relationships.” Not necessarily congruent with the living social persona, the social persona of the deceased was a “composite of social identities” that carried the greatest authority and power in the context of death (Saxe 1970:4-6). With this observation, Saxe brought attention to the selective and partial representation of the social persona in burials. Saxe also proposed that high status or rank were often emphasized in burial, and that mortuary space was used to mark spatial boundaries and legitimize control over important resources (Saxe 1970:11-12). Although these “laws” were later challenged, modified, and dismissed, Binford and Saxe established an initial set of rules through which mortuary contexts could be systematically employed in the study of social organization.

Burials were increasingly studied within their spatial and cultural-material contexts to define structures of social affiliation and inequality. Tainter (1978:17) proposed an “energy expenditure” model arguing that rank is expressed in the number of “duty-status” relationships of the deceased. As a result, the higher social rank of a deceased individual will correspond to greater amounts of corporate involvement and activity disruption, and this should result in the expenditure of greater amounts of energy in the interment ritual. Energy expenditure should, in turn, be reflected in such features of burial as size and elaborateness of the interment facility, method of handling and disposal of the corpse, and the nature of grave associations (Tainter 1978:125).
The “energy expenditure” model effectively made burial attributes with little material value quantifiable and measurable for the purpose of detecting social inequality.8

The study of the differential use of wealth objects and elite spaces in mortuary activities presented a more specific way for discerning rank and social hierarchies (Peebles 1971:87). Wealth items in burials served to accentuate status differences, while objects of social value (ceramic vessels) bearing “local symbols serve[d] to further tie burials in the various cemeteries together” (Peebles 1971:87). In a subsequently publication, Peebles and Kus (1977) introduced univariate and multivariate analyses to correlate a larger number of material and spatial variables to assess stratification and ranking in Moundville society. As a result, they distinguished between a superordinate dimension where individuals were ranked based on “symbols, energy expenditure, and other variables of mortuary ritual” not based on age and sex (Peebles and Kus 1977:431). In contrast, in the subordinate dimension individuals are ranked based on the same variables but in relation to age and sex. Peebles and Kus’ goal to establish “two clear, independent dimensions” of the social persona is problematic. In a re-evaluation of the Moundville study, Parker Pearson points out that superordinate ranking does not present the only interpretation of the analysis. I would add that the original study largely ignored the symbolic value of grave goods in Moundville society.

8 By offering a more value-neutral quantification of social investment, Tainter’s model also helped sidestep the potential pitfalls of interpreting material symbolism. However, the approach raised the problem that energy expenditure was not always reflected in materials but could take on a variety of non-material rituals. Also, as Tainter himself pointed out, measuring and quantifying energy expenditure can prove problematic over time (1978:128).
In the 1980s, O’Shea (1984:64-5) called attention to the fact that grave wealth differences were generally highly visible and easily discernible through statistical evaluations. In contrast, horizontal differentiation took the form of “mutually exclusive sets of symbols or treatments that isolated two or more equal-sized groups of individuals” (O’Shea 1984:252). This observation challenged studies of social organization that relied heavily on quantitative evaluations of burial contexts, shining light on the importance of stylistic and symbolic attributes of burial associations.\(^9\)

Mortuary space, an indicator of both rank and group affiliation, quickly became an essential tool for studying social organization. Building on the work of previous scholars, Lynne Goldstein (1980:125) proposed that “spatial structuring of cemeteries in terms of descent groups or corporate groups […] established that there are communal aspects to the mortuary activities.” Community or kinship affiliation often led to the use of discrete mortuary spaces. The two-tiered spatial analysis of cemeteries could shed light on inter-group hierarchies locally and regionally (Goldstein 1980:137, 1981:57).

The processual approach to mortuary archaeology introduced the concept that observable measurable patterns in burial assemblages could reflect social identities of the deceased and structures of social organization. Processualists acknowledged that mortuary evidence should be interpreted within its broader cultural context. Nevertheless, as O’Shea (1984) pointed out, quantitative approaches to mortuary analysis had a significant shortcoming through their inability to account for symbolic or immaterial aspects of funerary practice.

\(^9\) O’Shea qualified the validity of his observations to hold for societies in which economic and social hierarchies overlapped (1984:251–2), and in which status symbols found material and archaeologically observable expression.
2.1.2 Post-Processual Mortuary Archaeology

The post-processualist response to the New Archaeology criticized, among other things, the lack of interest in the symbolic dimensions of funerary contexts (Hodder 1982:9). Post-processual approaches to mortuary studies emphasized the symbolic role of mortuary practices in social reproduction (Hodder 1982:10; Pader 1982). As the product of rituals, Hodder (1982:10) argued, burials were “not a direct behavioral reflection of social pattern. They are structured through symbolically meaningful codes which can be manipulated in social strategies.” Burial attributes are laden with symbols, imbuing them with social powers and transformative potential for the members of the symbolic community. People and symbols engaged in funerary rituals communicated power ideologies (Shanks and Tilley 1982). This perspective challenged mortuary archaeologists to look not for the “what” but the “why” and “how”, the underlying motivations and causes of mortuary variability (Parker Pearson 1999:10). This would ultimately enable them to detect “decision-making processes and their relationship to social identities” (Chapman and Randsborg 1981:14).

This paradigm shift was supported by a growing corpus of ethnographies that showed that mortuary rituals did not always reflect the reality of social life. Instead, funerals could represent a temporary or idealistic reversal of the social order, or serve as processes for negotiating or contesting power relationships in society. For example, the ostentatious funerary rituals and monuments of the Merina of Madagascar did not reflect the actual degree of stratification and differentiation in society (Bloch 1971). Instead, they were deemed necessary for ensuring the group’s social reproduction, agricultural
fertility, and control over territory. Conversely, the cremation ceremonies of Balinese
kingly remains and possessions were the most socially prestigious ritual acts (Metcalf and
Huntington 1979) leaving behind no evidence of their power and prestige in life.

As social systems came to be seen not as “constituted of roles but by recurrent
social practices” (Parker Pearson 1982:100), funerary rituals and materials were
increasingly understood to be part of a larger body of *habitus*-reproducing practices.
Changing preferences in tombstone design in England in the second half of the last
millennium were not only the result of wealth differences, but more so related to
changing social perceptions of death, health and hygiene (Parker Pearson 1982:112), and
of emotional attitudes toward death (Tarlow 1999). Parker Pearson pointed out that
mortuary practices potentially idealized society, were frequently used for status
aggrandizement, and constituted spaces where “changing relations of domination
result[ed] in status re-ordering and consolidation of new social positions” (Parker Pearson
1982:112). Post-processual studies of mortuary archaeology thus resonated more strongly
with anthropological approaches to ritual, agency, and power. The interaction between
social actors and funerary symbols, limited by the prescribed nature of ritual, instantiated
and reproduced social order and ideals.

2.1.3 Finding a Middle Ground in Mortuary Archaeology

In an attempt to bridge the gap between the increasingly entrenched earlier
materialist-structural and later ideological-symbolic paradigms, Carr conducted a cross-
cultural ethnographic survey to evaluate the “kinds of philosophical-religious, social
organizational, circumstantial, and physical factors that affect specific kinds of mortuary
practices” and their relative importance (1995:105). In doing so, Carr was able to re-affirm some of the tenets that had been established by processualists. For example, age, status and group affiliation were consistently expressed in burials, and burial space was often indicative of group affiliation and status. He also suggested that ideology played a role in determining body, while the quantity and quality of grave assemblages marked social inequalities. Overall, however, “complexity of social personae found in the mortuary record does not correlate with the sociopolitical complexity of society” (Carr 1995:150–182).

Carr’s study reflects the broader attitude of mortuary archaeologists around this time who came to employ a positivist approach to understand mortuary practices as power relations, the legitimization of resources, and group boundary enactment (e.g., Beck 1995; Dillehay 1995; McAnany 1995; McGuire 1992; Parker Pearson 1999; Wason 1994). For example, McGuire found that among the Hohokam groups of the American Southwest, differences in grave wealth differences do not correspond with the lack of wealth difference in domestic life. The egalitarian ideology of Hohokam communities was therefore, at least in part, legitimised through seemingly paradoxical highly stratified mortuary rituals (McGuire 1992:157). Building on Goldstein’s assertion about burial space and community territories, Beck (1995) argued that North American cemeteries marked economic, territorial, and social boundaries because they functioned as signals to community members and non-members. Though grounded in a positivist approach to mortuary archaeology, many of these studies are sensitive to broader social dynamics of cultural, political and economic changes, in which mortuary practices occurred.
2.1.4 Mortuary Ritual and the Construction of Social Identities

Most recently, mortuary archaeologists have come to understand mortuary practices as crucial processes in the formation and contestation of social identity through the manipulation of human bodies in a symbolically meaningful context. Burials and human bodies are also often viewed as products and loci of social memory making. As methodologies are becoming more refined in regard to the causes and timing of death, the treatment of bodies, and textual and iconographic evidence, archaeologists are coming to think of mortuary practices as nuanced, emotionally charged personal experiences enabled and constrained by the social environment (Tarlow 2000, 2012).

In the post-paradigmatic era of mortuary archaeology, burials are recognized to represent and recreate social identities. Generally speaking, as ritual practices and objects are closer to the physical remains of the deceased and the time of death, the more personal is the experience or mourning and burial. This resonates with the Binford-Saxe hypothesis about the social persona of the deceased as reflected in the style of the burial and its material associations. But it also takes into account the effect of death and the deceased on the lives of mourning community members. For them, the funeral and tomb present a stage to perform, enact and materialize their memories and emotions. Their engagement with the body through its physical treatment, location of burial, and symbolic associations expresses broader social ideas of identity categories, social boundaries, and relationships of inequality.

In the short-term, the interaction with the remains of the deceased may affect mourners in very direct ways. Shortly after death, participants of mortuary rituals find
themselves in a state of mourning, grieving the loss of a personal relationship. The mourners retain first-hand knowledge and memories of the deceased. As a result, primary burials are often concerned with the display and embellishment of the deceased’s social identity in the public eye (Cannon 2005; Joyce 2001:21). At the same time, body preparation and interments also often reflect a concern with the wellbeing of the deceased in the afterlife (Meskell 1999: 170; Storey and McAnany 2006). This becomes particularly apparent in the context of infant burials, for example, where intense feelings of grief and loss can cause parents to break with social norms (e.g., Murphy 2011).

Recently scholars have argued that the interaction with human bodies can also be understood from a perspective of agency and entanglement. Because human remains carry the real or imagined personal histories of the deceased, their meaning differs from that of inanimate objects (Sofaer 2006:87). Post-mortem bodies (or their images, spirits, etc.) can “engage, influence, confine or structure the behavior of the living directly or indirectly” (Crandall and Martin 2014:431). Even as individual body parts, human remains retain an “effective” agency (Tung 2014:450) that can shape the actions of others. For example, the manipulation of skeletal remains in Classic and Postclassic Maya cenotes connotes the potency associated with human remains even long after death (Beck and Sievert 2005). Similarly, the decorated, re-arranged, or re-cremated skeletal remains found in Neolithic caches, Early Bronze Age charnel houses, and Hopewell crypts suggest that the remains of the dead were powerful symbols for laying claim to communal territories (Chesson 2001; Kujit 2001; Martin Byers 2005).  

10 The development of a social bioarchaeology has also helped in theorizing human bodies and life experiences in the past. Whereas mortuary archaeologists and physical
Under the concept of ancestor veneration, human remains, burial places, and death-related objects derive their power from representing the past in the present. As death bestows mystical power and authority on ancestors, they hold supernatural powers and abilities denied to the living (Kopytoff 1971:133; Lau 2002:281; McCall 1995:264). Because ancestors present capricious, sometimes incalculable supernatural forces that may exert both punitive and benevolent acts toward their decedents (Kopytoff 1971:129), communities must continually engage with the physical remains or memories of these ancestor figures to ensure their own well-being.

Ancestor veneration “entails periodic ceremonial practices that may include but also extend beyond interment and funerary rites” (Lau 2002:281). Commemorative practices may take place at the site of initial interment, at secondary spaces of storage, or places where ancestors were transformed into permanent features of the natural landscape. The spatially and temporally diffuse nature of ancestor veneration practices makes it difficult to identify them archaeology. Ancestral bodies may be kept in different places with restricted access to receive special treatment. Ancestors may be represented in isolated skeletal elements, for example, crania. More indirect evidence for ancestor veneration may instead consist of continued visitation and memory building at and

anthropologists have traditionally focused on age, sex, genetic affinity and cause of death, bioarchaeologists are increased broadening the scope of information available about the deceased’s diet, body modification, health, migration, etc. (Knudson and Stojanowksi 2008, Sofaer 2011, Agarwal and Glencross 2011). Advanced in forensic research have aided in identifying adverse or unusual causes of death or illnesses that may inform archaeological interpretations about unusual life histories or manners of death (e.g., Charlier 2008; Roberts 2000).

11 Calling for more carefully theorized distinctions between different kinds of ancestors, Whitley points out that ancestors can comprise both an elect subset of the dead and a de-individualized collective (2002:122).
around communal gravesites, accessibility of tombs, and the manipulation of human remains. In the long term, burials and bodies thus become memory objects and places where community-specific ritual styles perpetuate community identity and strengthen community boundaries.

Space and landscape have remained important factor for investigating the social identities of the dead and their relationship with the living (e.g., Beck 1995; Silverman 2002). The placement of burials in residential spaces, special funerary structures, or discrete cemeteries carried implications for the social identity of the dead and their community (group identity, status) and determined the types of rituals that were performed in these spaces (Charles and Buikstra 2002:22). For example, the close relationship between the dead and the living in Classic Maya is reflected in the use of sub-floor intramural interment. McAnany has argued that the continued awareness of the nearby dead created “a genealogy of place that links descendants to the land” (1995:65). The original hypotheses put forth by Saxe and Goldstein regarding the relationship of burial space to group identity, boundaries, and territory continue to be widely applied (e.g., Mantha 2009; Dulantho 2002; Emerson and Hargrave 2000).

2.1.5 Non-Normative Mortuary Practices and Social Exclusion

In so far as sharing burial space, interment styles, and commemorative practices with others can reinforce group cohesion and identity, these features can also be used to manifest social differences at the individual and group level. In non-normative or “deviant” burial, “the deceased is not treated in accordance with his normal social persona but in relation to the deviant circumstances of his death or his deviant behavior in
life” (Shay 1985:221). Deviant burial is not necessarily negative nor does it imply the deceased’s responsibility for a deviant burial (Murphy 2008:3). It does imply that the deceased is generally considered a member of the group, but temporarily or permanently exists in a marginal or excluded social space.

Some non-normative burials—e.g., of civil servant, war heroes, martyrs, or ancestors—may be considered positive, because they do not threaten the social order (Bloch and Parry 1982:16). Archaeologically, they may resemble the interments of elite or other high-status rituals. More commonly, non-normative mortuary treatment is reserved for individuals whose identity or actions present a threat to society. The dead, unless they receive a proper, normative burial endanger the living and wellbeing of society (Harris 1982:53). Bloch and Parry have argued that because non-conforming behavior in life (e.g., crime, disease\textsuperscript{12}) or death (e.g., suicide, violent death) is uncontrolled and socially unproductive, it questions the social order (Bloch and Parry 1982:17). Non-normative funerary treatment may be used to discourage members of society from defying social norms. In deviant burials, the social identity of the deceased is often reduced to singularly mark their unusual social status (Shay 1985:226).

\textsuperscript{12} Illness and disease can also determine or alter an individual’s social identity in life and death (e.g., Hubert 2000; Roberts 2011; Shay 1985; Tsaliki 2008). Extensive bioarchaeological investigations of Andean human remains have documented a wide variety of illnesses and diseases, ranging from nutritional deficiencies to more severe conditions that would affect the sick individual’s quality of life and interaction with others in the community. Currently, the mortuary evidence suggests that such illnesses did not influence the deceased’s status in the community, as their remains are generally treated the same as others (e.g., Marsteller et al. 2011), although some exceptions have been identified (e.g., Klaus and Ortner 2014).
The archaeological record is often biased against the recovery and identification of non-normative burials, because they are often separated from communal mortuary spaces. A non-normative social status may be indicated through the absence or alteration of body treatment and position, and unusual use (or withholding) of offerings and materials (Parker Pearson 1999:17; Shay 1985). Societies may reserve different types of deviant burial treatment for particular offenses against the social contract, so that only some characteristics of the burial may be unusual.

Sacrifices present a particular type of non-normative mortuary treatment. Broadly, the term sacrifice describes the transformation of a mundane object into something of holy quality through a series of ritual acts (Bell 1997:26, based on Hubert and Mauss 1967[1898]). Parry has proposed that human sacrifice would constitute a ‘good’ death because it redirects the life force of the sacrificial victim to regenerate other social and ideological orders and organisms (1982:74). Presented as gifts to the supernatural forces, sacrificed human bodies create bonds of obligation or reciprocity. Sacrificial objects and materials (including human remains) become “ritually efficacious parts” (Hill 2003:286), meaning that sacrificed bodies or body parts retain their association with the ritual act. They acquired a sacred value or attribution not present in other similar bodies or objects.

To define the nature of non-normative mortuary practices, it is necessary to establish an understanding of normative mortuary ritual. Non-normative mortuary rituals may rely on elements of practice or material culture that are usually found outside the traditional range of mortuary behavior, such as inversion of burial style or exclusion from communal burial grounds. Understanding the variability of mortuary patterns associated with normative social identities of age, death, status and group affiliation can furthermore
help identify subtle non-mortuary treatment, e.g., the use of special funerary dress despite normative body position and burial location.

In sum, mortuary archaeology offers a number of ways for investigating social identity in the past from the smallest social unit, the individual, to different kinds of communities, and society at large. The recurring uses of body treatment, interment type, and offerings at different temporal and spatial scales (pre- or post-interment, intra- or extramural) throughout the mortuary ritual constitute distinct styles of burial. In using a normative burial style, mourners acknowledge and represent the personal histories of the deceased and the social relationships. By communally shaping burials, mourners recreated shared values about personal identities. The experience of participating in the burial also bound group members together. In addition to strengthening group cohesion internally, mortuary rituals also made use of materials, symbols, and space to indicate social boundaries between ranked and unranked social groups, and between accepted members of society and those who lived, or died, outside of the community.

2.2 Mortuary Archaeology in the Andes

The Andean region offers a rich body of archaeological and textual data of mortuary rituals and interments. Because cemeteries are so prominent in the Andean landscape throughout much of prehistory, mortuary studies have played an important role in understanding stylistic sequences, social organization and identity. Here, I present archaeological and historical data of mortuary studies in the Andes that illustrate some of the overarching questions relating to the dead and society in the Andes. As this survey of
Andean mortuary archaeology shows, funerary and venerative practices fall into categories of normative and non-normative mortuary treatment that signified personal and group identities and relationships of difference and inequality. Commemorative rituals and prolonged interactions with the dead contributed to the making of social memories that lay at the foundation of Andean social identities and relationships.

2.2.1 Mortuary Practices, Social Identity and Organization in the Ancient Andes

Colonial-period accounts of indigenous Andean funerals emphasize the importance of status and ethnic identity in death. Guaman Poma de Ayala documented regional differences in burial practices throughout the Inca Empire (1987[1615]). In his travels throughout the Andes, Bernabé Cobo noted that diversity of tomb styles was indicative of regional differences in ancestor veneration and social organization (1990[1653]:247). Pedro Cieza de León commented on the sumptuary offerings—drink and food, exotic and finely crafted items, sacrifices of animals and humans—that were consumed at the funerals of chiefly leaders (1959[1550]:311). These observations suggest that status was a principal factor in determining burial practices throughout the Andean region.

Ethnographic descriptions of Aymara funerary traditions in highland Peru and Bolivia give a more extensive insight into the intricacies and variability of Andean funerary practices (Buechler and Buechler 1971; Onofre M. 2001; van Kessel 2001). Preparations for the interment often anticipate the moment of death in Aymara communities provided that death does not come unexpected (Onofre M. 2001). The body is prepared for interment, and following a wake, taken to the cemetery the next day.
Together, community members and extended prepare the funerary bundle and meal, and excavate the tomb. The social status and relationships of the deceased determine the level of communal involvement and labor expended: “if the deceased was a respected elder or the wide of such an elder, almost every household in the section plus those of his relatives from other sections will be represented at the ceremonial meal” (Buechler and Buechler 1971:82). Dances, music, ritual games and extensive feasting and drinking accompany the funerary procession. Before sealing the tomb, family and friends place food and warm clothing in the tomb to ensure that the deceased will travel comfortably to the afterlife (Onofre M. 2001). In addition to status and community, age and gender identities can impact the interment of the dead in terms of body preparation and the length of the commemorative rituals (e.g., Onofre M. 2001; van Kessel 2001).

Differential mortuary treatments based on group identity, status and personal can be seen in Andean funerary styles as early as the Archaic period (7000–1800 B.C.) at sites like La Paloma and Chinchorro (Arriaza et al. 2008; Quilter 1989).13 Mortuary practices became more differentiated with the rise of social complexity. Increasing social inequality and craft specialization correlated with the use of discrete communal

13 Differential use of space and offerings at coastal sites in Peru and Chile reflected rank and affinity of the deceased. At La Paloma (4000-2500 BC), the placement of male adult burials at the center of the burial space may indicate a differentiation of genders in this early community (Quilter 1989:64). The use of intra-mural burial space and the inclusion of artifacts referencing a semi-sedentary horticultural lifeway suggest burials “replicated … and continued the social unit after death” (Quilter 1989:54). Conversely, members of the Chinchorro culture (9000-7000BC) used extra-mural communal burial spaces and grave goods that referenced their affinity with coastal and highland culture through camelid wool textiles and marine objects (Arriaza et al. 2008). Sample and preservation bias have led to a significantly better understanding of mortuary practices and social relations in the arid coastal zones of Chile and Peru, and we cannot at this point preclude the existence of similar customs in the highland regions.
cemeteries, elite funerary architecture, and variable offering assemblages. For example, at
the Paracas necropolis on the Peruvian South Coast (1st millenium BC), mourners
acknowledged social inequalities within the community by elaborately furnishing the
tombs of adult males in discrete cemetery spaces (Peters 2000; Proulx 2008:569). In
contrast, the highly visible burial mounds (túmulos) of the southern coastal region
constructed during the Formative period (1500-200BC) marked communal territories and
social boundaries (Goldstein 2000a; Romero et al. 2004). Around the same time, burials
in the south-central highlands consisted of multiple-individual stone chambers used by
kin or lineage groups (Machicado 2009:236). Nascent social differentiation was
expressed through the choice in burial location and inclusion of offerings. Burial in
monumental ceremonial structures, which first occurred during this period, was reserved
for highly ranked families or leaders, as they included luxury items like gold plaques,
sodalite beads, etc., but also objects of symbolic value like human crania (Machicado
2009:236). The centrality of female individuals in communal tombs has led Hastorf to
propose that women held positions of power in these communities (2003:315).

Discrete burial spaces continue to serve as indicators of social boundaries in later
periods. Based on the continued use of discrete extra-mural cemeteries in Nasca society
(AD 0-600) Silverman has argued for the existence of a “flexible confederacy of
independent societies on a chiefdom level of sociopolitical complexity” (Silverman
1993:320; Vaughn 2000). In contrast, Carmichael has proposed that Nasca society was
not politically centralized or hierarchical because cemeteries did not show a clear
differentiation in burial offerings (Carmichael 1995:171). Instead, Nasca mortuary
treatment was more indicative of the deceased’s personal age and sex identities. This
homogeneity of communal cemeteries, according to Isla and Reindel (2006) may be caused by the existence of specialized elite cemeteries. Their substantial architectural and offering investments suggest a heightened degree in social inequality by the end of the EIP. Prolonged ritual activity at elite gravesites seems to be indicative of social status and reflects the prolonged influence of the dead in the life of the community (Carmichael 1995:177; Isla and Reindel 2006:394-6).

Variability in burial spaces and offering quantity and quality reflect increasing social inequalities between elites and commoners in state societies like the Moche, Chimú, and Wari. Moche royal elite burials at the site of Sipan and Huacas de Moche (A.D. 100–800) were prominent adobe mound structures (Alva and Donnan 1993). At their center were large burial chambers that housed the remains of kindly leaders dressed in ritual regalia, flanked by companion burials of royal family members, retainers and animal sacrifices. Hundreds of metal and ceramic objects accompanied these burials. The similarities between elite funerary dress and the paraphernalia iconographic characters suggest that elites embodied powerful mythical persons, who were central to the recreation of the Moche social order (DeMarrais et al. 1996; Donnan and Castillo 1992). In contrast, Moche commoners were wrapped in cotton shrouds and interred in pits or coffins (Donnan 2011:133; Nelson 1998). Foodstuffs (corn, beans, fish, llama bones) played an important role as grave inclusions, as did ceramic and gourd vessels and metal (Donnan 2011:146). In some cases, grave inclusions were found to index the deceased’s social status, gender, or occupation (Donnan 2011:149–150).

Burial practices in the Middle Horizon Wari state are characterized by the standardized preparation of individual funerary bundles, and the highly stratified nature
of funerary treatment through tomb architecture and offerings. Isbell has proposed that burials at Conchopata, an administrative center in the Wari heartland, reflected the multiple levels of social stratification of “lowly servants, middle-level citizens, wealthy elites, and probably even petty kings or governors” (Isbell 2004:6). Members of the lower social classes received few offerings of local ceramic vessels or personal adornment (Isbell 2004:27; Isbell and Cook 2002:282). Mid-level elites were interred in intramural collective burial chambers and equipped with adornments and high-quality ceramic vessels. High-elite funerary chambers at the center of urban areas were constructed from cut stone and filled with an abundance of exotic items (Isbell 2004:27; Isbell and Cook 2002:284).

At the Chimu-Inka administrative center of Farfán (A.D.1200–1400) on the North Coast of Peru, the placement of burial platforms within and outside of residential compounds reflects social dynamics of hierarchy, lineage differentiation, and foreigner status (Mackey 2010:244–7). Inca-style ceramics and exotic imports distinguished royal elites from lesser nobles buried with local Chimu-style ceramic and metal offerings. Foreigners were recognizable marked with Lambayeque-style ceramics and interred in extramural burial platform (Mackey 2010:248). The principal figures in elite burial platforms were females and males accompanied by retainer burials and llama offerings (Mackey 2010; Conrad 1982), distinct from commoners who were buried in pits in extramural cemeteries.

During the Late Intermediate Period throughout the Andean highlands, aboveground mortuary structures (*chullpas*) became an important addition to the array of mortuary structures, as previous forms of burial treatment continued. Likely burial
grounds of high-status kinship or lineage communities, chullpas also functioned as markers of territorial boundaries (Mantha 2009), social class\textsuperscript{14} (Frye and de la Vega 2005), and sites of social memory (Nielsen 2008).

2.2.2 Ancestor Veneration in the Ancient Andes

Among modern indigenous Andean communities, funerary rituals are drawn out over several weeks or months (Fernández 2001; Onofre M. 2001). The veneration of a common ancestor or progenitor, called mallqui, is one of the principal features of the Andean social unit (Doyle 1988:47). Mallquis were venerated through song, dance, and feasting events near the walled caves or burial shrines where the mummy bundles of the ancestors were kept (Doyle 1988:62). The visibility of mallqui tombs and their use for ceremonies enforced the link between ancestors and the natural landscape (Salomon 2011:321). In the case of the Inca, ancestors of royal Incas received lavish funerary rituals, were continuously dressed and fed, and their “words” held influence in royal politics (Anónima 1968[1631]:158; de las Casas 1939[1550]:158). There is some debate regarding the singularity of mallquis in the nested social hierarchy of the ayllu, in contrast to the general population of deceased forefathers (e.g., Doyle 1988:125; Salomon 2011:326). Nevertheless, modern Andean communities retain the belief that the souls of their forefathers (abuelos) in general possess power over the living (van Kessel 2001:222; Allen 1988:64).

\textsuperscript{14} At the Late Intermediate Period sites occupied by Lupaqa (altiplano) and Collagua (Colca Valley) groups, the contemporaneous use of chullpas, burials caves, and subterranean cists suggest group-internal social differentiation (Frye and de la Vega 2005; Wernke 2006).
Archaeologically, evidence for ancestor veneration in the prehispanic Andes includes the manipulation of bodies in primary or secondary funerary treatment, the visibility and accessibility of funerary architecture, and remains of ceremonial activities found with or near human remains.

In the dry cold and hot climates of the Andean highlands and coastal lowlands, human remains in the form of textile-wrapped funerary bundles often become naturally mummified. With the exception of the Chinchorro mummies, there is no clear evidence for the use of artificial mummification processes. Human skeletal remains included in offering caches at Early Horizon ceremonial centers like Chavin de Huantar (Burger 2008) may represent acts of ancestor veneration. Other potentially venerative activities included the preparation of Nasca trophy heads (Proulx 2001).

The veneration of ancestral funerary bundles can also be inferred through the presence of niches or other restricted spaces in public buildings in the Formative altiplano (Hastorf 2003:327). The spread of funerary houses and towers across the Andean highlands in the Late Intermediate Period reflects a desire to keep the dead close to the realm of the living and within the sphere of ritual activity. Archaeologists like Dillehay (1995), Lau (2002), Nielsen (2008), Mantha (2009) and, most recently, Buikstra and Nystrom (2015) have argued that the construction and use of accessible, highly visibly, and often large chullpas creates a shared interactive space for communion with the ancestor(s), their memories, but also territory and landscape.

Wari elite burials at Conchopata give yet another example of how funerary architecture may reflect ancestor veneration. Access to Wari elite communal burial chambers was restricted to residents of the compounds in which the burials were placed.
The capstones of elite cist burials had *ttocos* (access holes) in the capstones to offer libations to the deceased (Isbell 2004:28; Isbell and Korpisaari 2015). Couture and Sampeck have made a similar case for the re-accessing of intramural elite burials at the Putuni palace at Tiwanaku (Couture and Sampeck 2003:240).

Beyond access to and manipulation of human remains, ancestor veneration included feasting and making offerings near the tomb. These activities often resembled non-mortuary activities of public feasting and libations. For examples, Lau found “evidence of sooted plainware cooking vessels, miniature vessels and decorated fine wares [indicates] small-scale episodes of drinking and offering rituals” near the *chullpas* of the Central Andean Recuay culture (2002:293). Lau proposes that tombs became sites of community ritual, co-opting the dead as powerful ancestor figures used to legitimize social inequality (Lau 2002:298). Frye and Vega have observed similar material patterns of broken fine serving wares and ritual vessels, metal objects and animal bones concentrated in carbonized areas outside the Late Intermediate Period *chullpas* of the Lake Titicaca Basin (Frye and de la Vega 1997:138).

In sum, archaeological evidence for the veneration of singular “progenitor” ancestors is comparatively rare, possibly as a result of sampling strategies and preservation biases. Nevertheless, tomb architecture and cemetery surface deposits of feasting and ritual paraphernalia suggest that Andean funerary practices may have been prolonged rituals. Antecedents or ancestors were included in the practices of feasting and libation that governed much of Andean social life. In this sense, Andean ancestors and their tombs presented a valuable source of power and identity. Their presence and communal veneration demarcated social boundaries between different communities. At
the same time, gaining the favor of the ancestors through extended venerative rituals would also have been a coveted source of power for members of the community.

2.2.3 Normative Mortuary Practices in the Ancient Andes

This survey of prehispanic Andean mortuary practices reveals strong cultural continuities in death-related practices, and an emphasis on the materialization of individual and group identities through funerary ritual. Changes in sociopolitical complexity transformed burial styles to reflect increases in social inequality, gender differentiation and group distinction. Mortuary spaces marked physical boundaries (e.g., Mantha 2009; Romero 2004) and social boundaries (e.g., Machicado 2009; Mackey 2010; Reindel and Isla 2006) through variable tomb location and structure, shifts from single to multiple-individual interments, and offering assemblages.

As early as the Archaic period, Andean grave offerings included wealth goods like rare metal objects and import items, as well as utilitarian objects like serving and cooking wares and tools. The number and type of offerings often correlated with the age, sex, and status of the deceased (e.g., Hastorf 2003; Proulx 2008) in the tradition of the processualist mortuary archaeology approach. Stylistic variability in offerings or burial treatment appears to have played a less important role for marking social boundaries between communities of equal or different social rank; this was, perhaps, because spatial segregation of mortuary space so clearly signaled community identity. Community boundaries were also marked by the group members’ shared experience of grief, and of partaking in interment and post-interment activities.
Overall, Andean mortuary traditions displayed high degrees of continuity and homogeneity across regions in terms of the “ideological” aspects of funeral (body position, tomb space, prolonged funerary activities). Ancestor veneration in regions of the Andes was manifested in the manipulation of human remains or extended feasting near the tomb. Possible mallqui-like ancestral figures have not been detected in archaeological contexts, a likely result of sampling strategy and differential preservation. Nevertheless, the continued interaction with the remains and places of ancestors was an essential aspect of community life before and after the arrival of state societies in the Andes, and even continues into the present.

2.2.4 Non-Normative Mortuary Practices in the Ancient Andes

Non-normative, or deviant, burials often formed part of the broader range of mortuary practices in the ancient Andes. Most commonly, non-normative burials were the result of human sacrifice in the context of war and political spectacle, or as offerings. However, individual cases, often related to illness or unusual causes of death, can often be found within cemetery populations, as well.

Bioarchaeological studies in the Andes can offer detailed insights on the quality of life, health, and causes of death that enable archaeologists to identify potentially deviant mortuary practices in association with unusual personal histories or attributes. For example, at the Preclassic period site of La Paloma, Quilter identified the interred remains of a shark-bite victim who had been buried with an elaborate offering assemblage (1989:59). Based on the grave offerings alone, the individual would have simply been considered a high-status individual; the skeletal pathology, however, raises
the possibility that the rich burial treatment may have been due to unusual cause of death.

Conversely, Marsteller and colleagues found that individuals who had suffered from debilitating cases of leishmaniasis in San Pedro de Atacama did not receive unusual burial treatments (2011:29). These cases show that bioarchaeological data adds important about the individual’s life history for interpreting status differences or other normative variability seen in burial treatment.

In other cases, burial treatment and unusual life histories correspond more closely, for example in the case of human sacrifice. The most direct evidence for human sacrifices comes from several Early and Late Intermediate Period ceremonial centers on the Pacific coast (Chotuna [Turner et al. 2013], Cerro Cerrillos [Klaus et al. 2010], Túcume [Toyne 2015], and Pachacamac [Uhle 1903:84]). At these sites, death resulted from acts of violence as part of local political spectacle. The remains displayed skeletal indicators of violence, and the cemeteries in general had unusual demographic compositions (predominance of young adults), and stood out among the larger mortuary population due to their distinct burial locations and interment styles.

For example, interments of sacrificed individual and camelid at Túcume outside a local shrine included males and children, their throats and chests cut open before decapitation. The intimacy of the space, the association of bodies with exotic Spondylus shells, and their seated-flexed rather than extended burial position suggest that these “deaths were not part of the natural cosmological order, but a different ceremonial act, their remains were not treated as ‘ancestors’ but as supernatural offerings” (Toyne 2015:191).
Similarly, the Late Horizon occupation at Pachacamac — a regional pilgrimage center — a group of young women dressed in matching garments were strangled and buried with bound hands. They may have been acllas (Uhle 1903:181). A better-known example of human sacrifice offerings during the Late Horizon Inca Empire is the capacocha. This child sacrifice was dedicated to the mountain peaks of the high Andes. Inca elites staged ceremonies, feasts and lengthy processions that transformed the children of local elites into gifts to the gods through fine dress and objects. Eventually, the children were brought to high-altitude mountains – Andean deities in control of river water and powerful earthquakes – where they were drugged, killed and buried with sumptuous objects (Ceruti 2004).

Although sacrifices bear evidence of violence against human bodies and the intentional destruction of life together with a respectful disposal of their remains in sacred placed or with sacred objects. Through sacrifice, human bodies acquired value. This, in turn, made them powerful offerings for dedications and other types of ritual deposits, including burials. One example of this is the inclusion of retainer or companion sacrifices in North Coast elite burials (e.g., Alva and Donnan 1993; Conrad 1982). Human bodies acquired additional value through the association of complementary or contrasting objects. “Matching pairs” or “like-with-like” of human-human or human-camelid interments were common in Andean societies from the Early Intermediate Period onward and also played a role in the construction of retainer as well as other dedicatory offering contexts. In several Inca and Chimú centers on the North Coast, at the Sicán capital in the Lambayeque valley, and in earlier Moche contexts, “like-with-like” offerings include human-camelid pairs of similar age, and adult-juvenile human pairs.
(Gaither et al. 2008). The positive effect of these offerings and human bodies can be concluded from their unusually, but socially sanctioned location, burial style, and offering assemblages.

In contrast, the violent treatment of bodies in combination with careless disposal, informal tombs, and lack of offerings signified a deviant but negative status of the deceased. In the Andes, large-scale sacrifices of war prisoners and trophy heads are among the most prominent examples of negative deviant deaths.

At the Moche capital, young males (likely warriors or prisoners) had been killed. Their bound bodies were left on the floor of a secluded patio exposed to the elements (Verano 2014). Based on iconographic evidence, sacrificing of war prisoners was part of elite political spectacle at the Moche capital. Rather than consecrating the bodies, the act of killing in this case seems to have harvested the value of human life, leaving the body to be disposed of informally.

Wari trophy heads present another example of bodies of objects or symbols of power. They were likely made in the context of interpersonal warfare (e.g., Knudson et al. 2009; Verano 2008:1056). The public display of trophy heads bestowed upon the killer and wearer power and authority. Tung has proposed that sentient human objects like trophy heads may have been used strategically to undermine the status of the victim’s community (2014:450).

In the ancient Andes, non-normative mortuary practices were often used to mark the identities of individuals who had lived or died in unusual ways. Although normative burial treatment was occasionally modified to acknowledge a “deviant” aspect of a person’s life history (e.g., accidental death), the most visible forms of non-normative
death-related rituals was human sacrifice. During acts of dedicatory sacrifice, human bodies were effectively transformed into valuable offering objects that deserved distinct, yet respectful treatment in death. In contrast, the sacrifice and post-mortem manipulation of prisoners’ bodies, often outsiders or foreigners, represented and enacted the power of the sacrificers rather than the sacrificed, whose remains were discarded.

**Conclusion**

Death-related rituals in the Andes were relatively conservative cultural practices that were focused on the reproduction and creation of social identities and boundaries. One of the noteworthy characteristics of Andean mortuary rituals was the great level of heterogeneity that can be seen on the community and regional scale. Although tombs were occasionally placed within residential compounds, cemeteries of below-ground burials or funerary towers were the most common places of burial. Cemeteries presented bounded, easily visible and often accessible places where the dead resided as a community. Spatial segregation of burials or bodies either through walls (*chullpas*, funerary chambers) or unoccupied areas was one of the principal means for materializing the co-existence of distinct communities or lineage groups. As the use of elite burial platforms and intra-compound burial chambers in later state societies suggests, burial location was another important way of distinguishing communities based on their relative status and proximity to sources of social power. Space would also be used to signify the non-normative status of an individual or group, as demonstrated by the association of sacrificial victims with ceremonial spaces. Returning to some of the basic tenets of
proposed by mortuary theory, space did, largely, reflect certain aspects of social structure, both as reflections of social organization and of symbolic construction of power on the landscape.

Andean mortuary practices also reflect the highly standardized cultural norms relating to body treatment and interment style (especially body position and orientation). These aspects of burial style often continued over generations, although significant shifts in sociopolitical or ideological systems did sometimes result in the changing burials styles (e.g., the introduction of seated-flexed burials on the North Coast in conjunction with the rise of the Chimú empire). Because many aspects of burial were highly standardized, including the inclusion of serving vessels as grave offerings, mourners had relatively limited options for acknowledging the personal histories of the deceased and their relationship to them. Status was the most visible distinction in mortuary practice. Elites received greater amounts of objects, specifically of wealth objects, as grave offerings to display their access to physical wealth and their extended social relationship and influence in the community. The gender identity of the deceased also played some role in determining types of grave offerings, although commonly all members of society regardless of age and sex, received similar funerary treatment. Gender identity did play an increased role in the context of dedicatory sacrifices, where non-normative cemetery populations often consist exclusively of male or female individuals.

Lastly, post-funerary ceremonies gave community members continued opportunities to engage in the renewal of social memories of ancestors through the performance of feasting and offering rituals near the tomb. Although these activities can be difficult to detect archaeologically, modified human remains, tomb architecture and
offering deposits outside tombs have presented evidence to deduce practices of ancestor veneration in several Andean societies over time. Ancestor veneration is one of characteristics of the *ayllu* system, but archaeologists must take care in establishing the exact nature and timing of the interaction between the living and the dead to assess correctly the meaning and effects such actions may have had in the past.

In conclusion, the study of Andean mortuary practices holds significant contributions for understanding social identity and social organization in the past. The systematic study of Tiwanaku burials and cemeteries, their spatial and material characteristics, are reflective of cultural norms and constructions of individual and communal identities. As such, Tiwanaku mortuary practices potentially offer new insights into the construction of social identities through ritual practices, style, and space, and into the relationship of social diversity and inequality.
CHAPTER 3: TIWANAKU SOCIETY AND RITUAL LIFE

Introduction

In many early complex societies in the Andes, funerals and the commemoration of the dead were integral to maintaining social relationships but also the relationship between humans and nature. Burials had the potential to express social identities and roles of the deceased, power relationships between individuals and factions in society, and memories of the deceased that formed the basis of communities’ internal cohesion and external boundaries. Andean mortuary practices belonged to a broader suite of ritual activities, through which ritual agents and participants affirmed their affiliation with one another. By considering rituals as the expression and communication of belonging and shared identity that draws on shared systems of common material culture and meaning, the significance of mortuary rituals outgrows the spatial and temporal limitations of the cemetery, and becomes an integral aspect of community life that binds personal life experiences into social, natural, and supernatural orders.

In the case of the Andean *ayllu*, the shared sense of kinship, hierarchical descent and territory was performed through rituals. The recurrent use of recognizable symbols and activities in contexts relating to human or natural lifecycles, political or religious events materialized, represented and made intelligible social relations spanning across both space (distant colonies) and time (ancestors and descendants). The *ayllu* may serve as a guide for understanding the extent and importance of ritual practices in prehispanic Andean states, especially for the Tiwanaku state, for which archaeologists have relied
heavily on the *ayllu* model to explain the state’s social organization, power relations, and territorial expansion. While some of these studies have incorporated ritual practices as a catalyst for social inequality and pervasive ethnic boundaries within Tiwanaku society, few have paid attention to mortuary rituals and the treatment of human remains more generally as a significant aspect of social life. To address this question, it is necessary to define the social structures of affinity and inequality that bound and separated members of Tiwanaku society from one another. Because Tiwanaku history spans several centuries, we must assume that these relationships changed over time.

Because funerals and burials represent one particular aspect of a broader corpus of ritual practices, I pay particular attention to the different uses of ritual as a means to create social cohesion and division. I examine the variable uses of mundane and ritually charged objects and symbols in the context of public and domestic ritual as reflective and constitutive of community-based and elite identities. Lastly, I consider the utility of the *ayllu* model of social organization for interpreting current lines of archaeological evidence from Tiwanaku and its affiliated sites. This chapter begins with a brief history of archaeological investigations at Tiwanaku and its hinterlands, followed by a more detailed examination of evidence from domestic and monumental social spaces (with the exception of Tiwanaku mortuary rituals in Chapter 4), at the capital city and beyond.
3.1 Tiwanaku: Culture, City, State

3.1.1 History of Archaeological Research and Models

Max Uhle and Adolph Bandelier conducted the first scientific explorations at the site of Tiwanaku at the turn of the 20th century. Mapping, excavation, and the study of ceramics led them to define Tiwanaku as a style as well as a civilization whose influence reached beyond the south-central Andes (Bandelier 1911; Stübel and Uhle 1892). Later on, Bennett’s (1934, 1936) original ceramic typology, which identified Pre-Tiahuanaco, Classic, and Decadent Tiahuanaco styles, was complemented by Rydén’s detailed study of serving and utilitarian wares (1947, 1957). The work of Arthur Posnansky (1945/1957), though tainted by his outlandish interpretations, still presents an important source of descriptions of Tiwanaku architecture and materials.

In the 1950s, Bolivian archaeologist Carlos Ponce Sanginés initiated three decades of large-scale excavations at Tiwanaku. Ponce correlated the sociopolitical development of the Tiwanaku state with five stylistic phases. Phases I and II corresponded with the preurban (Late Formative) settlement at Tiwanaku,

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15 Historically, the spelling of Tiwanaku has changed from Tiahuanaco to Tiwanaku, which is most widely used today. Some scholars also use the alternative spelling of Tiyahuanaco in accordance with the linguistic background of the name. The same spelling, “Tiwanaku”, is used here for the archaeological site, the culture and the style.

16 The widespread findings of Tiwanaku-style, or “Tiahuanacoid” materials as far as the central coast led Uhle to conclude that the Tiwanaku, like the Inca, had conquered and controlled large parts of the Andes (1903:22, 47). Subsequent investigations at Huari, first by Julio C. Tello and later by William Isbell and Luis Lumbreras, and the establishment of the “Middle Horizon” sequence by Dorothy Menzel (1964) effectively disarticulated scholarly discussions of these distinct cultures and polities from one another.

17 The subsequent treatment and modification of Bennett’s typology by other scholars created a confusing conflation of style and chronological phases.
contemporaneous with the Chiripa and Wankarani sites. Phases III and IV (approximately 2nd to 7th century A.D.) entailed the urban development of Tiwanaku, including the construction of the Kalasasaya and Pumapunku monuments that represented the dual power of the ruling elite (Ponce Sanginés 1972:76–86). Tiwanaku’s elaborate architecture, lithic and ceramic art, so Ponce argued, implied the existence of elite-attached craft specialists organized by religious leaders, who also coordinated the agricultural and demographic expansion. Phases III and IV, according to Ponce, also saw Tiwanaku’s colonization of the central Peruvian highlands and the San Pedro de Atacama oasis.

During the subsequent “imperial” Phase V, Tiwanaku conquered neighboring populations for labor and resource extraction (Ponce Sanginés 1972:87). At the same time, the ceramic style became “provincial”, displaying simpler, mostly geometric design motifs. According to Ponce Sanginés, Tiwanaku collapsed around the 12th century A.D. Although Ponce’s interpretations were in large parts the result of the methodological and theoretical limitations of his time and the nationalistical agenda of his government-funded investigations, his 5-phase ceramic sequence, recognition of the urban character of Tiwanaku, and sociopolitical model of Tiwanaku using multiple lines of evidence continue as the foundation of current interpretations (Kolata and Ponce Sanginés 2003).

The most recent models of Tiwanaku are the result of the multidisciplinary Proyecto Wila Jawira (1980s–1990s), which included excavations at Tiwanaku and Lukurmata, surveys of the Tiwanaku and Katari Valleys, and paleoclimate and paleoenvironmental investigations (Kolata 2003a). Kolata initially dated the emergence of Tiwanaku as an urban center to the 2nd to 4th century A.D.; by the early 6th century
It became a primary center in the region and later an imperial capital, before disintegrating around A.D. 1000 (Kolata 1993a:85–86). This chronology was later adjusted by Janusek’s ceramic sequence and radiocarbon dates (Table 3.1); the revised chronology continues to be the most widely used today.

**Table 3.1 Tiwanaku Chronology (based on Janusek 2003:37).**

<table>
<thead>
<tr>
<th>Period</th>
<th>Sub-period</th>
<th>Date (cal.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formative Period</td>
<td>Early Formative</td>
<td>B.C.1500–800</td>
</tr>
<tr>
<td></td>
<td>Middle Formative</td>
<td>B.C.800–200</td>
</tr>
<tr>
<td></td>
<td>Late Formative</td>
<td>B.C.200–A.D.500</td>
</tr>
<tr>
<td>Tiwanaku Period</td>
<td>Early Tiwanaku IV</td>
<td>A.D.500–600</td>
</tr>
<tr>
<td></td>
<td>Late Tiwanaku IV</td>
<td>A.D.600–800</td>
</tr>
<tr>
<td></td>
<td>Early Tiwanaku V</td>
<td>A.D.800–1000</td>
</tr>
<tr>
<td></td>
<td>Late Tiwanaku V</td>
<td>A.D.1000–1150</td>
</tr>
<tr>
<td>Post-Tiwanaku (Pacajes, Colloa, Inca)</td>
<td></td>
<td>A.D.1150–1570</td>
</tr>
</tbody>
</table>

Kolata’s interpretations of Tiwanaku social organization focused on the urban core and its immediate surroundings. He argued that the restructuring of urban and agricultural landscapes at the beginning of the Tiwanaku period required the centralization of power within the hands of an elite class. Kolata postulated that Tiwanaku’s elite class consisted of the most powerful *ayllus* from ethnic groups that engaged in complementary strategies of agriculture and herding (Kolata 1993a:241). The urban elite complexes were built to control the food and craft production, and to serve as “a visual, and conceptual tool of socialization, a generator and arbiter of new ideas, norms, and ideologies” (Kolata 1993a:88). Tiwanaku elites positioned themselves ideologically as “intercessors between the natural and supernatural worlds” (Kolata 1993a:148). In later works, Kolata described rulership in the Andes as “charismatic” and “pragmatic”; acts of hospitality, gift-giving, marriage alliance, conquest and ceremony enabled the mobilization of personal networks and social consensus (2003b:465–6).
Feasting, redistribution of wealth objects (metal jewelry, tapestry textiles, ritual paraphernalia), and violent sacrifice established bonds of reciprocal hospitality and inequality with the Tiwanaku populace (1993a:126, 169). The prevalence of sacrifice imagery in stone, textile, and ceramic iconography, and numerous deposits of disarticulated and curated human remains in monumental structures indicated that “the elites of Tiwanaku were obsessed with decapitation and with ritual display of severed heads,” and that these displays “were constitutive of and publicly reproducing ideology” (Kolata 2003c:191–2). The singular focus on an exclusive multi-ethnic elite class controlling Tiwanaku ritual, political, and economic life is no longer sustained by the archaeological data; unfortunately, it continues to serve as a polarizing “strawman” model for the development of research questions (see Stanish 2013:158).

Archaeological data from outside the capital’s monumental core revealed compelling evidence for the continuous modification of Tiwanaku’s urban spaces, and the social networks that linked residents of the city to their immediate neighbors and to communities living outside the city or even outside the altiplano region (Rivera C. 2003:312; Janusek 2008:227–237). Current archaeological research focuses on the material conformity and heterogeneity among residential groups at Tiwanaku for understanding the situational relationship between groups embedded in shared ritual practices (Janusek 2008). Tiwanaku ritual activities were pervasive to social life and provided a performative framework for the recreation of the social and universal order (e.g., Vranich 1999). As the evidence from households and public spaces suggests, ritual actors used familiar objects and symbols in meaningful events of consumption that
represented social relationships across status and community boundaries. Tiwanaku ritual life evolved with the changing needs and demands of elites and commoners.

3.1.2 Life in Urban Tiwanaku Society

Located in the Andean altiplano, at 3800 m asl, the eponymous capital of the Tiwanaku state lies approximately 20 kilometers south of the modern shoreline of Lake Titicaca in the lower Tiwanaku Valley (Figure 1). Tiwanaku emerged from among a number of competing ceremonial centers in the neighboring Katari and Desaguadero Valleys during the 5th century A.D. It eventually became the largest of these sites, eclipsing its competitors (Janusek 2008:104). Around A.D.500, the site of Tiwanaku was transformed into a major urban center, consisting of a principal monumental core and sprawling residential neighborhoods; other indicators of rapid changes in the life of the city’s residents included the consolidation of status differences, and the abrupt appearance of distinctive new ceramic wares. The centripetal forces of Tiwanaku’s urbanism caused the influx of populations from the surrounding regions to the city and the re-organization of the rural settlements and landscape (McAndrews et al. 1997). At its height, the Tiwanaku capital may have housed between 10,000 and 20,000 people, while estimates of the total population for the immediate Tiwanaku sphere (Katari, Tiwanaku, 18

Altiplano: the high-plateau situated between the Cordillera Blanca and Cordillera Real spanning from the area north of Lake Titicaca ca. 1,000 km to the southeast near Lakes Poopo and Uyuni (southwest Bolivia; northeast Argentina). At an elevation of 3650masl, the altiplano constitutes a series of intermontane basins that form part of the puna ecological zone. The extensive grasslands and seasonal rainfall of the northern altiplano lend themselves to camelid pasture and agriculture, whereas the southern altiplano is comparatively arid but rich in mineral resources (copper, salt, silver) (http://www.britannica.com/EBchecked/topic/17727/Altiplano, doi December 15, 2014).
and Desaguadero valleys) lie upward of 100,000 people (for more detail on Tiwanaku population estimates, see Stanish 2013).

**Figure 3.1** Map of the south-central Andes and the location of the Tiwanaku capital as well as important regions of interaction.

By the end of the Late Formative, the monumental center of the Tiwanaku included the Semi-Subterranean Temple and an early version of the Kalasasaya platform. With its sunken court and monolithic statues, the Semi-Subterranean Temple carried on Formative Period traditions. Soon after, the architectural core was expanded with the enlargement of the Kalasasaya, the construction of the Akapana pyramid to the south, and
the founding of the Puma Punku complex and the Mollo Kuntu mounds outside the urban core (Janusek 2004:132; Kolata 1993a, 2003b, c) (Figure 3.2), attesting to the ability of local communities to mobilize large-scale labor. The common orientation, use of open raised platforms and sunken patios, and finely cut stone masonry points to a common aesthetic and technology, but the diverse recombinations of architectural elements suggests that builders held some autonomy in the implementation of architectural norms. Mounds outside the monumental core indicate that Tiwanaku residents shared some ceremonial spaces—i.e. the central structures—but each neighborhood also maintained their own public space.

![Figure 3.2 Map of Tiwanaku site with locations of excavations and burial finds (modified based on Kolata 2003:map 1a).](image)

Material evidence for ritual activities at these public places is scarce. Excavations at the Puma Punku and Mollo Kuntu mounds did not yield evidence of food preparation,
which took place in domestic settings nearby (Couture 2003:218). Apparently, ritual spaces were kept intentionally clean until the moment of abandonment. We can only speculate—based on circumstantial evidence like the monoliths that stood erect in the sunken courts and on the platforms—that the communal feasts and ceremonies, signified by the depiction of keros and snuff paraphernalia, respectively, featured in the performances that were staged in these places.

Feasts, comprising the consumption of food, alcoholic drink and drugs, accompanied many activities performed in houses and public spaces, bringing people together in “moments of communitas” (Janusek 2004:133). Further evidence for the fact that feasting had become a major aspect of Tiwanaku urban life is the introduction of a new ceramic assemblage of red-slipped serving and ceremonial wares\(^\text{19}\) across all sectors of Tiwanaku’s society during the Early Tiwanaku IV period (Janusek 2003a, 2004:151, 2005). These included keros and tazones, escudillas and vasijas, sahumadores, incensarios, and fuentes. Decorated serving wares came to account for a significant percentage of the domestic ceramic assemblage (up to 30% in some sectors), suggesting an increase in communal feasting events. The importance of feasting also transformed the domestite production sphere, and may be observed in the use of large tinajas, used for fermentating corn beer, in the Akapana East and Ch’iji Jawira sectors (Janusek 2004:156).

Despite the introduction of new serving wares, residential communities continued to reproduce their group identity through distinctive decorative styles and preferences for

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\(^{19}\) Only some of the Tiwanaku IV forms had antecedents in the Late Formative ceramic assemblages (e.g., escudillas and keros).
particular vessel forms. Some communities maintained strong and persistent ties with areas as distant as the Cochabamba valley, as the presence of non-local ceramics, which made up a substantial portion of the assemblages in the Akapana East 2 and Chiji Jawira compounds, would indicate (Janusek 2005; Rivera C. 2003). Some ritual activities involving the use of *incensarios*, *sahumadores*, and snuff paraphernalia may also have been restricted to elite groups or individuals (Janusek 2004). Specialized craft production of stone artifacts, bone tubes, and flutes was embedded in domestic economies (e.g., Giesso 2003; Janusek 2004:158), in contrast to metal artifacts and fine textiles whose production and distribution was likely controlled by the emerging elites (Lechtman 2003:430; Oakland 1986).

Tiwanaku status was institutionalized and embedded in the social relations between individuals and communities living in Tiwanaku. Status was expressed through a combination of material and spatial markers. Proximity to central places (e.g., the monumental core of the city) signaled the high social status of residents in neighborhood compounds like the Putuni and the Akapana East 1M. Material indicators of wealth as the basis of status included domestic architecture made from cut stone blocks, access to metal artifacts and ritual objects, such as pyro-engraved bone tubes probably used for the consumption of hallucinogens and incense burners, fine ceramic serving wares and greater variability in vessel forms. The greater frequency of serving wares found in high-status households suggests that elites had better access to comestibles and *chicha*. These pieces of evidence clearly indicate that status in Tiwanaku society was associated with access to locally produced and imported wealth objects. Serving wares like *keros* and *tazones* that were used in the context of public feasting events, offerings, and burial ritual
also held a symbolic or social value. The rapid adoption and diffusion of Tiwanaku’s standardized serving ware assemblage at the end of the Tiwanaku IV period evinces the social value attached to otherwise utilitarian and quotidian objects.

Communities at Tiwanaku were engaged in autonomous regional networks, which would have made it difficult for elites to control the import and redistribution of foreign objects. Instead, groups residing near the city’s center of power controlled the production of aesthetically pleasing objects decorated with images and symbols of power (e.g., felines, front-face deities). Therefore, the value of ceramic and other objects (likely including textiles) derived from their production and from their use in activities associated with powerful places. Janusek has argued that access to “pure” material assemblages, i.e. objects that lack foreign elements in their production or decoration, differentiated social groups (Janusek 2004:157).

3.1.3 Social Transformations and the Institutionalization of Inequality

Around A.D.800, Tiwanaku underwent a major transformation of public and residential spaces and activities. Access to spaces inside monuments became restricted, an indication that some ceremonies were no longer suited for universal participation. The houses in the Akapana East sector and the Putuni were razed and replaced with more spacious, higher-quality architecture and equipped with drainage canals. Immigrants established neighborhoods on the city’s outskirts, adding to the spread of residential compounds that were by large walls, signaling the continuity of extended kin groups as the basic unit of social organization. Inside the compound walls, domestic spaces became functionally differentiated, with rooms designated for cooking and food preparation,
storage, craft activities, and dwellings. In the Akapana East, the residents of adjacent compounds made use of distinctive architecture, culinary practices and exotic objects to reproduce long-standing cultural differences; the differential distribution of wealth items among these compounds suggests that communal identity had now also become, at least to some degree, synonymous with status (Janusek 2004:218–9).

The spatial restructuring of Tiwanaku’s cityscape coincided with an intensification of food production and craft activities in the city and its hinterlands. There is some evidence from Akapana East and Lukurmata that storage space was expanded, and “large tinajas [storage and fermentation vessels] composed huge proportions of urban assemblages, far higher overall than they had in previous occupations” (Janusek 2004:224). Serving ware assemblages also changed, gradually replacing escudillas and incensarios with standardized keros and tazones (Figure 3.3). The status differences that had begun to articulate during the previous Tiwanaku IV period were now becoming consolidated and concentrated among the residents of elite compounds in the center of the city. Elites fueled monumental construction projects and craft production through the sponsorship of feasts. Their residences near the ceremonial center included kitchens for the large-scale preparation of chicha. Instead of invoking a sense of communitas, as had been the case during the previous period, feasting was now “[a] functional linkage between […] noble and retained, forged in a time of increasing elite power, [when social relationships were] clearly highly asymmetrical and most likely differentiated by class” (Janusek 2004:224).
The increasing social inequality at Tiwanaku did not interrupt kin-based exchange networks. Imported items are found in virtually every residential complex dating to the Tiwanaku V period. Cochabamba-style ceramics composed small portions of the domestic assemblages at Putuni and Akapana East, and continued to dominate in the Ch’iji Jawira neighborhood (Couture 2003; Rivera C. 2003). Whereas elites may have gained control over long-distance exchange routes to places like San Pedro de Atacama for the acquisition of certain ritually charged status objects, the movement of goods between highlands and lowlands through kin-based caravan networks remained in place throughout the height of the Tiwanaku state.

Although the urban and rural landscape underwent some change between the Tiwanaku IV and V periods—increasing population and scale of production—life in the
capital and its hinterlands adhered to earlier traditions, merely intensifying social relations and activities. Although some groups living in the heart of the city enjoyed better access to fine ceramic and metal objects that those living in the periphery of the city, in other ways household activities, like food preparation, were strikingly similar across social classes in their emphasis on the production and storage of *chicha*, and the reliance on camelids and tubers as a primary food sources (Berryman 2010). Many of the objects we consider status markers in Tiwanaku society were intended for public display in the context of feasting (*keros, escudillas, tazones*), in the burning of offerings (incense burners), and in the presentation of elaborate costumes and dress (tapestry cloth, metal and stone ornaments). The basis of social power in Tiwanaku rested on the public presentation and performance of feasting and consumption-related rituals, sponsored by the urban elites. The reorganization of space and society at the onset of the Tiwanaku V signaled the widespread participation in and proliferation of these rituals and continued over two centuries until the state’s collapse.

3.1.4 Tiwanaku Ritual: Place, Material, and Ideology

Tiwanaku public and household rituals did not vary in nature throughout the state’s history. The evidence for Tiwanaku ritual activities is mostly indirect, and has to be inferred based on context and the materials left behind—intentionally or unintentionally—by the ritual participants. Feasting was an important aspect of social interactions within and beyond the walls of residential compounds, as was the burning of offerings, a symbolic act of consumption. The consumption of psychotropic substances had a more restricted use, and would have taken place in more intimate settings compared
to the public nature of libations and feasting. Grander ritual ceremonies celebrating the construction or destruction of residential and monumental structures, or seasonal events expanded the concept of consumption to include non-food objects. Caches and deposits of broken ceramic, metal, and other wealth objects together with camelid and human remains suggest that Tiwanaku ritual revolved around the production and consumption (or destruction as a symbolic act of consumption) of valuables.

Feasting defined and embodied the Tiwanaku way of life. Relative chronologies are built around the appearance and use of diagnostic serving wares like keros and tazones. Fine polychrome serving wares are often associated with other material indicators of wealth, and the production and storage of maize beer became one of the foremost culinary activities at the height of Tiwanaku state consolidation. The typical Tiwanaku feasting assemblage consisted of the kero, tazon or escudilla, and vasija. These vessels were used to carry, serve (vasija), and drink (kero) liquids, and eat foods (tazon). Although discussions of Tiwanaku feasting behavior often focus exclusively on the kero—perhaps because it displays more, and often visually stunning, stylistic variability—the prevalence of the three vessel forms indicates that sharing and distributing food and drink was as important as its consumption. Decorated pitchers were both functional and intended for public use and would have enabled their owner to serve drink. The flaring rims and large sizes of keros made drinking difficult, and in addition to actual consumption, these vessels exaggerated the process of lifting the cup to the mouth, and in tipping it, the liquid would spill. The large size and production of paired vessels
found in some ritual contexts\textsuperscript{20} also suggests that drink may have been shared among people. Lastly, the \textit{tazon} presents the complementary serving object to the \textit{kero}; similar in shape and proportion, it was probably used to serve stews or other foods that were distributed at the feast.

The act of preparing and sharing drink and meal, whether with members of the family, the neighborhood, or in the context of large-scale ceremonies taking place at Tiwanaku’s monumental center, would have created intimate bonds between the participants of the event. At the same time, qualitative and stylistic differences in serving wares also differentiated the ritual participants by status and origin. Thus, the presence of Cochabamba-style serving wares in several of residential compounds at Tiwanaku, and the polished blackware vessels associated with the islands in Lake Titicaca not only indirectly imply an affiliation with distant regions; the display of these objects in the context of a public ceremony publicly stated their origin and social affiliations. Similarly, the finely painted \textit{escudillas} and \textit{keros} found at the Akapana and Putuni distinguished their owners from others with simpler cups and bowls.

Miniature serving vessels formed part of domestic and ritual in commoner and elite assemblages. They were likely not used to serve or consume actual food or drink. Their crude appearance also starkly contrasts with the finely decorated, regularly sized vessels. Instead, miniatures may have served specifically as offerings, their small size invoking an affiliation with youth, fertility, and the gods (Sillar 1994; Tschopik

\textsuperscript{20} In Cochabamba, four vessel pairs were recovered from burial contexts (Anderson 2009:186)
Miniature vessels were found in caches and offerings at the Akapana mound (Alconini 1995:figure 75; Manzanilla 1992:70).

*Sahumadores* and *incensarios*\(^\text{21}\), adorned with zoomorphic head and tail elements, were prominent in elite and monumental contexts at Tiwanaku, and in some in commoner residences. They were only rarely found beyond the boundaries of the city. Like other serving wares, incense burners were shaped and decorated to reflect community values and aesthetics not necessarily shared by all within the state.\(^\text{22}\) Incense burners featured in large and small-scale ritual activities, while *sahumadores* also had a more quotidian use (Janusek 2003a:70).

Snuff paraphernalia comprised tablets, bone tubes and spoons, and small mortars and pestles, used for the preparation and consumption of psychotropic substances like *vilca* (*Anadenathera colubrina*) or *ayahuasca* (*Banisteriopsis* sp.). These objects are found in only a handful of contexts, and may represent both local products as well as imported items (Janusek 2004:216). Psychotropic substances are not endemic to the highlands and were imported from the eastern Andean lowlands. The demand for both drug and paraphernalia stimulated trade with the oasis of San Pedro de Atacama to the south, where this material culture complex had existed since the Formative period (Torres 2001). Access to psychotropic substances may have become a factor in distinguishing

\(^{21}\) *Incensarios* are mainly associated with the Tiwanaku IV period, whereas the use of *sahumadores* continued until the end of the Tiwanaku V period (Janusek 2003a:70).

\(^{22}\) For example, potters at the secondary Tiwanaku center of Lukurmata developed a distinct style of effigy incensarios; these vessels played an important role in public and mortuary rituals throughout the Katari Valley (Janusek 2008:204).
elites from commoners during the Tiwanaku V period. The procurement, distribution and consumption of coca (*Erythroxylaceae* sp.), a “staple” stimulant in Andean communities, likely also constituted a significant part of the ritual economy, but there is little archaeological evidence available from the highlands. It would appear more likely that coca, like maize, was traded within kinship networks that tied communities at Tiwanaku to lowland enclaves on the eastern and western slopes of the Andes.

*Chicha*, coca, and other psychotropic substances were physically ingested and consumed by Tiwanaku’s ritual actors in public or domestic settings. Another set of practices that also relates to consumption—and to the use of *sahumadores* and *incensarios*—was the killing or destruction, and subsequent interment of camelids and material objects.

Domesticated camelids (llamas and alpacas) played an important role in highland society as a source of food, long-distance transportation, wool, and tool making. Camelids constituted the majority of animal remains excavated at Tiwanaku and other Tiwanaku-affiliated sites in the altiplano and lowlands (Webster and Janusek 2003). Next to agriculture, herding was the most important subsistence activity of Tiwanaku peoples, their cultural significance displayed in the state’s iconography and ritual practices. Camelid remains are above all found in association with offerings that marked the founding or closing of residential and monumental structures. At the Akapana, disarticulated bones of several camelids were found in a large deposit that also included

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23 Janusek reports finding snuff paraphernalia in the Akapana East 1M residential compound together with other luxury objects (Janusek 2004:216).

24 Naturally dessicated coca leaves has been recovered in ritual deposits at the provincial temple complex at the site of Omo M10 (Gaggio 2014).
dozens of ceramic vessels and disarticulated human remains. At the top of the structure, elite residences had been filled with camelid remains during what appears to have been a closing or abandonment ceremony (Webster and Janusek 2003:359). The Wila Kollu platform at Lukurmata likewise contained a subterranean pit filled with the remains of a fetal camelid and *incensarios* (Janusek 2004:173). The Putuni palace at Tiwanaku included a subfloor deposit of a complete and articulated adult llama. In the residential compounds of Akapana East, llama fetuses and isolated skeletal elements were placed in caches and pits under floors and wall foundations, similar to human burials. These animals showed evidence of butchering, suggesting that they were not intended for human consumption. Webster and Janusek draw parallels to modern llama sacrifices practiced in the highlands of Bolivia (2003:360), which aim to display the wealth and influence of the ritual sponsors.

Whatever ritual and ceremonial activities took place at Tiwanaku platforms and mound structures, and even in the patio areas of residential compounds, left behind few material remains. This underlines the significance of the subfloor deposits as rare testaments to a prevalent component of Tiwanaku ritual practice. Caches or deposits placed in monumental or residential spaces contained only objects of high social value. They included a combination of materials, and the quantity and quality of the contents correlated with the scale and importance of the space in which they were found. The large offering of ceramics (decorated *keros* and *incensarios*), copper and silver pins and plaques, 14 camelids, plant and foodstuffs at the base of the Akapana marked the construction or remodeling of the monument at the end of the Tiwanaku IV period. The subfloor deposits found in various locations at the Putuni and Akapana East were less
elaborate but similarly associated with the buildings’ lifecycles. These deposits complemented ritual festivities of consumption. By destroying the most precious goods and burying them in meaningful places, the Tiwanaku community enacted their symbolic consumption by the earth and natural deities. Burial, invoking parallels to the agricultural activity of planting, constituted a payment to ensure returns in the future.

The similarities of the ritual practices performed by different groups at Tiwanaku are striking. Commoners and elites alike engaged in acts of feasting, burning, killing, breaking and burying. It is only in the magnitude of the event and quality of the offering that status groups can be differentiated. Elites, who had access to more and better ritual and feasting materials, performed their rituals in palaces and monumental buildings like the Putuni and Akapana, whereas the ritual activities of less wealthy members of the community took place at communal mounds like Mollo Kuntu or the patios of residential complexes. Therefore, engagement in ritual ceremonies that were deemed essential to the reproduction of life also served to reproduce the social inequalities, enabling elites to display their wealth as hosts on the city’s central stage, while community leaders of lesser rank used local venues and materials (Seddon 2013:121). The performance of rituals, hosting of feasts, giving of libations and offerings thus presented sources of power and status. Although the value of these activities increased when using wealth objects, the value of the ritual acts themselves bestowed prestige upon the rituals’ actors and participants. I therefore propose that materials and objects involved in the performance of such rituals, such as keros and incensarios, even though they may not be deemed status indicators based on the nature of their exotic or labor-intensive origin or production, can be deemed prestige objects due to their social value (Pygyn 1998).
Overall, ritual activities in elite and commoner, public and residential contexts formed a multi-scalar network of ritual activities, in which similar material components were replicated on different scales according to the need and ambitions of the actors and participants. As such, Tiwanaku ritual practices were flexible and capable of integrating local social hierarchies across the region, promising relationships of reciprocity and redistribution between ritual participants and supernatural forces, while allowing community leaders to gain power as ritual actors, mediators and hosts.

3.2 Tiwanaku State Expansion and Local Iterations of Ritual Practice

3.2.1 Tiwanaku State Expansion in the Lake Titicaca Basin

As is the case with all early states, the initial centripetal force of the urban center was followed by the rapid expansion of Tiwanaku peoples, material culture, and ritual practices across the region. Settlement surveys of the Tiwanaku and Katari Valleys have revealed a substantial re-organization of the social landscape associated with the rise of Tiwanaku as a primary urban center (Albarracín-Jordan 2003; Mathews 2003; McAndrews et al. 1997). During the Tiwanaku IV period, larger settlements emerged in the upper and lower Tiwanaku valley associated with agricultural intensification through terraced and raised field systems, respectively (Mathews 2003:127; McAndrews et al. 1997:73). McAndrews and colleagues proposed based on the primo-convex rank-size site.

25 Whereas the ceramic evidence from the preceding Middle Formative Period suggests a complex relationship between Tiwanaku and Chiripa, the recorded absence of rural sites during the Late Formative Period may be attributable to the convergence of populations at Tiwanaku (Mathews 2003:127).
distribution that Tiwanaku integrated several “autonomous subsystems within the valley [that] were relatively independent of one another” (1997:73), in contrast to the highly centralized management model of agricultural production favored by Kolata (1993a, 1993b). During the Tiwanaku V period, the region experienced an increase in the number of settlements, but the clustering of sites remained the same.

Albarracín-Jordan has interpreted Tiwanaku’s rural landscape to represent “a dynamic system, consisting of various social units with local political hierarchies […] capable of mobilizing their own labor force to accomplish diverse productive [agricultural and building] tasks” (2003:111). He argued that participation in larger communal tasks was likely coordinated by “higher authority figures of each territorial node” (2003:111). This is reflected in the diversity of monumental building and stone-carving styles at Tiwanaku, where “it is possible that the structures were built by different groups from the Tiwanaku Valley and, conceivably from beyond. In this sense, Tiwanaku represented an emblem of solidarity, […] a point of ritual union” (2003:111). Despite Tiwanaku’s prominence as the urban center of the southern Titicaca Basin, rural populations appear to have maintained some degree of autonomy in their productive, residential and ritual lives. The monumentality and dominance of Tiwanaku in the region may thus have derived from its role as the periodic and recurrent coordinator of supra-local productive and ritual activities, a primus inter pares in the region.

Because our understanding of the various social relationships within the capital remain unclear (e.g., Stanish 2013; Seddon 2013), it is challenging to link sociopolitical developments and occurrence at the capital to others taking place outside the center. As Stanish has convincingly argued, highly centralized hierarchical models of state
organization and expansion are not only unviable, but also misleading and counterproductive to anthropological studies of states (2013). Tiwanaku state expansion was a multi-locational discourse between elites and non-elites in the core and in the surrounding regions; this discourse could be manifested in direct colonization, or through indirect contact between peripheral social groups.

Models of Tiwanaku expansion vary significantly from region to region regarding its motivations and means and paint a picture of specific and locally targeted, as well as long-standing and socially embedded interaction networks that span across the south-central Andes. Some of the prominent models for explaining these interactions include the “altiplano mode”, colonization, and clientage.\(^{26}\)

Camelid caravans played an important role in the lives of Tiwanaku communities. Caravan transhumance facilitated the movement of people and goods across the altiplano and beyond, a migration pattern that has great antiquity in the region – so much so that some archaeologists have argued they were the primary reason for the rise and expansion of the Tiwanaku state.\(^{27}\) Although it is unlikely that caravans were the sole reason for

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\(^{26}\) Ponce Sangines’ (1972) military conquest model is not discussed here since there has been virtually no archaeological evidence found to support the military expansion of Tiwanaku, especially in comparison with Wari whose expansion throughout the central Andean region was likely coercive and included extensive warfare and raiding (e.g., Tung 2012).

\(^{27}\) Among the earliest archaeologists who sought to explain Tiwanaku’s rise and role in the region were Browman (1984) and Nuñez and Dillehay (1995[1978]). Emphasizing the importance of llama caravan trade as a catalyst for social interaction, they considered the urban center a site of elite production that fueled the trade networks, which in turn came to converge at Tiwanaku. Browman argued that Tiwanaku gained power over competing centers because it “served as an industrial center, with guilds of craftsmen and artisans; it imported raw materials and exported finished manufactured goods [requiring it] to develop increasingly larger market areas” (1984:123). The so-called “altiplano” mode required communities to develop specialized production that allowed them to
Tiwanaku’s rise to power in the region, they were nevertheless crucial for maintaining the long-distant interactions Tiwanaku’s residents, colonies and client groups. In the Desaguadero valley—a key route for llama caravans from the Middle Formative period onward—Tiwanaku influence was only observed at a select number of strategically located sites; this is likely the result of “the polity’s efforts to gain access to [this caravan route from Cochabamba to Tiwanaku]” (Smith and Janusek 2014:689–93).

To the west of Lake Titicaca, Tiwanaku caravan routes followed the least-cost paths along rivers (Stanish et al. 2010:529–530). The scarcity of Middle Horizon sites suggests “an informal Tiwanaku exchange system characterized by caravan trips made by many disparate people moving goods from the countryside to the centers of intermediate areas. […] Traders make their own arrangements with local populations [and] provided goods, particularly Tiwanaku ritual finewares, in return for access to water, grazing and perhaps protection” (Stanish et al. 2010:530). Traders were the lynchpin for articulating the altiplano with other regions. Yet, the interest of Tiwanaku elites in controlling trade was probably limited to specific long-distance networks, such as that with San Pedro de Atacama. The exchange of staple goods like maize implied the constant movement of access locally unavailable resources. While production and exchange of specialized objects such as ritual paraphernalia (keros, snuff tablets) was certainly a major component of the regional economy during the height of the Tiwanaku state, there is little evidence to support a model of Tiwanaku as an industrial center. Most production activities at the site were intended to supply local demands. Nuñez and Dillehay afford Tiwanaku a position in the regional trade networks organized by llama caravans as a “nexo de vinculación económica e ideológico con diferentes regiones agro-ganaderas” (1995:91), but without significant influence over the economic processes that controlled caravan trade.

28 identified by the presence of decorated keros and tazones, rather than domestic pottery fragments.
caravans across the region, and may have been in the hands of kin groups, only to be subjected to elite control toward the end of the Tiwanaku state period.

![Figure 3.4 Map of Tiwanaku hinterland sites with burial excavations.](image)

3.2.2 Tiwanaku Influence in the Altiplano Hinterlands

Tiwanaku ritual practices were quickly incorporated into the local lives of communities outside the city (Figure 3.4). While places like Lukurmata thrived under the expansion of Tiwanaku’s urban economy, wholeheartedly adopting its culture and even developing a distinct stylistic identity, village communities like Iwawi and
Chucaripupata\textsuperscript{29} were more selective in their affiliation, choosing some elements but not others to popularize and secure the position of local elites.

Lukurmata was a secondary Tiwanaku center located in the neighboring Katari Valley. Excavations by the Proyecto Wila Jawira included the monumental sector (a semi-subterranean temple and platform complex), residential areas and burials. Lukurmata underwent a spatial reorganization during the Tiwanaku IV period, and became a prominent secondary Tiwanaku center and point of administrative and ritual activity in the Katari valley. Lukurmata is representative of the social changes taking place during Tiwanaku IV. Dispersed individual households were replaced by concentrated patio groupings that housed larger kinship units and organized specialized activity areas (Bermann 1994; Bermann 1997:98–99). Ceramic production, intensification of agricultural, the introduction of ritual paraphernalia and serving vessels closely mirror the social processes at the capital. Lukurmata was also a center of production for effigy incensarios, bone tubes used in the consumption of psychotropic substances, and of panpipes (Janusek 2008). Objects representative of Tiwanaku’s corporate ideology, such as standard keros with puma and condor motifs, front-face deity keros, bone tubes and snuff tablets, as well as effigy incensarios buried in caches in public spaces substantiate the pervasiveness of Tiwanaku influence in Lukurmata’s public and domestic rituals. In their adoption of Tiwanaku culture, Lukurmata residents nevertheless maintained a local identity expressed in the unique stylistic and material expressions found on ceramic and other materials (Janusek 2004:198). Affiliation with

\textsuperscript{29} Although Tiwanaku-affiliated residences have been excavated at other sites, as well, those excavations are usually limited in area and make it difficult to observe the cultural and social processes that are of interest here.
Tiwanaku seems to have provided local elites access to prestige and power; in fact, elites may have moved between Lukurmata and Tiwanaku during the Tiwanaku-V period, as suggested by the presence Lukurmata-style effigy incensarios in Putuni (Janusek 2004:222). In turn, local elites at Lukurmata may have also derived status from the production of wealth objects used for rituals, such as engraved bone tubes (Janusek 2004:179–183) (Figure 3.5).

![Figure 3.5](image)

**Figure 3.5** Bone tubes produced at Misiton 1, Lukurmata during Tiwanaku IV–V (from Janusek 2004:figure 6.5).

Ritual practices at Lukurmata also closely resemble those at Tiwanaku. Although no domestic offering features were identified for the Tiwanaku IV and V occupations at Lukurmata, subfloor pits containing the remains of a human and camelid fetus dated to the Late Formative 2 period (Bermann 1994:131). On the terraced platform, the site’s principal public space, several effigy vessels had been interred in the architectural foundations and in deep pits, together with another offering of camelid and human fetuses (Bermann 1994:198). The remains on the platform surface consisted of decorated stone
and bone objects, and a number of effigy vessels. As at Tiwanaku, intentional destruction and burial were the final steps in a process that ritualized consumption and redistribution. The popularity of feasting is reflected by the abrupt replacement of the local serving bowls with keros and tazones during the early Tiwanaku IV period, although other parts of the domestic material assemblages remained the same. By the Late Tiwanaku IV period, Tiwanaku serving and utilitarian wares had effectively replaced the local ceramic assemblage and were also found in ritual and burial deposits.

At the site of Chucaripupata on the northern tip of the Island of the Sun, Tiwanaku influence transformed local ritual practices, allowing elites to insert themselves into existing reciprocal relationships between people and deities, much like the elites at Tiwanaku did (Seddon 2013:114). During the Tiwanaku IV period, residents of Chucaripupata selectively adopted Tiwanaku-style tazones and keros for the purpose of public feasting (Seddon 1998:246–7). Instead of imports, these vessels were locally produced, suggesting that in some places Tiwanaku ritual practices were appropriated by local leaders to advance their own power by invoking the influence of Tiwanaku without necessarily becoming subjects of the capital’s elites (Seddon 1998:250). At the Tiwanaku port of Iwawi, keros and tazones were introduced during the Early Tiwanaku IV period but did not appear in burials until later, suggesting that local life was not permeated by Tiwanaku’s ritual ideologies and practices immediately (Isbell and Burkholder 2002). While these cases provide evidence for the popularity of Tiwanaku’s feasting rituals, the excavation of two large offering deposits on the island of Pariti containing hundreds of finely decorated ceramics likely produced at Tiwanaku suggests that some settlements maintained direct links to the capital. The Pariti offerings included several vessels pairs,
an abundance of keros and tazones in different styles, including the Cochabamba and Lake Titicaca styles, *escudillas* and effigy vessels (Korpisaari et al. 2011). Radiocarbon dates indicate that the pits, located under the entrances to a stone structure, were repeatedly reopened and new broken vessels placed inside. Given the quality and quantity of the Pariti ceramic offerings, it is reasonable to suggest that these recurrent depositions constituted high-status ritual events performed by Tiwanaku-affiliated elites who had access to such diverse ceramic styles and forms. This lends support to the model of Tiwanaku expansion and regional consolidation through elite-organized relations of reciprocity with strategically valuable places.

The case of San Pedro de Atacama, on the southern edge of the state’s sphere of influence, illustrates that Tiwanaku did not enforced interactions with outside communities violently but through relationships of exchange and reciprocity. The inhabitants of the San Pedro de Atacama oasis maintained ties with coastal and lowland regions as far back as the Archaic period, allowed them to access a other resources in exchange for the locally available minerals, salts and metals (Berenguer and Dauelsberg 1987). During the Quitor phase (A.D. 400–600), San Pedro society became increasingly stratified and established contact with Tiwanaku resulting in a relationship of “clientaje” with the powerful polity to the north (Berenguer 1998; Berenguer and Dauelsberg 1987:156). Mortuary and bioarchaeological evidence clearly point to an ephemeral material presence of Tiwanaku at San Pedro de Atacama during the Coyo phase (A.D. 600–1000). San Pedro trade networks became articulated with those of Tiwanaku to the north,affording local leaders access to, and claims over, new sets of exotic items and reciprocal relationships, thus reinforcing structures of inequality within the oasis (Stovel
2001). At the same time, trade with San Pedro de Atacama afforded Tiwanaku elites or communities access to desirable resources necessary for daily life, craft production, and ritual practices (Janusek 2008:240).

3.2.3 Tiwanaku Colonization of the Cochabamba Valley (Bolivia)

In addition to the interaction of the city’s elites with the immediate hinterland, other residents maintained contact with distant regions with resources desirable, complementary, and exchangeable to those produced by highland populations. Exchange and migration between different ecological zones during earlier periods have been traced back to the Archaic period and the interaction of Tiwanaku-affiliated groups and populations outside the monumental core fall within a well-established social pattern (Rothhammer et al. 1983). There are two regions that seem to have been closely connected with the Tiwanaku capital: the Cochabamba valley in Bolivia and the Pacific coastal valleys.

Archaeological evidence found at Tiwanaku in the form of iconography, ceramic vessels and paleoethnobotany suggests that residents of the capital maintained direct or indirect ties with these regions. Cochabamba-style ceramics found in the residential compounds of Ch’iji Jawira, Akapana East 2, and Putuni were rare but ubiquitous (Rivera C. 2003). Hastorf and colleagues (2006) determined that maize found at Tiwanaku included local as well as foreign variants grown in the distant Moquegua and Cochabamba valleys.

The Cochabamba valley is located approximately 400 km southeast of Tiwanaku and is one of the primary agricultural regions for cereal production in Bolivia. Tiwanaku-
style materials have been found throughout the area, and their presence in domestic as well as mortuary assemblages dating from A.D. 600–1100 suggests that Tiwanaku’s influence in Cochabamba was substantial and long-lasting. Surveys of the central and western valleys in the Cochabamba region evinced that Tiwanaku influence was strongest in the western region, closest to the altiplano, with 70 to 90 percent of ceramics being of Tiwanaku-style, compared to 10 percent in the eastern valleys (Anderson 2013:90).

Anderson divided the Tiwanaku period (A.D. 600–1100) into the earlier short Illataco phase (A.D. 650–750), defined by the initial appearance of Tiwanaku ceramics and a diversification of local ceramic forms, followed by the Piñami phase (Early, A.D. 740–950, Late A.D. 950–1100), when Tiwanaku-style ceramics were locally produced and dominated serving and utilitarian assemblages (Anderson 2004:15, 2013:90).

The Illataco phase is marked by an increase in fine ware styles and changes in the forms and pastes of utilitarian wares, the result of “increased interregional trade and possibly movement of people within the larger Cochabamba region” (Anderson 2013:93, 96). The stylistically diverse Tiwanaku-style vessels, mostly keros and tazones, had likely originated in the Katari Basin and the western Lake Titicaca Basin. Subsequently, the Tiwanaku-Cochabamba ceramic assemblage (also known as Central Valley Cochabamba Tiwanaku style, or CVCT) became more standardized and common during the Early

30 As at Tiwanaku, serving wares became increasingly more frequent in comparison with earlier periods (Anderson 2009:180), with keros and challadores as the common vessel type. The hybridization of Tiwanaku culture in Cochabamba is perhaps best exemplified by the challador, a funnel-shaped vessel sometimes with a perforated base, that has local antecedents but was manufactured using highland ceramic production technology (Anderson 2004:18). Anderson interprets the widespread introduction and distribution of keros as “a high degree of acceptance and emulation of Tiwanaku drinking traditions, signifying a change to a local Tiwanaku-centered identity” (2009:183).
Piñami phase (Anderson 2013:95). Imports were more rare than before. The serving ware assemblages were expanded to include *challadores* and *vasijas*. During the Early Piñami phase, domestic architecture, cooking practices and tools changed to known Tiwanaku-style patterns. This included the increased reliance on maize agriculture and consumption, as well as camelid herding. Increased storage capacity coincided also with a growth in population until the Late Piñami phase\(^{31}\) (Anderson 2013:96–100). The population of the Cochabamba valley became coopted by Tiwanaku elites during the Early Piñami phase by way of indirect control via connections to local leaders. Rather than through an influx of highland Tiwanaku groups, Cochambinos developed a new social identity related to the CVCT ceramic style, acting as a key periphery. As observed at the capital and other smaller Tiwanaku settlements, the Late Piñami phase, concurrent with Tiwanaku V, saw an increase in population and storage, and a decrease in social diversity and homogenization of lower status lives (Anderson 2013:106–7).

The archaeological evidence from Cochabamba indicates that this region, though several days from the Tiwanaku capital, became integrated and continued to participate in the Tiwanaku state for several centuries (Late Tiwanaku IV period). Tiwanaku influence appears to have won the upper hand during a time of increased multi-ethnic interaction in Cochabamba, and managed to substantially transform the lives and activities of the local population. Although the evidence for direct control by Tiwanaku elites is sparse, the emergence of a Tiwanaku-style ceramic assemblage, and pronounced changes in the structure of domestic and social life suggest that Cochabamba was perhaps through informal communal ties connected to, knowledgeable of, and involved in the social

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\(^{31}\) Anderson’s publications of her excavations at Piñami do not mention household offerings or caches, so that at this point it is not possible to determine in how far such ritual behaviors were adopted by Cochabamba populations.
processes that were taking place in the urban and rural areas of the altiplano. As was the case with San Pedro de Atacama, it appears that Tiwanaku, or altiplano presence in the region was not unprecedented, and the successful adaptation of Tiwanaku ritual behaviors, even to the point of otherwise highly conservative burial traditions, may have been in part due to a long-standing cultural connection between these regions.

### 3.3 The Tiwanaku Colonization of the Middle Moquegua Valley (Peru)

#### 3.3.1 Tiwanaku Settlement Patterns in Moquegua

Beginning around the middle of the 7th century A.D., in the wake of a major El Niño event that may have depopulated the Moquegua valley (Magilligan and Goldstein 2008), Tiwanaku-affiliated populations arrived in this hyper-arid coastal river valley located approximately 200 km west of the Tiwanaku capital. They settled in previously uninhabited locations near the arable river floodplains.

In the 1990s and early 2000s, The Moquegua Archaeological Survey project (MAS) registered 30 Tiwanaku sites covering 83 hectares in the Middle Moquegua Valley (Goldstein 2005:table 5.3). In addition, Owen identified two Tiwanaku sites, La Cantera and Cancha de Yacango, at the foothill of Cerro Baúl, a Wari outpost that dominated the Upper Moquegua drainage (Owen and Goldstein 2001:175). The sites, many of which have multiple components, ranged in size from ceramic scatters to large towns. In contrast to the local Formative Period Huaracane settlements that were equidistantly spaced along the river, the majority of Tiwanaku sites cluster in five locations, four on the eastern or southeastern side of the river, and one on the western.
At the highest elevation, La Cantera and Cancha de Yacango constituted isolated Tiwanaku settlements in the Torata River valley that probably had some connection with the Cerro Baúl site. Further downriver, Los Cerrillos was a group of residential, ceremonial and cemetery sites located on a ridge overlooking the Moquegua River (Figure 3.6). The settlement cluster of Chen Chen\textsuperscript{32}, located on the ridges and relatively far removed from the valley bottom near the modern city of Moquegua, consisted of almost 50 sectors covering an area of 36 ha, of which over 80% were cemeteries, and the remaining area habitation and ceremonial areas (Goldstein 2005:table 5.3). On the opposite side of the valley, at the entry point into the valley of important regional trade routes, the Cerro Echenique site complex was situated in close proximity to the Wari-Huaracane site of Cerro Trapiche (M7) (Green 2015; Green and Goldstein 2010). Cerro Echenique also included residential, ceremonial and cemetery areas. The site was protected by a peripheral defensive wall, which may have been used to defend it against the nearby Wari outposts (Goldstein 2013b:372). Approximately five kilometers downriver was the Omo site group, which included four large Tiwanaku town sites (M10, M12, M13, M16) and two apachetas (M96, M158). The Omo group is the largest of the Tiwanaku settlement clusters, with 38.3 ha of occupation. Finally, about six kilometers south of Omo was the Rio Muerto site complex, consisting of three village sites (M43, M52, and M70) and some isolated scatters and cemeteries (Goldstein 2005:table 5.3).

\textsuperscript{32} The Chen Chen site has almost entirely been destroyed by the urban expansion of Moquegua and its pueblo nuevo of San Antonio. Most of the information available about the site’s archaeological contexts exists in the form of salvage excavation reports to the Ministerio de Culture, some of which I was unable to locate. For this reason, I rely here mostly on secondary sources.
Additionally, the Tiwanaku occupation includes large-scale agricultural sectors with canals that allowed for the use of non-inundatable areas for agriculture (Williams 2003).

Figure 3.6 Map of the Middle Moquegua Valley with Tiwanaku settlements.

The extensive work of Goldstein and others on Tiwanaku settlement patterns, domestic, and mortuary site components in Moquegua has generated models of a two-stage colonization of the valley (1989, 2005, 2013b; Goldstein and Owen 2001). The description of the Tiwanaku occupation in Moquegua will follow this chronological and stylistic framework as originally presented in 1989 and later modified in 2005.
3.3.2 The Omo-style Occupation in Moquegua

Eleven radiocarbon dates from Omo M12 and Rio Muerto M70 and M43A date the Omo-style Tiwanaku occupation in Moquegua to A.D. 538–1030 (1-sigma, calibrated). Of these, three dates fall into an earlier range of between A.D. 550–730 (1-sigma, calibrated); the others range from A.D. 750–980 (1-sigma, calibrated) (Goldstein 2005: table 5.2, 2013b: table 4.2). The stylistic complex is based on excavations at the typesite of Omo M12, and was originally assigned to be contemporaneous with the Tiwanaku IV phase at Tiwanaku (Goldstein 1989). Omo-style settlements have been registered at Los Cerrillos M31, Omo M12, M13, and M1, and Rio Muerto M70, counting sixteen sites (28.7 ha) (Goldstein 2005:152–6). They are consistently situated away from the valley’s floodplains, and instead are located along ancient and modern caravan routes. Many of them are not affiliated with cemeteries. In addition to the spatial association of Omo-style sites with caravans, the ephemeral nature of their architecture,

33 The names Omo and Chen Chen in Moquegua occur in three different senses: 1) Location: Omo and Chen Chen are the names of the two largest clusters of Tiwanaku sites in Moquegua, both of them include multiple component sites of distinct stylistic affiliation; 2) Style: Named after the typesites of Omo M12 (component of Omo settlement cluster) and Chen Chen (M1) - for detail see text; 3) Chronology: Subphases of the Tiwanaku presence in the valley, primarily correlated with style, originally thought of as a two-phase sequence, radiocarbon dates now show that although the Omo-phase starts slightly earlier, the two largely overlap. I will henceforth use the terms Omo site or settlement cluster, Omo-style, and Omo-phase to denote the particular use of the term.

34 All radiocarbon dates for the Omo-style occupation are derived from wooden posts used in domestic or mortuary construction; the scarcity of wood in the Moquegua valley allows for the possibility that the earliest dates are the result of an old wood effect, in which recycling of construction materials effectively makes the occupation appear earlier than it actually was. For newer dates based on less permanent materials see Chapter 5.
which consisted of tent-like houses without storage features or extensive midden deposits, further support the model of a transhumant life-style (Goldstein 2005:196).

Omo-style settlements consisted of distinct residential communities consisting of “freestanding, multi-room structures arrayed in community sectors centered on distinct public plazas” (Goldstein 2005:155). Subsistence included the cultivation and consumption of maize, beans, gourds, aji and tubers, as well as camelid herding; these resources were neither extensively processed nor stored, and probably served household consumption. Evidence for the consumption of marine resources at Omo-style sites is scarce; access to objects from the Pacific coast appears to have been limited to shell beads made from *Oliva peruvianis*.

Domestic ceramic assemblages include *tinajas* and large and small *ollas*, of which the former were used for storage and transport of liquids, while the latter functioned as cooking pots (indicated by carbonized bases). Other utilitarian forms included *tinajas* (Goldstein 1989:63–66). All serving wares consisted of typical Tiwanaku-style polished and decorated finewares. Fine Tiwanaku serving wares, which constituted <10% of the Omo-style ceramic assemblage, consisted up to 50 percent of polished blackware vessels (Goldstein 1985, 1989, 2000b, 2005, 2013b). Omo-style vessels were small in size, especially keros, which were often banded. Also included were one-handed or handleless pitchers, tazones, sahumadores, portrait head and front-face deity keros (Goldstein 1989:66–67). Painted designs in black, orange, and white-on-red used diagnostically fine, curving lines to display continuous volutes and naturalistic depictions of feline heads and full-bodied felines, and plumes (Goldstein 1985:77–81).
Non-ceramic artifacts found in Omo-style contexts with close parallels to highland Tiwanaku household assemblages include camelid mandible tools (whose purpose is unknown but may relate to ceramic production) and wooden and stone trompos, grinding stones (batanes and manos), spindle whorls, small pieces of obsidian, metals and stone beads (Goldstein 1989:68, 2005:199). Several Omo-style sites include workshop areas for shells (M12) and obsidian (M70), and the latter may have also served as a rare contact point between Tiwanaku and Wari groups in the valley (Goldstein 1993b:34, 2005:201). At the site of Omo M12, Goldstein identified a possible chichería among the residential structures, where large-scale storage vessels were found in association with the remains of twelve blackware portrait-head keros35 (Goldstein 1989:134–140, 1993b:35, 2005:206–10). The ability to produce and distribute chicha in such prestigious ceramic objects may have provided an opportunity for Omo-style settlers to display status and accrue power within their community.

The absence of Huaracane materials in Omo-style assemblages refutes the possibility of an immigration-and-acculturation scenario like that in Cochabamba. The complete transposition of Tiwanaku cooking and serving ceramic assemblages, as well as household objects for everyday use in ceramic, textile and other types of production activities evinces the highland character of the Omo-style occupation. Furthermore, Goldstein argues that the compelling similarities between Omo-style and Tiwanaku IV-period serving wares in terms of paste, form and decoration could suggest the import of such highly prized objects to the Moquegua Valley (Goldstein 2005:198). The

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35 Goldstein mentions that the serving vessels were abandoned in situ of use and did not constitute a ceramic offering (Goldstein 2005:206).
prominence of blackware vessels in Omo-style assemblages may be indicative of an affiliation between Moquegua Tiwanaku colonists and Tiwanaku groups living on the Lake Titicaca islands (Titicaca, Copacabana), where blackware vessels are more common (Goldstein 1989:67, 2005:198).

In addition to feasting, which took place at a small, communal scale comparable to that of the residential neighborhood compounds at Tiwanaku, other ritual activities associated with Omo-style settlements also reflect the unconsolidated nature of this occupation. At the Upper Valley site of La Cantera, Owen documented an informally constructed ceremonial complex that consisted of a series of stone-walled enclosures. Ceramic fragments from the surface and offering deposits consisted of fine, decorated, largely Omo-style serving ware fragments and a miniscule component of provincial Wari-style sherds (Owen and Goldstein 2001). La Cantera may have functioned as a supra-communal gathering place for ritual and feasting activities among Omo-style populations in addition to the residential plazas that were the primary site of ritual activity.

3.3.3 The Chen Chen-style Occupation in Moquegua

The Chen Chen-style Tiwanaku occupation in Moquegua, although contemporaneous with Omo-style groups, nevertheless presented a distinctive set of cultural practices closely associated with Tiwanaku state core. Radiocarbon dates from Chen Chen-style sites range from A.D.785 to 1085 (1-sigma, calibrated)\(^36\), and overlap

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\(^{36}\) As is the case with radiocarbon dates for the Omo-style complex, samples were taken from wooden posts and may be distorted due to the recycling of building materials.
significantly with the principal set of dates for the Omo-style (Goldstein 2005:table 5.2, 2013:table 4.2).

The Chen Chen-style occupation was far more substantial and included ten large towns (65 ha, of which 10.4 ha were cemeteries) (Goldstein 2005:158). It formed the dominant stylistic complex at most Tiwanaku settlements. Chen Chen-style sites were located close to irrigable lands, often bordering ancient canal lines or natural springs. Like Omo-style sites, the layout of towns and villages consisted of multi-room structures clustered around open, irregularly shaped, and clean plazas. These residential compounds were contiguous like the residential compounds at Tiwanaku, and contained “functionally specific activity areas, roofed rooms, open patios, and storage units” (Goldstein 2005:159). Deep midden deposits and domestic architecture of *quincha* (wattle-and-daub) walls set into stone or adobe foundations attest to the permanent nature of the Chen Chen-style occupation (Goldstein 2005:210–2). Further parallels with Tiwanaku exist at Omo M10 in the reorganization of urban space according to the layout of the ceremonial structure some time after the initial occupation of the site around A.D.780.

### 3.3.4 Residential Life in the Tiwanaku Provinces in Moquegua

Most of the evidence for Chen Chen-style domestic life comes from the excavation of four structures as Omo M10 (Figure 3.7). Structure 11 consisted of a *quincha* wall around a compact floor (Goldstein 1989:179–82). The floor and any evidence of activity areas in this structure had been destroyed by extensive
“rockpiling.” On the western edge of an open plaza, Structure 12 was a stone-lined, mud-plastered storage feature used over two occupational sub-phases (Goldstein 1989:183–5). It contained ash and burnt organics (maize, gourds, beans) and was covered by rocks and *manos*.

**Figure 3.7** Location of domestic excavations at Omo M10 conducted by Goldstein in 1986–1987 (symbols are not representative of excavated area).

Structure 13 was located across the plaza from Structure 12 and was occupied over two sub-phases (Goldstein 1989:185–192, 2005:212–4). The earlier phase consisted of a packed-earth floor associated with a hearth, *quincha* walls, and a central roof post. The area outside the house was used for midden disposal and storage pits. The materials

37 This surface phenomenon consists of the systematic pitting of compound floors and the movement and churning of midden materials, resulting in the piling of construction and midden materials that give Chen Chen-style sites a distinctive appearance of undulating rock piles. Goldstein has associated this phenomenon with the intentional destruction of sites that took place in the context of the internal socio-political upheaval at the end of the Tiwanaku state (V) period (Goldstein 1989:179, 2005:159, 225–6).
included Tiwanaku V style ceramics (mostly *ollas*), as well as a minimal number of Tiwanaku IV ceramic fragments of blackware vessels and an *escudilla*. Camelid bones dominated the faunal assemblage, but the presence of shell indicates “good access to marine resources in this sub-phase” (1989:188). Later on, the architecture was disassembled in order to lay a thick red clay floor. The structure was probably expanded during this phase, and accommodated cooking and storage vessels set into floor depressions. Serving wares and marine resources increased during the later occupation.

Structure 14 was a small square adobe building places on the northern edge of the Omo M10 bluff (Goldstein 1989:193–6). The building had been placed over an earlier Tiwanaku midden that included fragments of a *sahumador* and a female ceramic figurine. The materials found on the floor of the adobe structure included ceramic redware fragments, cotton textile, copper sheets, camelid and shell remains.

A diagnostic feature of the Chen Chen-style cultural complex is the increased use of agricultural tools, such as chipped-stone hoes and grinding stones (Goldstein 2005:219). Together with the ubiquity of storage cists it signals the intensification of maize farming and processing. Ceramic assemblages also point to the cultural focus on maize production and consumption, and to the different social networks in which Chen Chen-style residents participated. Plainware *ollas* and *tinajas* continued to be in use, but storage vessels played an increasingly important role in the household economy. Redware serving vessels became more frequent, increasing to 10% of the assemblage, but blackware vessels comprised only a minimal percentage. Keros, pitchers and tazones were most common and standardized in size and form. Standardization is also discernible in the homogenized corpus of motifs found in the painted decoration of Chen Chen-style
vessels (Goldstein 1985, 1989:73, 2005:158). Instead of the naturalistically portrayed fine-line figures of the Omo-style ceramics, Chen Chen-style vessel designs included the diagonally opposed step-stair motifs, circles and bands, but also split-eye profile heads and flamingoes.

In comparison with Omo-style groups, where ritual activities in the form of feasting appear to have been directed toward the communal plaza areas, Chen Chen-style settlements were laid out and oriented in reference to a sacred landscape. The MAS project registered several mountain and hilltop apachetas along the edges of the valley, the most important of which aligns with the central axis of the Tiwanaku temple at Omo M10 (Goldstein 2005:161). Associated with the later clay floor in Structure 13, Goldstein found a camelid fetus offering under the entrance, and a mummified guinea pig buried with coca leaves and colored yarn (1989:191, 2005:214).

Open plazas served as stages for the performance of ritual activities and processions. Goldstein reports the presence of large circular features of shallow depressions in ceremonial plazas at Chen Chen M1 and Omo M10; these may have been used for “community dances or processions” (2005:289). Structure 14 at Omo M10, the square adobe building, and Structure 15-1 at Chen Chen M1, a small stone building, aligned with natural and cultural features in the landscape. Their unusual architecture and content of metals, beads, miniature ceramic vessels and figurines point to the perpetuation of Tiwanaku’s diverse ritual corpus in the colonies.

Omo and Chen Chen-style communities, as proposed by Goldstein (1989, 2000b, 2005, 2013), constituted maximal ayllus that maintained relationships with their highland and Cochabamba kin. In each settlement, social life and activities were organized around
communal spaces shared by smaller corporate groups represented in the form of households. The most important differences between these stylistically distinct occupations was subsistence strategy; Chen Chen-style residents of the Moquegua valley engaged more intensively in agriculture, produced more standardized ceramic wares, and inhabited more permanent structures in contrast to Omo-style settlers, whose ephemeral architecture, less intensified maize cultivation and artistic practices are indicative of a more mobile lifeway.

3.3.5 Public and Elite Ritual Practices at the Omo M10 Temple

Similar to the Tiwanaku capital, craft specialization, trade and the ability to sponsor communal festivities provided opportunities to acquire social status in provincial Tiwanaku society (Goldstein 2000b:197, 2005:318). The most important place of Tiwanaku ritual activity in Moquegua was the temple at Omo M10. A series of raised, contiguous enclosed platform abutting a natural hill was oriented along a northwest-southeast axis\(^\text{38}\) toward the hilltop on the other side of the river (atop which was found an *apacheta* with smashed *keros*) (Goldstein 1993a, 2005); its architectural layout resembled that of the Kantatayita maqueta at Tiwanaku (Goldstein 2005:294).

Test excavations in 1983 and 1990, and large-area excavations in 2010 through 2012 provided evidence for the construction and activities of the temple area. A number of increasingly restricted doorways led visitors through the large, walled Lower Court\(^\text{39}\),

\(^{38}\) The temple’s central axis has the same orientation as that of Lake Titicaca (Sitek 2013).

\(^{39}\) At the center of the Lower Court was a circular depression like that found at Chen Chen M1.
from where three raised doorways led into the compressed Middle Court with lateral galleries. The Upper Court was accessed by way of a step central staircase. The Upper Court contained a number of contiguous patios with individual roofed structures situated around but not accessible from a central sunken patio. The walls, up to 2 m high, had cut-stone foundations, which supported rows of adobes covered with plaster and painted red and green.

Surprisingly little archaeological evidence for activities was found in the temple, suggesting that the space had been cleared intentionally before its destruction. There was no evidence for food preparation or consumption, because plainware vessels were absent and serving vessels rare (Goldstein 2005:297). Instead, ritual activities were focused on offerings of burning, breaking and burying. Incensarios and sahumadores were found smashed throughout the temple area, as were crudely made miniature vessels (Goldstein 1993a; 2005:297). Animal sacrifices invoke the ritual activities that took place in the houses and temples at Tiwanaku; they included several llama fetuses buried in pits under floors, seashells, and a double burial of camelids (juvenile and adult). It is apparent from the loose scattered remains of tapestry textiles, greenstone and spondylus beads that the temple’s occupants had access to luxury goods. The recent areal excavations have also shown that the rooms and patios of the Upper Court were not constructed and used uniformly suggesting perhaps that they constituted separate activity areas or were used by different social groups (Kjolsing 2013).

The intensification of maize production among Chen Chen-style colonists for Tiwanaku’s “hospitality economy” in the center and colonies coincided with the region’s transition from an autonomous colony to a state province, which was ultimately
formalized through the construction of the temple at Omo. Nevertheless, the continuation of household and communal rituals—in conjunction with the public ceremonies held at the temple to legitimize the state’s power—imply “state orthodoxy existed only in a dynamic dialectic with household and cult heterodoxy” (Goldstein 2005:306).

3.3.6 Provincial Tiwanaku Population and Life Histories

Because of the exceptional preservation of human remains in areas like Moquegua and San Pedro de Atacama, bioarchaeologists have been able to use several lines of evidence to assess cultural practices like migration, diet, health and body modification as indicators of ethnic affiliation, status, gender and other types of social identities at the individual and group level.

Paleodemographic studies of Moquegua’s extensive cemetery populations have shown that Tiwanaku-style settlements consisted of families including individuals of all ages and both sexes (Blom 1999:177). A comparison of the demographic profile of the Omo-style Rio Muerto M70B cemetery with the expected pre-modern age-at-death distributions revealed an absence of middle-aged and old adults in the mortuary population that may be attributed to cultural patterns of return migration or repatriation of remains (Baitzel 2008; Baitzel and Goldstein 2016).

Systematic investigations of health and living conditions in Moquegua Tiwanaku settlements are few. High rates of juvenile Cribra orbitalia and porotic hyperostosis at Chen Chen have been attributed to a combination of factors, including a mixed maize-marine foods diet, parasites and infectious diseases (Blom et al. 2005). Dental caries rates at Chen Chen that were twice as high as those recorded for Tiwanaku residents (17
percent and 9 percent, respectively) (Berryman 2010:192) support arguments about the emphasis on maize in colonial Tiwanaku diet. Biological distance studies of Chen Chen individuals confirmed the genetic affinity of colonists with highlanders, but showed no appreciable differences between communities within the colonies based on cemetery sectorization (Blom 1999:182; Blom et al. 1998:252).

Cranial vault modification (CVM)—considered a marker of group or ethnic identity through which parents shape their offspring’s identity as a member of the group—was widely practiced in Tiwanaku society and followed two styles: annular (associated with the eastern Andes) and fronto-occipital (associated with the western Andes)\(^40\). Blom studied 36 crania from Tiwanaku and 16 from Middle Horizon burials in the Katari Valley. At Tiwanaku, 83 percent of individuals showed evidence of CVM, and within the sample, fronto-occipital style prevailed with 60 percent (Blom et al. 1998:table 3, Blom 1999:table 7.7). In the Katari Basin, annular CVM was most common (Blom et al. 1998:251). At San Pedro de Atacama, local CVM styles did not correlate with Tiwanaku grave offerings, and cannot be considered an indicator of immigrant identity in the region.\(^41\) CVM analysis of almost 300 individuals from Chen Chen revealed that 84

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\(^40\) Annular CVM is created by placing pressure around the entire cranial vault in the form of circumferential bindings in the individual’s infancy, causing the bones to grow into a cone-like elongated shape. In fronto-occipital CVM, pressure is applied on the frontal and occipital bones through pads or slates that are held in place by bindings along the top or sides of the cranium. This causes the parietal bones to expand bilobally, forming a heart-shape as the sagittal suture depresses from pressure. Fronto-occipital CVM may be “erect”, with posterior pressure applied at an acute angle causing the occipital bone to flatten at lambda vertically, or “obtuse” when frontal and occipital pressure pads are parallel.

\(^41\) In San Pedro de Atacama, the distribution of fronto-occipital and annular CVM styles did not represent substantial changes from earlier CVM patterns at the site (Torres-Rouff 2002, 2009:220). No CVM style was exclusively associated with imported Tiwanaku
percent of the population had fronto-occipital CVM (Blom 1999:table 7.10). At Chen Chen, CVM variants of erect and obtuse shapes did not correspond with spatial patterning of tombs, suggesting that there existed “few social or environmental boundaries to reproduction between [Chen Chen site] groups” (Blom et al. 1998:252).

Hoshower and colleagues (1995) studied 25 crania from burials at Omo M10 (excavated in 1984). Except for one individual (M10S-2), all crania had fronto-occipital CVM. Contrary to what Blom observed at Chen Chen, Hoshower and colleagues claimed “the pattern of deformation within the Omo M10 cemetery complex clearly emphasizes homogeneity within the individual cemeteries and heterogeneity across cemeteries” (1995:156). However, the use of a uniform CVM style and variant could only be established in the case of cemetery M10R, and possibly M10S (75 percent), but M10T and M10M were varied in their forms, and other cemeteries had insignificant sample sizes. Although Hoshower and colleagues used the data to suggest that “individual cemeteries [at Omo M10] represent residential descent groups … symbolized by shared cranial forms” (1995:161), further studies are necessary to support this argument. A recent re-assessment of Hoshower’s study expanded the sample from Omo M10 and found no significant correlation between CVM style variants and spatial patterning at the site (Dahlstedt et al. 2014).

artifacts found in the Solcor 3 burials (Torres-Rouff 2002:170). This supports the theory that San Pedro de Atacama was a trading nexus, where local populations entertained exchange relationships with Tiwanaku without being directly colonized by the state.
Based on carbon stable isotope studies\(^{42}\) of remains from 65 individuals from various neighborhoods within Tiwanaku and secondary rural sites (Lukurmata, Kirawi, etc.), Berryman reported a dramatic increase in the consumption of maize in the southern basin, with C4-enriched resources (maize and lake fish) constituting on average 50 percent of the diet (2010:225). She did not find noticeable differences in dietary patterns between males and females, but diet did vary by neighborhood, and community affiliation likely determined patterns of subsistence access (2010:234). For example, residents of the Mollo Kuntu and Chiji Jawira neighborhoods consumed more C3-plant resources like tubers and quinoa, while the sacrificed individuals found in the Akapana pyramid displayed the highest $\delta^{13}C$ values.

In Moquegua, an initial study by Sandness (1992) of 10 individuals from Omo M10 (Tiwanaku) found that they had increased C4-plant consumption (likely maize), compared to Formative period populations. These findings have recently been confirmed by a larger sample that included 35 more individuals from Rio Muerto M70 and M43 (Somerville et al. 2011). The later study also observed a gender difference in C4-plant intake, with males consuming significantly larger amounts of maize than women. There were, however, no dietary distinctions between Omo-style and Chen Chen-style residents, in spite of differences in farming, storage and food processing (Somerville et al. 2011).

\(^{42}\) Stable isotope analysis can be used to identify the relatively consumption of protein and different plant sources (carbon and nitrogen stable isotopes), and the geological origin of water and foods consumed (strontium and oxygen stable isotopes); by sampling skeletal and dental elements that form at distinct times of physical development, changes in diet and location can be traced across the individual’s lifetime.
Strontium and oxygen stable isotope analysis has been the most direct method of identifying migrant individuals in populations at Tiwanaku and Tiwanaku-affiliated sites. At Tiwanaku, Knudson and colleagues identified three non-local individuals among a sample of 10 based on their elevated tooth enamel strontium stable isotope ratios; two of them were buried in the Putuni compound and one was a sacrificial offerings from the Akapana’s base (2004:11–2). Of seven individuals from the small Tiwanaku-affiliated sites of Kirawi, Tilata, and Iwawe, two were non-locals. Although strontium values reflect broad geological regions and cannot pinpoint specific sites or even regions, the presence of non-local individuals in highland populations indicates a high degree of residential mobility during the Middle Horizon period (2008:17). In comparison, values from individuals buried in cave sites and in San Pedro de Atacama reflected lifelong local residence and disaffirmed the presence of first-generation migrants.

Among 23 analyzed individuals from Chen Chen, four were first-generation highland immigrants (Knudson 2004:12–3, 2008:11). Four of 33 individuals excavated at the Rio Muerto site complex had non-local radiogenic strontium values. One of them, an adult female, possibly immigrated from the Cochabamba Valley, while a second female could have grown up in the altiplano but came to Moquegua some years before her death (Knudson et al. 2014:416). The two adult males with non-local enamel radiogenic strontium isotope values had arrived in Moquegua during early adulthood

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43 Three non-local individuals were identified at Tiwanaku: one in the shaft tombs (young adult female with offerings) below the floor of the Putuni; a 20–29 year old male found near the putuni drainage canal, and one individual from the akapana’s first terrace offering
44 All were women, but the sample is too small to draw conclusions about gendered patterns of migration.
(Knudson et al. 2014:417). An additional three individuals had intermediate radiogenic strontium values and may have migrated between the lowlands and highlands throughout their lifetime.

3.4 Tiwanaku State Collapse

Around A.D. 1000, construction ceased at Tiwanaku. Stone monuments across the urban core were defaced. Elite residences in the city center were razed (Putuni) or filled with trash deposits (Akapana), while outlying neighborhoods were slowly abandoned or occupied impermanently with ephemeral architecture placed on top of abandoned compound structures. Similar developments can be observed at Lukurmata and Tiwanaku-affiliated sites as far west as Moquegua. At Omo M10, the temple was cleared out, abandoned, and walls were intentionally pushed over, possibly to access and re-use the cut stones from wall foundations (Goldstein 2005:283, 1989:163). Chen Chen-style residential compounds in Moquegua were razed, resulting in the deliberate pitting and mounding of stones and cultural fill into irregular piles (Goldstein 2005:225). As at Tiwanaku, these sites continued to be briefly occupied before becoming abandoned.

Although traditional places and activities of political and public nature were abandoned or destroyed during this time, there was no population collapse. The term “collapse” here refers to the socio-political system that bound the area for several centuries. Instead, formerly urban communities re-organized themselves across the landscape – a process that began already during the Tiwanaku V period, and that may have upset the power balance in the state (Mathews 2003).
The Tiwanaku collapse, as proposed by Ortloff and Kolata, was the result of a series of severe droughts that occurred around A.D. 1000, and that would have had significant negative impacts on the agricultural output and raised field system (1993). In response, Erickson has argued that first, raised-field systems are highly adaptable to drought conditions, and second, the dating of the drought event to A.D. 1000 places it after the actual collapse of the urban center (1999). As Goldstein has noted for Moquegua, there is no evidence to suggest warfare or conflict with non-Tiwanaku groups (2005:226). Tiwanaku scholars today agree that the causes for collapse were probably internal. The same system that helped elites gain power, according to Janusek, had also created social tensions that rendered the system fragile. “Tiwanaku leaders had seriously strained an enduring etiquette of social values, inciting contradictory consciousness and the potential for symbolic and physical violence” (Janusek 2008:298).

Aside from the abandonment of monumental—and eventually also residential—sites and the disappearance of particular elite practices and social distinctions, there is a remarkably high degree of social and cultural continuity throughout the south central Andes. In the highlands as well as the western coastal valleys, social groups re-established themselves in smaller communities that reproduced a Tiwanaku-derived corpus of cultural practices. The migration following the state’s collapse may have pushed people into new areas (Owen and Goldstein 2001) like the Azapa valley, where Tiwanaku-derived ceramic and textile styles became the dominant material culture45. In

45 The Azapa valley Cabuza phase was originally dated to A.D. 500–1225 (Espoueys et al. 1995), but more recently radiocarbon dates from the Azapa-6 cemetery have shifted the chronology of Tiwanaku-affiliated artifacts to no earlier than A.D. 1000 (Korpisaari et al. 2014). Initially, the Azapa sites were interpreted as administrative outposts established for
the Moquegua Valley, the post-Tiwanaku “Tumilaca” culture is defined by smaller settlements in more defensive locations and a political fragmentation into community-level entities (Goldstein 2005:174). At the same time, the memory of Tiwanaku state culture also gave rise to new identities, reflected in the emergence of a new ceramic style and local domestic and mortuary practices (Sharratt 2011).

The Tiwanaku settlements of the Moquegua valley constitute the largest agglomeration of highland colonists on the western slopes of the Andes, and may have acted as interlocutors in the spread of Tiwanaku cultural materials and practices along the coastal valleys to the north and south. The influence of Tiwanaku style in ceramic and textile artifacts, as well as mortuary practices is most visible in the development of the Cabuza style in the Azapa valley of northern Chile, but can also be traced to the Ilo-Cabuza style of the lower Osmore drainage\textsuperscript{46} and several likely colonial outposts in the cultivation of maize and other lowland products (Berenguer and Dauelsberg 1987:151; Goldstein 1996:67). However, a re-examination of the mortuary materials, in addition to the absence of Tiwanaku-style residences, has led Uribe and Agüero to characterize the Azapa valley as a secondary satellite, or “ultra-periphery” that was loosely integrated into the Tiwanaku sphere through the use of shared iconography and ritual practice via the Moquegua settlements (2001:421). Textiles as well as ceramics derive their formal and iconographic attributes from the Moquegua Tiwanaku-style and show little to no direct resemblance with the objects found at the Tiwanaku capital. This interpretation fits best with the above-mentioned new chronology of the Azapa valley, which essentially post-dates the Tiwanaku IV and even V phase.

\textsuperscript{46} Ilo-Tumilaca/Cabuza-style (A.D. 950–1200) populations co-existed with a much large Chiribaya-style occupation of the same region (Owen 2005:54–5). The Ilo-Tumilaca/Cabuza ceramic style shares a suite of forms and motifs with the Chen Chen-style of the Middle Moquegua Valley, but the vessels have “generally poorer finish, more careless painting, and fewer polychromes” (Owen 2005:53). The appearance of such derived-Tiwanku materials, according to Owen, was the result of a diaspora following the collapse of the Tiwanaku state in the altiplano and the disintegration of the colonies in the Middle Moquegua Valley (2005). The dispersal of highland and lowland Tiwanaku groups affected regions to the south (Azapa) as well as to the north (Arequipa), and in the intermediate areas (Carumas) (Owen 2005:66).
Locumba and Sama valleys. The arrival of Tiwanaku stylistic influence in this region occurs generally late (after A.D. 850) and persists for some time even after the collapse of Tiwanaku’s political system in A.D. 1100.

**Conclusions: The Social and Ritual Fabric of Tiwanaku Life**

In various ways, Tiwanaku defies traditional archaeological models of ancient states (e.g., Goldstein 2005; Janusek 2008; Stanish 2013), because these are, on the one hand, often based on unrealistic expectations and, on the other, because characteristic state features like an urban center, monumental architecture, intensification or agriculture and territorial expansion are juxtaposed with high levels of internal social diversity, a poorly understood basis of social inequality, and expansive strategies that eschewed military or coercive methods. In the case of Tiwanaku, the preceding social organization of autonomous communities, who came to reside at and partake in the urban society of Tiwanaku, continued throughout the state’s existence and determined significant aspects of the economic, social, and ritual behavior that took place. Communal autonomy was expressed in the large compound walls that separated distinct material assemblages, and the neighborhood mounds used for the performance of group-specific festivities. Even more indicative of the independent spheres of interactions that co-existed within Tiwanaku’s society was the integration of objects from distant regions into the domestic assemblages. The immigrants that continuously came to settle at Tiwanaku belonged to extensive social networks whose members resided in different ecological regions moving
people and resources between them. As a result, imports fell into two categories: serving vessels and maize, acquired through community-organized trade networks, were used in the context of communal and citywide feasting events and were available to all levels of Tiwanaku society, whereas snuff paraphernalia, metals, obsidian and other high-status prestige items belonged to elites, specifically.

The distribution of the latter in Tiwanaku IV period contexts suggests that early on social stratification was incipient and may have been more pronounced within each community than between the co-residential groups. The qualitative differences of status in the earlier period of the state’s history is supported by the evidence from outlying satellite communities that already existed prior to the expansion of Tiwanaku and were transformed by the integration of part of their community into urban society (e.g., Cochabamba, Island of the Sun), and from satellite communities that were newly established as the state grew in influence throughout the region (e.g., Moquegua). Here as well as at Tiwanaku, craft production of ceramics (*incensarios, escudillas*), obsidian, metal, bone, and shell objects used for display in ceremonies and festivities may have provided a path for gaining influence and power, first over members of one’s community, and later over others, as well. Long-distance trade of such items in exchange for ritual paraphernalia from San Pedro de Atacama fueled the emerging imbalance of social and economic resources, resulting in the concentration of power in the hands of elites by the Tiwanaku V period.

Many of the items that expressed communal affinity and social status were used in the context of public display, feasting and ritual activities, while the most prominent places at Tiwanaku and provincial settlements consisted of gathering spaces like open
plazas and platforms (although increasingly restricted in access during the Tiwanaku V period, they were still able to accommodate large numbers of people). Sumptuous dress, adornments, serving wares, incense burners and snuff paraphernalia marked the exceptional role of certain individuals in the performance of rites and ceremonies that ultimately entailed the destruction of precious objects: the consumption of chicha and psychotropic drugs, the slaughter of camelids and burning of incense. These rituals likely marked events relating to the agricultural and astronomical calendar, to the construction and abandonment of monumental and domestic structures, and lifecycle events. They often terminated in the burial of the ritually destroyed items, a down payment to the deities in return for their reciprocal protection and goodwill.

Tiwanaku ritual practice was deeply rooted in Formative-period cultural notions of communal consumption and reciprocity between distant kin and neighboring communities (e.g., Janusek 2008). The ease with which objects like keros, tazones and incensarios were adopted into the domestic and mortuary assemblages of households at Tiwanaku, but also of those in towns and villages throughout the altiplano and eventually the eastern lowlands and San Pedro de Atacama suggests a certain degree of familiarity with their function. Ritual responsibilities and roles were essential in defining social identities like gender, status, and ethnicity, and it is probable that the ability to host and preside over ritual and feasting ceremonies was a principal pathway to power in Tiwanaku society. In addition, the fact that serving and ritual wares never differed between status groups in form or function, but rather in the quality of their production and design, suggests that Tiwanaku ritual practices remained much the same throughout the emergence of the state and the reorganization of society.
Ritual activities included a number of recurrent elements, such as the literal or symbolic consumption of humans through fire or force, and the interment of the offering remains. Some ritual materials were restricted to particular events or contexts, for example the use of kero was deemed appropriate for the consecration of the Akapana but no kero fragments were found in domestic subfloor caches. Instead, building activities often called for the offering of camelids and even humans (see next chapter). *Incensarios*, especially effigy vessels, were both markers of elite status and of exclusive ritual activities. Differentiation of ritual elements, actors, and participants may therefore provide insights into the social motivations, meaning and impact of such events.

In light of the many lines of evidence available to us, we may want to briefly reconsider here the utility of the *ayllu* for modeling Tiwanaku society. Extended kinship, one of the principal organizing factors of the *ayllu*, was supremely important to social relations in Tiwanaku, if we presume that co-residence, body modification and exchange were based on familial relations. Kinship communities marked their affinity through space, style, body modification, and dietary practices. The evidence for hierarchical descent, whether fictitious or real, is circumstantial at best. Janusek (2004:157) has argued that elite communities living at the center of Tiwanaku likely counted among the city’s earliest inhabitants and the justification for social inequality may have included an ideology of common descent among the urban residents in which elites occupied a position of prestige based on proximity to the center of power. In Moquegua, the co-existence of two large autonomous social groups that may have constituted maximal

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47 This reasoning is, admittedly, somewhat circular, but the resolution of bioarchaeological evidence is not yet sufficiently fine to establish the degree of genetic affiliation between different levels of co-residents.
*ayllus*, engaging in complementary subsistence strategies and maintaining distinct spheres of interaction save for the shared use of state-affiliated ceremonial space, may also lend support to the model.

The discontiguous territoriality of social groups whose satellite communities spanned from the eastern to the western lowlands of the Andes is also evidence of an *ayllu*-like organization. The founding of the Moquegua settlements reflects that territorial expansion of autonomous social groups was ongoing and that new access to resources, especially maize, may have played a role in the changing social relations of ceremonial hosts and guests at Tiwanaku, as well. The nested ritual system that existed throughout Tiwanaku society is perhaps the most diagnostic indicator of an *ayllu*-like system. The production and performance of domestic, communal and state-level rituals permeate many aspects of daily life and social relations. The organization of ritual spaces, materials and events gave rise to Tiwanaku’s elites, but it also allowed communities to maintain a certain degree of autonomy.

In summary, archaeologists have not been able to confirm that Tiwanaku society resembled the Early Colonial period *ayllu*, only that Tiwanaku society was socially, and likely ethnically diverse. Because many of the features that are characteristic of *ayllu* social and economic organization, and cultural practices resemble those observed in Tiwanaku society, the term has become a fixture in discussions of Tiwanaku social organization. Nevertheless, there are many questions about social relations and identities that remain unanswered, including some relating to status and ethnic identity. Other than domestic and public ritual, what can we say about the role of individuals in Tiwanaku society? How did social identities like age and gender, status and identity influence the
lives, practices and social relations Tiwanaku peoples? I would argue that mortuary data provide an ideal temporal and spatial resolution for answering these questions. As a part of the ritual corpus, the treatment of human bodies and their practices relating to their interment and commemoration provide a uniquely powerful perspective of some of the issues that remain unresolved in Tiwanaku archaeology.
CHAPTER 4: DEATH AND BURIAL IN TIWANAKU’S HEARTLAND AND PROVINCES

Introduction

The creation of a new political and social order at Tiwanaku and in the surrounding region in the early Middle Horizon is reflected and reproduced through significant shifts in settlement location and urban landscapes, production and exchange patterns, public ceremonial life at various scales of magnitude, and household practices. Another diagnostic characteristic of the transformative influence of the Tiwanaku state, its ideology and material culture is the widespread incorporation of Tiwanaku-style burial practices across the south-central Andes. During the Formative Period, preceding the rise and expansion of Tiwanaku ritual and ideology in the region, mortuary activities were highly variable at the local level (Bermann 1994; Blom and Bandy 1999; Machicado 2009). They included intramural, extramural and urn burials, seated-flexed body position, and single-individual and multiple-individual interments. The variable distribution of grave goods made from metals or ceramic materials marked the social status of adults. Beyond the use of formalized interment, interaction with human remains also included the curation and manipulation some time after death (Hastorf 2003). While some of the diversity present in the Formative period was retained during the Middle Horizon, the standardization of communal burial spaces is significant and indicative of the transformational powers associated with the spread of Tiwanaku ideology. Most noteworthy are the widespread adaptation of extramural segregated cemetery spaces,
subterranean covered pit or cist tombs, single-individual interments, and the predominant use of the popular Tiwanaku serving vessels (*keros* and *tazones*) as offerings.

Much of the mortuary data, especially in the *altiplano* region, comes from test excavations conducted during the first half of the 20th century, at a time when ceramic chronologies were still poorly developed, and sampling and recording strategies were fortuitous, at best. 48 Nevertheless, more recent scientific excavations at Tiwanaku, Tiwanaku-affiliated *altiplano* sites and the eastern and western lowland valleys (Figure 4.1) provide data that elucidate the wide spectrum of Tiwanaku mortuary practices throughout the Middle Horizon in the region.

### 4.1 Burial Practices at Tiwanaku

The sample of human burials at the Tiwanaku capital is limited for two reasons. First, sampling and excavations have focused primarily on monumental and some residential structures throughout the city, producing a biased sample toward open, public, and elite spaces. While this has resulted in the recovery of some burials, the scarcity of burials found in these locations suggests that these were not common places of interment, and that the current sample of burials from the Tiwanaku capital city represents exceptional, or non-normative, mortuary practices. Secondly, the area of Tiwanaku that

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48 In many cases, Tiwanaku affiliation of smaller of sites throughout the *altiplano* was assigned based on the presence of Tiwanaku-style ceramics. Therefore, burials that did not contain ceramic vessels, unless they contained other diagnostic objects or tomb structures, could not be clearly identified as Middle Horizon period burials, or Tiwanaku-affiliated burials.
has been proposed as the cemetery area for the city (Bennett 1936) is today covered by the modern town of Tiwanaku and therefore inaccessible to archaeologists today.

At the Tiwanaku capital, there are two main types of burials: normative burials of higher status individuals associated with residential spaces, and non-normative burials in association with architectural elements and monumental structures that point to the use of human remains in the context of sacrificial and offering practices. In what follows, I present the mortuary evidence from the site of Tiwanaku in regard to the use of mortuary attributes, such as interment styles and offerings, and their location as indicative of the different meanings assigned to the dead in Tiwanaku society. The locations of the burial finds are indicated in Figure 4.2.

4.1.1 Burials Associated with Monumental Architecture at Tiwanaku

Several burials found below the floors of elite residences at the top of the Akapana pyramid at the core of Tiwanaku, have been interpreted to contain the priestly residents of this structure (Manzanilla 1992:62). A principal male adult, interred seated-flexed facing north in a pit, was holding a puma *incensario* and was accompanied by a thin-walled orange-paste miniature ceramic vessel. To the south was a row of six adult individuals, buried in seated-flexed, north-facing position. The formal manner of this interment group associated with the elite occupation of the Akapana pyramid reflects a single interment event dedicated to likely elite persons. The formal attributes of these burials differ greatly from the human remains found along the base of the structure.

On the lower terraces of the Akapana (Figure 4.2), there were two types of burials associated with the structure’s expansion during the Late Tiwanaku-IV period. Three
adult male individuals were buried near the Akapana’s foundation walls in a flexed facedown position (Kolata 1993a:122). Theirs were primary interments associated with the monumental construction. In addition, on the top of the first terrace was a large deposit of at least twenty-one incomplete human individuals, comingleed with the remains of large adult camelids and great quantities of smashed, finely decorated ceramic vessels (standard, banded, and portrait head *keros*, recurved *tazones*, *sahumarios*).

**Figure 4.2** Locations of neighborhoods and burials excavated at Tiwanaku and described in Chapters 3 and 4 (modified from Kolata 2003:Map 1a).

Some of the adult and subadult crania in this context may have been modified and curated. Eighteen individuals were found without crania, suggesting that crania and post-crania were treated distinctly (Kolata 1993a:122). Blom re-examined the comingled
remains following the initial analysis by Manzanilla and Woodard (1990), who had not found evidence of modification. Blom and colleagues observed cutmarks and compression fractures on the fresh bone of cranial, spinal and long bone elements (2003:439), interpreted to have been the result of “violent, forceful, and public dismemberment of the dying or recently dead” (Kolata 2003b:445). There is no evidence to suggest that the remains found in this context originated as primary interments.

The inclusion of fine serving and ceremonial vessels, and camelid remains alongside human remains reflects indicates the dedicatory nature of this context. It suggests that “human lives were valued above material objects [and that] the inclusion of human bodies in the Akapana sacrifices reinforces the importance of the sacrifice and the identity of its [elite] sponsors” (Blom et al. 2003:445).

Descriptions of mortuary excavations at the Kalasasaya in 1957–1959 are limited to unpublished reports at the DINAR (La Paz) archives. Korpisaari (2006:86–87) mentions fourteen burials associated with the Tiwanaku I–IV occupations. They contained mostly adult and young adult individuals in primary burials and variable body positions. Several tombs contained gold and silver artifacts, greenstone beads, and ceramic vessels. Later excavations at the Kalasasaya in 1970–1973 also reported the inclusion of gold objects along with partial human remains in what were likely secondary offering caches or deposits, rather than primary burials (Korpisaari 2006:87).

Excavations in the open space north of the Akapana and east of the Kalasasaya by the Proyecto Arqueologico Pumapunku-Akapana in 2005 uncovered several primary and secondary burials. Shallow stone conduits were consecrated with the shallow pit interments of one adult individual buried in flexed, facedown position, similar to those
found near the Akapana’s foundation walls (Vranich 2005:17). A nearby large pit contained the partial and complete remains of sixteen individuals ranging in age from infancy to young adulthood, including males and females (Verano 2013). Some individuals were found in flexed position on their sides, while others were extended or flexed facedown. No cutmarks were found to suggest the violent disarticulation of the remains, but three adults showing “unhealed blunt trauma to the skull, and one had multiple penetrating wounds to the head,” and may have been killed violently49 (Verano 2013:179). The remains were found in association with two camelid offerings placed at the base of the pit, as well as 13 decorated broken escudillas (Late Tiwanaku IV period). The arrangement of some bodies in a flexed position stands in opposition to the more informal, and even secondary or incomplete interment of other individuals in the pit. Although the pit is not associated with major monumental construction, its location aligns with the sunlight that passes through Kalasasaya’s eastern gateway at sunrise on the winter solstice (Verano 2013:180). Human and camelid sacrifices may have been connected with the control of the movement and transformation of building materials and natural features like sunlight.

At the Mollo Kuntu community mound south of the urban core, dedicatory human burials was placed in subfloor pits covered with a layer of sterile sand at the base of the mound during its abandonment in the Tiwanaku V period (Couture 2003). The six multiple-individual burials contained the remains of fifteen partial and complete

49 The pit also contained copper spear points that originally tipped wooden staffs or spears. The diameter of the metal staff tips matches the cranial perforations, and it has been suggested that they were used to inflict the cranial wounds in the male individuals (Verano 2013:175).
individuals. The burials contained paired individuals (adults-young children), two isolated children’s crania, and multiple primary interments (two adults, one child) and several isolated children’s crania (Couture 2003:218–223). The primary interments were in a flexed, facedown position. Grave goods (a pyro-engraved bone tube and a greenstone pendant) were only found in association with children’s remains. Similar to the Akapana dedicatory burials, the Mollo Kuntu dedicatory burials were primary and secondary interments near stone structures with few grave goods.

Another communal ceremonial space, the Akapana East mound was intentionally destroyed and sealed during the Tiwanaku IV period (Janusek 2004:111). On the final surface of the mound, the partial remains of five individuals were affiliated with the abandonment of the structure (Blom et al. 2003:441). Only one individual, an adult male, had been a primary interment in flexed position (orientation unknown). The others were incomplete and only partially articulated. They consistently showed cutmarks on skull, trunk and long bones of defleshing activities, similar to the remains found at the base of the Akapana50 (Blom et al. 2003:442; Janusek 2004:112). This confirms that post-mortem processing of human remains occurred repeatedly in ritual activities associated with the building and abandonment of public structures.

The evidence from monumental and public spaces in and around Tiwanaku’s monumental core suggests a recurrent association of monumental structures with human remains, more so perhaps than with precious objects. While fine ceramic vessels (serving

50 Blom et al. (2003) and Blom and Janusek (2004) only investigated human remains found at the Akapana and Akapana East mounds; no information is available at this point on the taphonomy and paleopathology from other human remains deposits associated with monumental architecture at Tiwanaku, and so we cannot assume that post-mortem modifications were only performed on these particular individuals.
wares and *incensarios*) and some metal and stone objects were found in these burials occasionally, many of the dedicatory contexts did not contain such precious materials.

Adult individuals were more commonly found in these burials than subadults. Although there is very little direct skeletal evidence for cause of death, the presence of a mixed demographic age profile (containing young adults, as well) suggests their deaths were not natural. Primary interments consisted of single complete individuals, placed in flexed and facedown position. Continued interaction with the deceased took the form of secondary interments resulting from the modification, dismemberment, and re-interment of remains (possibly removed from nearby primary contexts). Among the secondary deposits, children’s crania constituted the most frequent skeletal element accompanying intact bodies. I would therefore argue that in the context of dedicatory human burials, modified or curated remains functioned as high-valued offering materials.

### 4.1.2 Mortuary Practices in Residential Spaces at Tiwanaku

Human burials were not common in intramural residential spaces at Tiwanaku. Residences and communal activity areas were therefore not spaces for communal burial, but were used for interment in exceptional cases and circumstances. Reports of residential burials are limited to the elite compounds of Putuni and Akapana East 1 in the monumental core, and Akapana East 2 outside the monumental core.

A pair of large *tinajas* was buried under the kitchen floor of the Putuni’s northern compound during the Tiwanaku IV period. The vessels contained the remains of an adolescent male, and an older adult male accompanied by an adolescent placed in fine
white sterile sand (Couture and Sampeck 2003:238). This burial style and location is unique at Tiwanaku. Nonetheless, the paired individuals and sterile sand (otherwise found in the construction of monumental and elite spaces) bring to mind the architectural offerings from the Mollo Kuntu mound.

To the south of the compound wall that dissects the Putuni complex was a designated mortuary area surrounded by domestic activity areas (Couture and Sampeck 2003:238–241). The tombs in this area were extensively looted. Ten excavated tombs were deep cylindrical shaft and bell-shaped tombs with small side chambers in which offerings had been placed. Fitted stones had been used to build and seal the tombs, possibly allowing for regular access to the tomb’s interior (Couture and Sampeck 2003:240). The absence of human remains from the looted tombs may be the result of deliberate removal of human remains. The remaining grave goods included wealth objects such as metal and bone artifacts, and large quantities of finely decorated and utilitarian ceramics (escudillas, tinajas, and sahumadores decorated with stylized birds) (Couture and Sampeck 2003:240). Vasijas, tazones and keros52 (one set of paired vessels) composed only 15 percent of the offerings. The size and architecture of the tombs, their location, and numerous high-quality offerings suggests that these were elite burials dating to the Tiwanaku IV period. A small number of non-local Cochabamba-Omoreque style

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51 I have unable to find a more detailed osteological or paleopathological analysis of these remains. However, their available demographic information (adults/adolescents, male) and the pairing of complementary attributes (young-old) fits with the predominant pattern of remains found in dedicatory contexts associated with public and constructed spaces. The presence of two individuals inside the same urn, as I would argue, indicates a single depositional event.

52 One of the keros depicts the “sacrificer” figure, a rare motif in Tiwanaku ceramic iconography.
vessels, while perhaps statistically insignificant compared to the high frequency of local vessel forms, also indicates that “elites buried in the south compound mortuary complex, and their living descendants, maintained ties, either directly or indirectly, with groups residing well beyond Tiwanaku’s altiplano heartland” (Couture and Sampeck 2003:241).

This mortuary area was covered during the Tiwanaku V phase by the westward extension of the Putuni platform. Offering events associated with the razing of the surrounding architecture led to the deposition of human and camelid remains on floors, near wall foundations, and inside canals (Couture and Sampeck 2003:245) (Figure 4.1). The remains included an isolated subadult cranium, the articulated but incomplete body of an adult male, and secondary comingled remains of children and adults. The individuals fall along the entire age range, but males seem to outnumber females. Sometimes comingled with camelid bones, these secondary human remains were consistently deposited in a matrix of grey and green ash (Couture and Sampeck 2003:246). Couture and Sampeck argue that these deposits constituted offerings associated both with the closing of the Tiwanaku-IV period occupation and the construction of the new Putuni platform during the subsequent Tiwanaku-V phase, following a broader pattern of “major episodes of architectural transformation” observed also at the Akapana and Mollo Kuntu mounds (2003:248).
While building the Palace of the Multi-Colored Room over the original northern Putuni kitchen compound during the Tiwanaku V period, resident elites placed a number of burials underneath the compound entrances and corners (Couture and Sampeck 2003:252). These burials consisted of shaft and chamber tombs — much like those seen during the earlier period in the south compound. They contained adult and subadult interments (single and multiple), accompanied by luxury items. One adult female was buried in a seated-flexed position with stone, shell and bone beads, copper and gold jewelry, a bone awl, stone scraper, a pitcher with obsidian flakes and bones tubes filled with pigments; the tomb’s side chamber also contained copper pins and scrapers, a second ceramic pitcher and bone awls, and a lead flask (Couture and Sampeck 2003:253) (Figure 4.2). The other subfloor burials were also large and contained the primary interment of a woman placed on top of the complete and partial remains of three children and was associated with a silver pin, beads and antlers (possibly part of a head ornament). Three other burials were too looted to determine their contents. Under the eastern wall of
the compound, residents had interred an adult in a shallow pit in flexed position\textsuperscript{53} without offerings.

Couture and Sampeck classify the shaft-and-chamber burials under the floor of the Palace of the Multi-Colored Room as dedicatory offerings (2003:253), but they bear little resemblance to the pattern of facedown or disarticulated human remains found associated with construction and dedication events elsewhere at Tiwanaku and even in the Putuni. Instead, these richly furnished burials seem to follow in the tradition of the earlier Tiwanaku IV period observed in the south-compound mortuary complex. They may represent a particular elite practice of keeping the physical remains of important lineage members close by—a privilege, given that less affluent groups had to make use of outlying mortuary spaces as the city expanded. It also enabled Putuni residents to maintain continuous contact with the deceased, which is additionally supported by the fact that stone chambers and shaft tombs architecture facilitated easy access to the remains. Proximity and easy access to the remains of antecedents may have been among the markers of high social status in Tiwanaku’s urban society.

\textsuperscript{53} The description of the burial is unclear as to whether the individual was placed flexed in a seated or facedown position.
Human burials in non-elite residential sectors are frequent and fall into the category of dedications or offerings based on their location and informal architecture, and general absence of grave goods. Formal burials, though present, are comparatively rare. In the neighborhood of Ch’iji Jawira, a corridor was ritually marked by the presence of a subfloor pit filled with midden materials and, at its base, the isolated remains of two young children (Rivera C. 2003:300).

Associated with the Tiwanaku-IV occupation of Akapana East 1M (inside the urban moat), an infant and a young adult female had been buried under the wall foundations of the residential compound (Janusek 1994:441, 2004:140). Formally, these burials resemble the placement of camelid fetuses under wall foundations and may be interpreted as part of household ritual activities that served the “periodic reanimation of group memory and activity” (Janusek 2004:142, 161). In the Akapana East 2 compound,
Janusek discovered an elaborate composite tomb below the patio of Structure 1. Feature 23 consisted of a central shaft almost 2 m in depth, whose opening was marked with a standing cobblestone. At the base of the central adobe-lined shaft was the seated-flexed body of a 35–40 year-old adult individual oriented northeast associated with a *vasija* and *tazon* (Janusek 1994:443). From the top of the shaft, another chamber extended to the southeast, its opening sealed by large stones and a broken grinding stone (Janusek 1994:443). Despite poor preservation conditions, it was possible to assess that the tomb had contained abundant basket and textile artifacts, and the remains of a child and a juvenile camelid. Other objects in the tomb included a spouted duck effigy vessel, a *tazon*, and a *kero* decorated with elite human figures. To the north of the central shaft extended a third funerary chamber. Also adobe-lined, it contained a child in seated-flexed position accompanied by a *vasija* and *tazon* (Janusek 1994:444).

Feature 23 was constructed and enlarged over a prolonged period, starting with the southwest chamber, followed by the occupation of the central shaft and finally the addition of the northern chamber. The central and northern chambers contained single-individual burials. The pairing of a human and camelid in similar developmental stages together with the presence of standard grave goods (*tazon, kero*) bears some resemblance to the composition of certain dedicatory offerings found in the Putuni and Akapana. Yet, these interments were placed within the compound and clearly marked allowing residents to remember the deceased, pay them visits, and use their tomb a site of domestic ritual activities. Though less extravagant, Feature 23 resembles the elite burials in the Putuni platform in location, tomb structure, multiple interments, large quantities of grave goods and occasional reuse.
Excavations in the commoner Akanapa East 1 neighborhood revealed two residential compounds separated by a cobblestone wall dating to the Tiwanaku V phase. In the southern compound, an open area was used as a communal mortuary sector (Janusek 2004:216). One of the three excavated burials was a stone-lined cist containing middle-aged male in seated-flexed position oriented west. His grave goods included a ceramic bowl, *olla* and broken pitcher, as well as camelid bones, obsidian flakes (an imported resource), and red pigment (Janusek 1994:446–8). A second informal pit found in the same area contained the incomplete remains of a camelid and human individual. Nearby, a 25–35 year old male had been interred in a pit with obsidian flakes. Although Janusek interprets this area as a mortuary complex, I would argue that only the two adult
burials fit the formal interment criteria. The shallow pit with human and camelid remains is more like the category of offering deposits seen in other public spaces.\textsuperscript{54}

Isolated occurrences of patio interments in other non-elite residential compounds support the site-wide practice of selecting certain individuals for intramural interment. At Ch’iji Jawira, an intact subfloor pit burial contained an adult individual in seated-flexed position, likely a higher status member of the community, because he or she was accompanied by a spouted \textit{vasija} and several other vessels (Rivera C. 2003:298). At La K’araña excavators found a subfloor adult burial outside a circular residential structure although it was not reported whether the tomb contained offerings (Escalante 2003:321).

Because of the fortuitous and disparate archaeological sampling of burials at the Tiwanaku capital, it is difficult to establish a clear picture of normative burial practices that would have been extended to the majority of the population living in the city over the course of several centuries. The present sample reflects the use of human remains and burial in the context of offerings in monumental and residential contexts, and other ritual practices (possibly ancestor veneration in residential compounds). In addition, the privilege or ability to keep the dead in or near the house in the Tiwanaku capital appears to have been, at least in part, associated with social status; the wealthiest burials being found in discrete intramural elite spaces. The non-normative nature of many of the burials found at Tiwanaku becomes more apparent, when comparing them to Tiwanaku-affiliated mortuary contexts beyond the city boundaries.

\textsuperscript{54} The temporal resolution is not sufficiently refined to determine the relationship between these burial events. It is possible that the human-camelid offering played a role in the initial or final consecration of the area.
4.2 Mortuary Practices in the Tiwanaku Hinterland

The different styles of human burials at Tiwanaku provide information about the exceptional or non-normative treatment of deceased individuals, as high-status individuals or high-value objects. Yet, these contexts are too few and unusual in their nature to offer insights into other aspects of mortuary practice, such as normative funerary practices, social identity and organization, in Tiwanaku society. To approach these issues, I present evidence from a large corpus of burials that have been excavated outside the state capital. These samples were recovered from numerous Tiwanaku-affiliated sites in the southern basin and on islands in Lake Titicaca (Figure 4.2). Comparing how mortuary traditions changed with the expansion of Tiwanaku influence in the region and varied regionally and locally serves as a proxy for reconstructing mortuary processes and ideologies linked to the Tiwanaku state and its capital.

The main type of burial found in the Tiwanaku hinterlands is normative communal burials that are usually found in extramural cemetery areas. Higher-status burials in residential spaces and non-normative burials similar to those found at the capital city are found in rare instances in the Lake Titicaca Basin region. In regions like the Cochabamba Valley and the San Pedro de Atacama oasis where Tiwanaku influence was less direct, burials are marked by predominantly local characteristics altered to incorporate Tiwanaku materials or practices. Only the Moquegua Valley, with its substantial highland-affiliated populations, shows a continuation of Tiwanaku-style mortuary practices, including the propinquity for extramural cemetery spaces and non-normative mortuary practices in association with monumental spaces.
4.2.1 Mortuary Practices in the Katari Valley

At Lukurmata, the local adoption of Tiwanaku cultural and material practices at the beginning of the Tiwanaku IV period also affected local mortuary rituals. Burials associated with the Late Formative occupation of this Tiwanaku satellite center were intramural multiple-individual interments. In contrast, the earliest group of Tiwanaku-style burials was moved outside the town’s residential sector (Bermann 1994:199–201). Eight of the ten Tiwanaku IV period interments excavated at Lukurmata were “conventional”. Subterranean cists with capstones (including grinding stones) contained single individuals with limited to no offering materials, except for two locally produced utilitarian vessels. The positioning of some individuals flexed and lying on their side seems to be a remnant of the regional Late Formative interment style. The absence of grave goods in the “conventional” burials may be the result of poor preservation. But the absence of ceramic offerings is compelling, given the presence of Tiwanaku-style serving wares in the domestic assemblage during this period.

Lukurmata elites were buried in the monumental platform instead of the extramural communal burial grounds (Bermann 1994:204). Fourteen platform tombs consisted of stone-capped pits with side benches or chambers. The majority contained adult individuals interred in seated-flexed position. Bermann describes their grave goods as including at least two blackware and redware Tiwanaku IV-style vessels, animal bones, stone and metal tools and adornments, and unfired clay miniature vessels (1994:204). The richest among these contexts was the tomb of a child that with two vessels inside the tomb cavity. In addition, a puma sahumador was placed on the intact capstone.
Two intramural above-ground double-floored chamber tombs at Lukurmata bear resemblance to the elite patio interments at Tiwanaku (Figure 4.4). The lower chambers contained llama effigy incensarios — a diagnostic Lukurmata ceramic form —, and were covered with large stone slabs. The upper chambers were constructed with several courses of stones (no mention is made of an access point); they contained the remains of an adult individual (Bermann 1994:200). Bermann has termed these structures “proto-chullpa” that were not so much indicative of the deceased’s higher social status; they were “highly visible markers of ancestry, perhaps even patio group shrines [reflecting] an increased emphasis on establishing ancestral claims and publicly displaying membership in descent groups” (1997:104). No similar structures have been found at Tiwanaku, but it is possible that these tombs held curated ancestral remains and resembled the elite shaft tombs placed in mortuary areas in the Putuni.

Figure 4.4 Artist reconstruction of double-chamber aboveground burial at Lukurmata (from Bermann 1994:figure 12.20).

Beyond social stratification, the remains of the dead were also used to consecrate the construction of major public works. Test excavations in Lukurmata’s monumental complex revealed five mortuary features near the structure’s foundation containing the
complete and partial, primary and secondary interments of one adult, one juvenile, and four children (Bermann 1990a, 1997:104). The first interment was a deep oval pit that contained an adolescent female in seated-flexed position. Although her remains were found with camelid and fish bones, and plainware sherds, there was not evidence of intentional grave goods (Bermann 1990a:100). Burial 2, a simple pit, contained the incomplete remains of an older child positioned flexed on his or her right side. The cranium was absent, possibly due to later disturbance. Burial 3 was a complete burial of a child in seated-flexed position inside an unlined pit without grave goods. In Burials 4 and 5, Bermann found the partial remains of children interred in undisturbed shallow pits, one of which had received a bead offering (1990a:101–2). Although individuals were not positioned facedown, the presence of incomplete human remains, use of informal burial pits, and lack of grave goods relates these burials to the broader pattern of dedicatory human offerings at monumental structures in Tiwanaku.

During Tiwanaku V, Lukurmata’s burial patterns became even more assimilated to regional Tiwanaku-style mortuary practices. Tombs were arranged into extramural cemetery clusters. Nine excavated burials were stone-collared pits with some interior stone lining. The stone slabs used to cap the tombs were worked andesite blocks and had likely been used in the construction of the monumental complex. This recycling of worked stones can be used to date the burials to the last phase of Tiwanaku-period occupation.

Most pits contained single-individual interments, but one contained three adults in seated-flexed positions without grave goods (Bermann 1994:220–221). A second burial contained a child in seated-flexed position accompanied by stone and bone tools, two
Tiwanaku-V style *keros* and a *tazon* (Bermann 1994:221). A third collared pit had been opened and disturbed but still contained a *tazon* and *kero* (Tiwanaku V style). The standardization of tomb structure and body positioning (seated-flexed), and the use of *keros* and *tazones* as offerings substantiates Lukurmata’s participation in the established regional Tiwanaku-style mortuary practices.

At the site of Qeya Kuntu, east of Lukurmata, four excavated Tiwanaku V-period burial cists “differed from burial chambers elsewhere in the region (typically subterranean pits lacking reinforcement) in that they were collared and completely lined with flagstones and river cobbles.” (Janusek and Kolata 2003:150). The tombs contained in total three adults and one child. Each was accompanied by a *tazon* (Janusek and Kolata 2003:150, Fig.6.29).

Northeast of Lukurmata, the site of Kirawi featured a central mound, repurposed from a residential platform during the Formative to a burial platform in the Middle Horizon. The eleven excavated burials resembled the Formative burial styles of “simple cysts containing flexed individuals.” (Janusek and Kolata 2003:151). One adult female with was buried with a grinding stone and *vasija*. A second adult had also received a *vasija*. Janusek and Kolata mention the excavation of nine more burials, of which one contained a duck effigy vessel.

In 1998, 2002 and 2003, Finnish-Bolivian excavations at the lakeshore site of Tiraska recovered 32 Tiwanaku-period burials. To date, they form the most systematically excavated and reported Tiwanaku-style mortuary sample and provide a baseline for understanding the heterogeneity and standardization that defined Tiwanaku mortuary ritual and social identities within heartland communities. The excavations
produced two clusters of burials, eight burials on an upper terrace and 24 on a lower terrace following the topography of the site. The burials on the lower terrace were furthermore divided into a northern and southern group by an open paved space with possible ritual features (Feature 2 and 3) (Korpisaari 2006:147). Radiocarbon dates from human remains clustered tightly within a 200 to 300-year range between the 10th and 12th century A.D.\textsuperscript{55} (Korpisaari 2006:141, table 1). This means that the observed variability of burial practices at Tiraska was likely the result of ritual heterogeneity rather than diachronic change.

The majority of burials followed normative Tiwanaku patterns of individual, seated-flexed interments in subterranean pits or cist with none to two ceramic offerings. Tomb structures ranged from simple open pits to stone and slab-lined cists or larger stone-lined chambers covered with large slabs. Korpisaari observed that imported Tiwanaku V-style vessels at Tiraska were most commonly found in cists, whereas chamber tombs contained locally produced ceramic vessels. Simple pits contained no ceramic offerings at all (Korpisaari 2006:141). In the northern lower terrace cluster, adolescents and adults predominated the assemblage, while the southern lower terrace had a more balanced demographic profile (Korpisaari 2006:147). Korpisaari hypothesizes that the separate spaces “may have been used by a particular family, lineage, or other social group” (2006:147).

The ceramic assemblage at Tiraska consisted of 35 vessels: 13 \textit{tazones}, 6 \textit{keros} (including banded, standard and front-face deity vessel), 11 \textit{vasijas}, 1 \textit{sahumador}, 1

\textsuperscript{55} with exception of two probable post-Tiwanaku burials from a separate area (Burials 31 and 32).
escudilla, 1 challador, 1 “plate” and 1 cuenco (Figure 4.5). The prevalence of tzones and keros reflects Tiraska’s participation in Tiwanaku-style cultural practices, and the adoption of new mortuary practices. The ceramic objects connect Tiraska to the Tiwanaku capital and other nearby and distant Tiwanaku-affiliated sites. Korpisaari draws connections to the ceramics excavated at the Akapana East and Mollo Kuntu neighborhoods of Tiwanaku, Lukurmata and Iwawi to the west, challadores from Cochabamba, and Chen Chen-style serving wares from Moquegua (2006:143). Tiraska burial offerings consistently showed evidence of use wear, breakage, repair, and modification. These vessels may have been personal items used during the individual’s life, precious objects that would have been used exhaustively, or heirlooms (Korpisaari 2006:144). Preservation conditions at Tiraska were insufficient to confirm or reject the inclusion of organic mortuary offerings. A single vasija, broken on the surface of Burial 23, suggests post-interment visitation of the cemetery area. Because the burials were intrusive to an extensive domestic refuse deposit, other types of feasting offerings were difficult to identify.
Figure 4.5 Ceramic offerings found in Tiwanaku burials at Tiraska (from Korpisaari 2006:figure 7.11).

Four features at Tiraska may have constituted secondary interments or curated remains (Burial 23, Features 2 and 3). Burial 23 had limited space to accommodate a complete adult individual, and remains in chamber Burial 17 seem too partial to account for the original presence of a complete adult individual. Features 2 and 3 were shallow slab-lined covered chambers in the paved open space on the lower terrace that contained some bone fragments (not confirmed human). Based on their location and content, Korpisaari proposes these may have “represented the ‘tomb’ of a deceased whose body was unavailable for burial … [or held some other] function related to ancestor worship” (2006:132). This resembles the patio interments at Tiwanaku and the double-chamber tombs at Lukurmata.
A cluster of three burials in the northern lower terrace group may have contained “deviant” interments. Two adults and one child had been interred facedown and flexed (either bent-forward, lower legs folded over thighs, or flexed to chest) in large pits covered with rocks (Korpisaari 2006:145). The position of the remains together with the lack of grave goods leads Korpisaari to suspect that these burials resembled the dedicatory sacrifices associated with the monumental structures at Tiwanaku (although excavations at Tiraska did not encounter evidence for monumental or even residential structures near these burials).

Placing Tiraska within the broader context of Tiwanaku society, Korpisaari identifies three broad social categories: “(1) elite and/or priests, (2) ‘commoners’, and (3) sacrificial victims and/or slaves and/or prisoners of war” (2006:156). The population of Tiraska included local elites, indicated by their access to imported or locally emulated Tiwanaku-style vessels that allowed them to participate in ceremonial feasting. Local commoners had limited access to these items. The presence of deviant or sacrificial victims in a specific space amidst and above the regular burials is interesting because it does not associate these individuals with monumental architecture, not does the location clearly indicate the exclusion of these individuals from Tiraska’s community. Rather, it may have been their social position or role, cause or manner of death that distinguished these individuals from other community members. They nevertheless received the right to be burying within the communal cemetery. Evidence of post-funerary ceremonies—ceramic vessels deposited on the cemetery surface, secondary interments and possibly symbolic caches for human remains—underline the complexity and ubiquity of normative Tiwanaku death-related practices.
Just east of Tiraska at the site of Qiwaya, four looted burials of Tiwanaku-affiliation were recorded. All four were slab-and-stone lined cist tombs with capstones. The osteological materials inside the tombs were comingled from extensive looting activity. A single decorated TiwanakuIV/V ceramic fragment was used to assign cultural affiliation (Korpisaari et al. 2003:82–84).

Excavations on the island of Pariti in the 1930s included at least three Tiwanaku-period burials. Tomb A was a stone-lined covered cist containing a child and six Tiwanaku vessels: *vasijas*, a *tinaja* and redware *tazon*, a banded *kero*, and a *sahumador* (Bennett 1936:447–8). Tomb B, a stone-lined cist, contained the base of a broken *olla* but no bones. The third tomb was an opened stone-cist holding the remains of a child. It had been buried with 23 small gold vessels, incised bone tubes, beads, and paint fragments but no ceramic objects. Bennett assigned this to the Classic Tiwanaku period based on the style of the bones tubes and metal objects (1936:448). In 2005, a single cist burial covered with a large stone slab was excavated on Pariti (Korpisaari 2006:101). The burial contained teeth from an adult and intrusive subadult individual, and a small Late Tiwanaku-style *vasija*.

Three Tiwanaku-affiliated burials were excavated at the site of Churijahuira is located on the eastern shore of Lake Huiñamarca south of Lake Titicaca. Tomb 1 was a stacked stone cist with intact capstone, inside which was found an adult male in seated-flexed position together with a Tiwanaku red-slipped front-face deity *kero* and an

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56 The dating of the third, sumptuous burial is complicated somewhat by the superposition of Chiripa-style midden materials, but since Bennett seems to consider Chiripa a transitional phase between Classic and Decadent Tiwanaku, the relative dating of the burial to Tiwanaku IV is consistent with the current chronology.
escudilla. The second tomb, contained an adult individual flexed lying on his or her left side, accompanied by two cooking vessels and two Tiwanaku-style bottles. A looted stone cist contained another front-face deity kero (Liendo Lazarte 1956:26–31).

4.2.2 Mortuary Practices in the Tiwanaku Valley

Mortuary evidence from the mound structure at Iwawi, a small Tiwanaku-affiliated port on the south side of the Chiripa peninsula, included several large pit burials containing adult individuals. Ceramic offerings included undecorated small vasijas, ollas, a sahumador and a bowl made from the base of a large tinaja (Isbell and Burkholder 2002:223). A single shallow pit burial of unknown location contained the remains of an adult female in flexed position on her right side was accompanied by a groundstone and handstone (Albarracin-Jordan 1996:253).

Isbell and Burkholder interpreted the absence of decorated ceramics in the Tiwanaku IV period tombs as evidence that Iwawi’s people were refusing to inter their ancestors with Tiwanaku iconographic symbols, a decision about grave furniture that probably affirmed resistance to civil ideology that promoted state authority. The burial of ancestors, as suggested by the pottery selected for tombs, seems to have been an occasion for symbolizing continuity with the past, and the reproduction of local organization (2002:224).

During the Tiwanaku V period, tomb size at Iwawi decreased, and keros and tazones became common grave offerings, as Tiwanaku rituals gained popularity.

At Chiripa, a major Formative ceremonial center on the northern side of the Taraco peninsula, Bennett excavated at least eight Tiwanaku-period burials dated based on ceramic offerings. Unlike the Formative Period burials, which had been located under
the floors of the ceremonial and domestic structures, later burials were no longer
affiliated with architectural spaces. The tombs were subterranean pits, lined with bark or
grass (likely a local variant) and covered with large stone slabs, and in one case a
grinding stone (Bennett 1936:433–435). Preservation did not allow for determination of
body position and orientation. The reported tomb depth ranged between 50 and 100 cm,
indicating a seated-flexed body position. The ceramic offerings included Tiwanaku-V
tazones, ollas, vasijas, bowls, sahumadores, and keros. The richest tomb had five ceramic
vessels. Four of the seven tombs with ceramics contained the broken and ground-edged
bases of plainware ollas giving them the shape of platters.

More recent excavations at Chiripa uncovered an additional thirteen burials
including nine adults and seven subadults buried in seated-flexed position (Blom and
Bandy 1999:118–119). One of these was a multiple interment with adult males and
females. The tombs consisted to equal parts of cists and pits, and used plant materials for
interior lining and grinding stones as capstones. Six tombs contained ceramic offerings,
and one contained beads, but there was correlation between the grave goods, tomb
structure or age and sex of the interred. The spatial clustering of the burials suggests the
use of a formal extramural cemetery during this period (Blom and Bandy 1999:118). The
spread of Tiwanaku influence in the mortuary traditions of the Taraco peninsula reflects
fundamental changes in the ritual repertoire from the earlier Formative period
(Machicado 2009:191–200). The gradual transition and complete adaptation of
standardized body positions, burial locations, and grave assemblages suggests that the
rise of Tiwanaku was rooted in a more fundamental ideological transformation that
occurred on a widely popular level rather than being imposed and channeled through local elites.

At the small site of Guaqui, four stone-lined cist tombs were excavated (Albarracin-Jordan 1996:174). One contained an older adult without offerings (its dating is based on stratigraphy). Two more burial contexts found had additional aboveground stone structures, a step toward the later development of chullpas in the region (Albarracin-Jordan 1996:178). A few kilometers east of Guaqui at the site of Obsidiana (LV-109), Albarracin-Jordan found human teeth mixed with camelid remains inside two ash pits; the presence of a banded stone kero was used to date the deposits’ cultural affiliation (1996:236).

4.2.3 Mortuary Practices in the Desaguadero Valley

In the Desaguadero Valley on the southern edge of the Kimsachata mountain range, Rydén excavated two Tiwanaku-period burials at Iktomani/Sollkatiti. The burials were located in close proximity to house foundations, and could therefore be classified as residential-area burials (Rydén 1947:167). The first burial was a rectangular slab-stone cist that contained an adult individual in seated-flexed position with a tazon and a kero, both of which dated to the Tiwanaku V period (Rydén 1947:169–179). A few kilometers to the southeast of Iktomani, Rydén discovered two more Tiwanaku burials at the site of Wancani. The first was identified as a slab-stone cist. It contained an adult individual in seated-flexed position who had been given a Tiwanaku red-slipped tazon and kero, as well as a local bowl with handle. The second burial also contained an adult with a Tiwanaku kero, tazon and a bone object (Rydén 1947:139–140).
4.2.3 Mortuary Practices on the Islands of the Sun and the Moon

Excavations on the Islands of Titicaca (Island of the Sun) and Koati (Island of the Moon) during the last 100 years have produced a rich but unsystematically recorded corpus of Tiwanaku period burials. What is noteworthy about the evidence from this area is the great heterogeneity and differences in grave wealth, which speak to the special significance of the Island of the Sun in Tiwanaku ideology.

Bandelier reported discovering several hundred subterranean stone cists in 1905, many of them in the agricultural terraces (andenes) that cover the island (1910:186). Unfortunately, Bandelier only distinguished between “chullpa”-style burials that contained materials from the Formative through Colonial periods (1910:165).

At the site of Ciriapata on the northeastern side of the island, Bandelier reported “opening, emptying and measuring of eighty-five stone cysts” (1910:179). These stone cists, some of them sealed with slabs, contained both adults and children. Many of them were empty. Noteworthy finds included copper and silver tupus, coarse pottery and keros in two tombs (Bandelier 1910:179–180, 186). Other groups of cist tombs included multiple-individual burials in seated-flexed position; a duck effigy vessel was found in a tomb nearby.

The site of Sicuyu at the northern tip of the island included a large cemetery affiliated with the Middle Formative to Tiwanaku Period (Stanish and Bauer 2004:188). The rectangular slab cists had stone covers but were without remaining content. Bandelier pointed out their resemblance to burials at the nearby site of Kasapata

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57 He asserts that is was “needless to describe each grave”.
Of the eight rectangular slab stone chambers found there, one contained an adult, and seven contained children (Bandelier 1910:209) in seated flexed position facing east. No grave goods were found, making their association with Tiwanaku tentative.

At the southern end of the island, archaeologists recovered eight Tiwanaku-affiliated tombs from the site of Wakuyo (Perrín Pardo 1957:183–199). All were stone-lined subterranean cists, but only two were found intact with their capstones in place. Preservation was poor but three features seem to have contained adult individuals. Five out of the eight burials contained ceramic offerings, which included three banded keros (blackware and red-slipped wares, flamingo motif), a standard kero with geometric design, a red-slipped vasija, a small plainware cup or bowl, and the broken base of a vasija modified to function as a platter, similar to those found in the tombs at Chiripa.

Excavations on the northern half of the Island of the Sun, at the site of Chucaripupata, produced evidence suggesting that Tiwanaku appealed to different communities throughout the regions because of its inclusive ritual program, while also allowing local communities to continue in their particular cultural practices in other spheres of life (Seddon 1998:250). Burials at Chucaripupata were located in residential areas, where they were intrusive to the domestic structures. In fact, they were probably extra-mural as residences shifted locations at the end of the Tiwanaku IV period. Among the first cluster of six burials were four intact slab cists (three shallow, one deep) with single individuals (adults and children), their body positions unknown (Seddon 1998:226–7). One cist was covered with a grinding stone. There were no offerings. A fifth slab-cist contained the disarticulated remains of a female individual, possibly a
secondary burial. A pit filled with domestic refuse and ash contained partially articulated human remains at the base, and was covered by rocks and a *sahumador*.

The second cluster of tombs at Chucaripupata consisted entirely of slab-stone cists (Seddon 1998:233–237). Five of them had been covered with a layer of sterile sand. Features 46 and 47 were shared a stone-lined wall and cover. Each contained tree bark and adult individuals accompanied by a front-face deity kero (Feature 46) (Figure 4.6) and a red-slipped *kero* (Feature 47), both likely imports based on their non-local paste. Feature 48 also contained a non-local *vasija* and tree bark. One adolescent individual was interred with a local broken *olla* base platter, and the deep stone cist of an adult male included a local, crudely finished *vasija*. Although Seddon argued that the subterranean slab-lined cists constitute a local burial tradition distinct from that found at Lukurmata and Tiwanaku (1998:249), the coeval use of imported Tiwanaku-style ceramics and local vessels fits well with the standardization of mortuary practices during the Tiwanaku IV period.
Figure 4.6 Planview of Feature 46, a cist burial with ceramic offering from Chuacripupata (Seddon 1998:figure 4.26).

On the Island of Koati, Bandelier reported two grave chambers that were superposed and separated by a cover consisting of at least two slabs, with pottery and skulls of the “chullpa” type (Bandelier 1910:259). The description is similar to the double-chambers at Lukurmata. In the agricultural terraces associated with the Inca site of Iñak-Uyu on Koati, Bandelier discovered two stone cists, one with a rectangular layout that contained five “chullpa”-style vessels, the other empty (1910:269).

More recently five more stone cists were identified at Iñak-Uyu (Bauer et al. 2004:164–165).\(^58\) Two cists (Units 6A and 10) were slab-lined and sealed, but contained

\(^{58}\) Test excavations in the plaza of Iñak-Uyu “recovered high-quality Tiwanaku ceramics including an intact kero with a front-face god motif and fragments of large incense burners. At least six gold Tiwanaku pumas and one silver one have also been recovered on the island [indicating that Koati] was held in high regard during Tiwanaku times and
no offerings or human remains; a Tiwanaku *kero* was found near the cist. Two other cists were badly disturbed, but associated materials included fragments of Tiwanaku *incensarios*. The evidence from Koati may not suffice to assess the chronology of the political and social relationships between the island and the Tiwanaku state. Nevertheless, the presence of high-quality Tiwanaku objects indicates some Tiwanaku-affiliated ritual activity on Koati. The adoption of Tiwanaku-style mortuary practices and grave offerings suggests that the cultural affiliation between residents of the islands was more than just superficial.

In sum, the burials recovered from the southern basin and the islands of Lake Titicaca paint the picture of a culturally heterogeneous regional population that selectively engaged with the spread of Tiwanaku materials and practices during the Middle Horizon period. At the end of the Formative period, there is a shift toward the use of single-individual, subterranean tombs, seated-flexed positioning, and grave offerings of serving wares. At some sites, residents held on longer to earlier funerary traditions, leading to more idiosyncratic cemetery styles. Local identities were maintained in the differential use of tomb furnishings and structures. In many cases, Tiwanaku-style offerings formed part of a larger assemblage of local products. More often, however, no offerings were recovered that could speak to the Tiwanaku-associated identity of the deceased. The fact that local populations were willing to modify otherwise conservative mortuary traditions and integrate emblematic objects like *keros* into their funerary assemblages speaks to the cultural potency of Tiwanaku in the city’s hinterlands.

*that the Tiwanaku state may have supported ritual activities on it*” (Bauer et al. 2004:171).
4.3 Tiwanaku-style Mortuary Assemblages Outside the Tiwanaku Heartland

Isolated finds of cave burials found throughout the southern Andes provide evidence for the spread of Tiwanaku materials among more mobile camelid pastoralists. They reveal how Tiwanaku-style mortuary elements were suitably adapted away into local funerary traditions as garments and offerings. It has been argued that Middle Horizon mummy bundles set into the walled recesses of caves or rock overhangs may have constituted the antecedents of later *chullpa* burial towers (Oakland 1986:62). The caves of Niño Korin, Pulacayo, and Las Ventanas, and several others illustrate the regional impact of Tiwanaku’s on local mortuary practices.

4.3.1 Cave Burials

Located in the Cordillera Real east of Lake Titicaca, the Niño Korin (Calliicho) cave housed several mummy bundles placed in walled niches. The human remains were wrapped in textiles and adorned with hats. Based on their ritual paraphernalia (snuff trays, mortar and pestle, spoon and tube), they were interpreted as having been “medicine men” or ritual specialists (Wassén 1972). Oakland identified several bags with Tiwanaku-style embroideries included in the bundles alongside textile objects woven in non-Tiwanaku style (1986:57–58).

Juch’uyampa, or Pulacayo, another cave site east of the Salar de Uyuni, contained five individuals, three adult males and two children under the age of ten. All had been wrapped in several textiles, and their offerings included hats, sacks, leather
bags, wooden spoons, bone tubes, maize cobs, cuy heads, and basketry vessels (Agüero P. 2007:87). The textiles included Tiwanaku-style and Atacameño-style garments. Stable isotope analysis of bone and teeth from the adult individuals identified them as local individuals from the Pulacayo or Potosí region; there is no evidence that they had resided at Tiwanaku or any of its colonies for an extended period (Knudson et al. 2005:909). The use of elite Tiwanaku ritual objects by non-Tiwanaku individuals lends support to the “reticulated complementarity” model (Llagostera 1996) according to which some goods, such as Tiwanaku tapestry tunics and ritual paraphernalia, circulated within certain spheres, “enhancing and reinforcing hierarchical status” (Agüero P. 2007:96).

Cave burials contribute an interesting perspective to understanding Tiwanaku within a broader regional setting. The relatively small number of individuals in caves suggests that these spaces were reserved for individuals of special status near regularly traversed caravan routes (Knudson et al. 2005). Stable isotope analysis and non-Tiwanaku materials point to a local identity. The burial location and high-status ritual offerings distinguished them from Tiwanaku society and from their own communities, perhaps to indicative of their status as leaders, elites, or ritual specialists.

The relatively widespread acceptance and use of Tiwanaku wealth items by non-Tiwanaku groups carries two possible implications. The adoption of Tiwanaku mortuary practices or particular cultural elements was a highly selective process. Therefore, the association with Tiwanaku’s ritual practices and ideology enhanced the power of local leaders. The insertion of state-affiliated ritual objects into local economies and even mortuary contexts empowered caravan groups as the primary agents of adopting and disseminating Tiwanaku’s influence between the state’s heartland.
4.3.2 San Pedro de Atacama

The integration of Tiwanaku-style objects into local mortuary assemblages at San Pedro de Atacama reflects the role of imported luxury goods in the context of local identity formation and factional competition. In the Middle Horizon cemetery sectors of Solcor 3, Quitor, Coyo Oriente, and Larrache Callejón at San Pedro, fine Tiwanaku-style ceramic, textile, metal and ritual objects were consistently found in tombs alongside local objects (Stovel 2001). Oakland’s study of textiles from San Pedro de Atacama burials reveals that Tiwanaku-style tunics and hats were likely elite trade items and may have been manufactured in centralized workshops (1986, Oakland Rodman 1992). Individuals buried with Tiwanaku-style objects at four cemeteries had local radiogenic strontium isotope signatures in their dental enamel. They did not spend significant periods of their life in other regions (Knudson 2008:16). Local cranial modification styles at San Pedro de Atacama persisted from the Formative throughout the Middle Horizon period (Torres-Rouff 2002). An increase in violence during the Middle Horizon may be linked to the influx of Tiwanaku-style objects and rising competition among local factions over these goods (Torres-Rouff 2008). The hallucinogenic complex — consisting of snuff kits, bone tubes, spoons and mortars — likely originated in the southern Andes and only became an important status symbol at Tiwanaku during the Tiwanaku IV period.59

59 In fact, only 10% of tablets display iconographic designs that link them to Tiwanaku, whereas most tablets do not seem to reference the state to the north. Torres therefore suggests that the complex may have originated in the southern Andes (Torres 1987) and had become appropriated by Tiwanaku elites for the purpose of building a powerful ideology.
The mortuary evidence from isolated burial caves and from the community cemeteries at San Pedro de Atacama suggests that Tiwanaku influence was not contiguous across the south-central and southern Andean region. For local populations beyond the southern Lake Titicaca Basin, Tiwanaku presented a source of prestige and wealth that was accessed through mutually beneficial trade relations. Fine Tiwanaku textiles and ceramics were generally found in combination with local burial textiles and offerings. In light of the high degree of local continuity in burial traditions at San Pedro de Atacama, it is much more likely that the acquisition and inclusion of these exotics in burials reflects local competition and social hierarchies fueled by the influx of foreign goods.

4.4 Mortuary Practices in the Lowland Tiwanaku Colonies

In contrast to the more ephemeral trade relations that Tiwanaku maintained with distant places like San Pedro de Atacama, the colonies established by highland populations in the lowlands to the east and west of the altiplano offer a very different perspective of Tiwanaku state influence beyond its core region. Survey and household excavations in Cochabamba (Bolivia), Azapa (Chile), and Moquegua (Peru) have substantiated the migrations of highland populations into these lowland areas (e.g., Anderson 2009; Goldstein 1989, 1996, 2005; Muñoz 1986). Although the intensity and nature of these colonial projects differs significantly between regions, the burial practices associated with highland enclaves in all three areas highlights the perpetuation of highland identities through all aspects of community life.
4.4.1 Tiwanaku Burials in the Azapa Valley (Chile)

The appearance of Tiwanaku-style material culture in Azapa valley is linked to the arrival of a small group of colonists. Two small Tiwanaku-style cemeteries, Az-140 and Az-143, consisted of cist burials with single-individuals furnished with Tiwanaku-style tunics, hats, and ceramic vessels (Goldstein 1996:64–65). They bordered local Formative-period Alto Ramirez-style cemeteries. The absence of a residential Tiwanaku-style occupation in Azapa (Goldstein 1996:66) indicates that Tiwanaku immigration to the valley was not substantial. The proximity of Tiwanaku “elite” goods to local cemeteries mirrors the use of Tiwanaku imports in local politics and status differentiation seen in San Pedro de Atacama.

Another Tiwanaku-associated cemetery in Azapa is the Atoca-1 site which distinguished itself from local cemeteries through a cover of large rocks and the occasional used of surface architecture (Muñoz 1986:315f). It included stone-lined cists and camelid offerings in shallow pits near the cemetery area (Muñoz 1986:311–2). The burials contained local Cabuza and imported Tiwanaku-style ceramics, as well as a wooden kero carved in the Tiwanaku-IV style (Goldstein 2005:254). Other objects, for example basketry, textiles, bone beads, appeared to be of local origin. The presence of several Wari-Chaquipampa style ceramic fragments, led Goldstein to argue that the site may be a “good candidate for particularly high status provincial Tiwanaku burials (Goldstein 1996:65, 2005:265).
Given the small number of Tiwanaku-style burials in Azapa and their close proximity to local burial and residential grounds, it is unlikely that this region was colonized by substantial groups of highland immigrants. Unlike the cemeteries at San Pedro de Atacama where local and imported materials were found inside the same burials of indigenous individuals, the Atoca-1 and Az-140 and Az-143 cemeteries indicate the presence of a small Tiwanaku-affiliated enclave, that may have become acculturated to local lifeways, contributing to the rise of a local material culture style with Tiwanaku-derived attributes (Uribe and Agüero 2004).

4.4.2 Cochabamba

Mortuary practices observed at five sites in the Central Cochabamba Valley support current models of mixed direct colonization/local adaptation (see Anderson 2009, 2013). The site of Arani featured a large mound that was used for residential and mortuary purposes. The style of ceramic grave offerings dates the site to the Middle Horizon period (Bennett 1936:350). Burial styles included urn burials, unlined pits and stone-line cists with stone covers and bark lining (Bennett 1936:352–357). Although most interments contained single individuals, some multiple interments may represent local burial traditions. The average number of ceramic offerings per tomb was five to six vessels. They included red-slipped and blackware banded keros, tazones, and small plainware two-handled ollas. Only one non-Tiwanaku vessel was found. Bennett divided the Tiwanaku-style Arani burials into two phases (I and II), of which tombs from the earlier phase contained at least one Tiwanaku-style vessel each. The later phase introduced some local-style (possible Mizque) vessels into the burial assemblages.
(1936:378–9). Because the Tiwanaku-style vessels found at Arani did not conform entirely to Bennett’s Classic or Decadent styles, Bennett termed them Tiwanaku-Derived, emphasizing the amalgamation of local and highland culture traditions.

The site of San Sebastian was a heavily disturbed Tiwanaku-period cemetery located atop a natural hill. The discovery of an elite burial in 1916 recovered a rich assemblage of gold artifacts that tied the site to Tiwanaku. The burial likely belonged to an adult male, interred in extended position inside a large pit (Money 1991:197). The individual was accompanied by a number of elite regalia fashioned from over 600 gold artifacts. These included a headdress, a wooden staff with a standard, a kero, earrings, necklaces, arm and leg bands, pectorals and sandals manufactured from gold. The headdress bears a striking resemblance with a similar artifact excavated at the Kalasasaya, linking the San Sebastian individual directly to the ceremonial center of Tiwanaku (Money 1991:194). The wealth of the San Sebastian burial raises strong possibilities of direct interactions and movements between Tiwanaku elites and immigrant or local populations in Cochabamba.

At the domestic mound site of Tupuraya, Rydén (1959) excavated 25 Tiwanaku-period burials (pits, urn burials and stone-lined cists). Urn burials were used for children and adults, and smaller urns may have held secondary deposits of human remains (Rydén 1959:63). Ceramic offerings were quite frequent and numbered between three to five vessels, including small ollas, keros and tazones. Local variants of Tiwanaku vessel forms (e.g., challadores) also formed part of the assemblage. Keros were sometimes

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60 Except for one vessel of foreign origin, all others were Tiwanaku-decorated or Tiwanaku utilitarian, featuring known zoomorphic and geometric motifs (e.g., feline-eagles, human heads, “S”, flamingoes).
found in pairs, and libation vessels showed wear because they would have been used “on more festive occasions of everyday life” (Rydén 1959:76). Rydén observed that vessels were often found stacked or carelessly placed in the tomb, and likely would not have contained food or drink at the time of burial (1959:62). He also notes the ubiquity of miniature vessels in the form of *vasijas, ollas, tazones, keros* and *challadores*. Rydén hypothesizes that because these objects were crudely made and impractical they were substitutes for standard-sized vessels in burials (1959:69). Like the burials at Arani, Tupuraya burials reflect a clear departure from earlier local burial practices. The use of urn burials along with pit and stone cists, and the large burial assemblages (compared to highland Tiwanaku burials) amalgamated local and Tiwanaku traditions.

Piñami is the most intensively investigated of the Cochabamba mound sites and included Formative and Tiwanaku period domestic and mortuary occupations. Of the 42 burials excavated at Piñami, 29 dated to the Early Piñami, 13 to the Late Piñami phase (Anderson 2004, 2009). The cultural diversity that defined the region during the Early Middle Horizon Illataco phase found expression in the contemporaneous use of seated-flexed and on-the-side flexed body positions, urn burials, and secondary burials. During later phases burial practices were used to distinguished between different social groups by spatial separating on-the-side flexed interments from seated-flexed and urn burials (Anderson 2013:101).

Middle Horizon tomb styles were also initially reminiscent of earlier local mortuary traditions, as collared pits co-existed with Tiwanaku-style stone-line collared cists. Later, clay-lined rectangular pits became more popular. Urn burials, common during the previous period, seem to be used exclusively for children during the Piñami
phase, while secondary burials were only found with adult individuals. Discrete cemetery areas were used for interment throughout the Middle Horizon, but sub-floor burials appear to be limited to the Late Piñami phase.\textsuperscript{61} The presence of multiple cranial vault modification styles among Piñami’s residents also supports the hypothesis of a multi-ethnic occupation of the site and valley (Anderson 2013:104).

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{burials.png}
\caption{Burials associated with the Early Middle Horizon Tiwanaku-style occupation at Piñami (from Anderson 2013:figure 6.12).}
\end{figure}

Grave offerings included serving and utilitarian wares, unfired miniature vessels, beads, camelid bones, basketry and metal disks. The average number of vessels in tombs

\textsuperscript{61} Unfortunately, Anderson does not specify how many isolated burials were found in domestic structures, nor the tomb structure type, age and sex of the interred or grave goods found with them. This makes it difficult to draw parallels between intramural burials in Cochabamba and Tiwanaku, as the Cochabamba pattern may derive from a Formative mortuary behavior or, as at Tiwanaku, constitute the interment of individuals with special communal status close to home.
with ceramic offerings was 4.2 during the early phase, but it dropped to 1.2 vessels per burial in the late phase. Around one third of the vessels were drinking vessels, distributed over more than 50% of the burials (Anderson 2009:183–4). Drinking cups were generally found with adults of both sexes, and children. During the early phase, social rank in Piñami was expressed in the quantity of grave goods; two burials were noteworthy for their assemblage of 12 vessels, including paired drinking cups and a kero with Caraparia iconography (an eastern valley Cochabamba ceramic style). Social distinctions of rank decreased in the Later Piñami phase as ceramic vessel offers became less frequent. One noteworthy change is the restricted use of keros with male burials in the later Piñami phase (Anderson 2009:186–7). The unequal distribution of drinking cups necessary for participation in the ritual activity of Tiwanaku life could indicate a change in local gender relations that resulted from the adaptation of Tiwanaku feasting culture in Cochabamba.

The site of Sierra Mokho, also located in Cochabamba, contained 32 Middle Horizon burials dated by the presence of Tiwanaku Polychrome Altiplano, Cochabamba and Decadent ceramic styles (Döllerer 2013:404). The burials were found within and around domestic areas similar to those at Piñami. They contained individuals of all ages and sexes in flexed positions on their side or seated. Analysis of tomb architecture, age at death, and grave offerings revealed that very young and very old individuals received more offerings more elaborate tomb structures. Offerings found with old adult individuals were more diverse than those found with children, and included ceramic serving vessels, tools, and jewelry items, perhaps indicative of personal wealth (Döllerer 2013:400–401).

62 The two elite burials were rectangular, fully stone lined chambers containing one adult, and one adult and adolescent. In addition to the ceramics, Anderson also found greenstone beads and silver plaques.
Pairs of *keros* and *tazones* were often stacked inside the tomb, but also deposited around tombs. These items reflect feasting and prolonged interaction with the dead (2013:403). The ceramic iconography presents a combination of Tiwanaku and locally introduced stylistic elements and motifs.

Farther from the highlands, in the central lowland valleys of central Bolivia, isolated finds of cave burials containing cultural elements and high-status objects demonstrate the extent of Tiwanaku influence in the region. The site of Las Ventanas (Omoreque) consisted of two large collective (walled) cave tombs with offerings of wooden spoons, gourds, bone artifacts. Ceramic materials belonged to the Mizque-Tiwanaku style, a local derived Tiwanaku style. Most of the textiles were made from cotton, but two were clearly identifiable as Tiwanaku-style structures (Oakland 1986:66–71). Evidence from the Manzanani cave (Charasani, Savadra Province) likewise included some Tiwanaku-style sherds, a miniature stone mortar, baskets, gourds, and one Tiwanaku-style textile (Oakland 1986:59–66). The large funerary assemblages found in the Yayambi and San Lorenzo caves (Mojocoya, Rio Grande) included several individuals adorned with local cotton and twenty-six Tiwanaku-style textiles, wooden bells, metal rings, engraved bone tube (Oakland 1986:71–80).

**4.4.3 Mortuary Practices in the Tiwanaku Colonies in the Moquegua Valley**

Populations as far away as San Pedro de Atacama and Cochabamba incorporated Tiwanaku-style artifacts in their mortuary practices, while also maintained varying degrees of local cultural continuity. This stands in contrast to the Tiwanaku-associated colonies in the Moquegua valley, whose domestic and ritual complex showed no local
influence and only limited interaction with non-Tiwanaku populations in the valley. In Moquegua, there is also clear evidence of stylistic differences in mortuary practices between the contemporaneous highland-descendant Omo and Chen Chen-style groups in Moquegua. In Moquegua, Tiwanaku mortuary practices emphasized group affiliation and corporate identity through shared space (Buikstra 1995; Goldstein 2005:254; Hoshower et al. 1995).

Only a few Omo-style cemeteries have been identified in Moquegua. These include cemeteries at Rio Muerto M70B, Omo M16D and perhaps Rio Muerto M43A. At least two of these (M16D and M70B) were spatially separated from residential areas by ravines. Omo-style cemeteries were limited in area especially compared to the sprawling mortuary occupations of the Chen Chen-style.

The Omo M16D cemetery contained only 19 burials and 22 individuals, most of them children (Oquiche 1999). All tombs were stone-lined cists, except for one — a large stone-lined burial chamber with an entry step (Goldstein 2005:261–2). Although the cemetery had been looted, some burials still contained remains of high-quality grave offerings, including metal objects (rings and spoons), and Spondylus and greenstone beads. The funerary chamber was surrounded by a low-rising circular stonewall; a plant-and-mud roof had originally sealed the tomb. An adult male and two young children had been buried inside the large chamber tomb.63 Their funerary attire included at least seven ceramic vessels (portrait head and standard keros, tazones, sahumador, cups and an escudilla with Tiwanaku IV designs), a decorated wooden spoon and three polychrome

63 Because of looting it can only be assumed that the adult was the principal individual in the interment.
baskets, as well as over 800 greenstone and onyx beads, and three interlocking tapestry tunics.\footnote{One of these tapestry tunics has been identified by Amy Oakland as possibly being of Wari-style, distinguishable by the use of cotton warps (Oakland 2012).}

From 2006 to 2008, the Proyecto Arqueológico Rio Muerto directed by Paul Goldstein and Patricia Palacios conducted the first problem-oriented Tiwanaku mortuary excavations in the this region at the Rio Muerto site complex near the lower end of the Moquegua valley. The site contained two discrete settlement areas, an Omo-style village with one associated cemetery to the east (site M70A and B), and a Chen Chen-style village with three associated cemeteries to the west near the valley (M43 A, B, C, and F). The project aimed to elucidate differences between the discrete mortuary spaces at the M70 and M43 sites as indicative of horizontal or vertical status distinctions in Tiwanaku provincial society, with the goal of determining if and when social inequality may have developed in this region (Goldstein and Palacios 2009:9).

The investigations found that a small cemetery designated M70B located on the northeastern edge of the Rio Muerto M70 site was covered by a layer of rocks, similar to the Atoca-1 cemetery in Azapa (Goldstein and Palacios 2009:73). Baskets, ceramic and wooden vessels, and plant remains (maize, molle, algarrobo) were found on the cemetery surface indicating ritual activity or feasting in the cemeteries (Baitzel et al. 2008; Muñoz et al. 2007). The tombs comprised mostly simple pits, some stone cists and a semi-subterranean tomb type of vertically placed stone slabs that protruded above the ground surface. All tombs had originally been covered with stone piles (Green et al. 2007).
The paucity of materials found inside the burials at M70B was surprising. Only two of the 73 excavated burials contained one ceramic vessel. Baskets and wooden vessels were more common, but the number of offerings was low compared to the Chen Chen-style burials in Moquegua and elsewhere (Goldstein and Palacios 2007; Palacios 2009:73). The burial style in Cemetery M43A near the Chen Chen-style settlement at Rio Muerto presented a hybrid of Omo and Chen Chen-style funerary behavior (Goldstein and Palacios 2007:56). High frequencies of blackware ceramic fragments and the deposition of baskets and ritual objects (assemblage of camelid phalanges) on the cemetery surface resemble Cemetery M70B (Goldstein and Palacios 2009:74). At least two of ca. 20 individuals had been buried with fine tapestries and four-pointed hats (Plunger 2009). In contrast, the neighboring Cemetery M43B contained tombs that conformed with standard Tiwanaku Chen Chen-style pit and cist burials, many of which were marked by surface rock collars. Compared to the other Tiwanaku-style cemeteries in Moquegua and the altiplano, Rio Muerto burials contained few offerings, ceramic or otherwise (Goldstein and Palacios 2009).

Although the Rio Muerto project was unable to detect clear differences in vertical status differentiation between different cemeteries, the identification of distinct burial styles that correlated with residential sub-cultures in Moquegua was a significant contribution to understanding social diversity in the region. In general, Omo-style cemeteries are small and few in numbers. This may be the result of the more mobile, semi-nomadic lifestyle of Omo-style populations whose caravans moved regularly between the highlands and lowlands, maintaining temporary residence in multiple locations (Baitzel 2008; Baitzel and Goldstein 2015). Goldstein has described Omo-style
cemeteries as likely places of interment for elite members of the community (2005:261). I would argue that apart from the one large burial chamber at Omo M16D, there is little evidence that the Omo-style community occupied a high rank in Tiwanaku provincial community. Instead, Omo-style cemeteries are quite variable in their use of tomb architecture and grave offerings, suggesting that their population had higher levels of internal diversity. Because of the materials deposited on the cemetery surfaces, Omo-style cemeteries may have served as places of ancestor veneration and social memory.

Decades of archaeological research at the Tiwanaku site of Chen Chen in Moquegua have produced the highest number of excavated Tiwanaku-style burials at any site to date. The excellent preservation of organic materials in Moquegua provide a baseline for studying Chen Chen-style mortuary practices in Moquegua. Additional excavations of Chen Chen-style burials were conducted at Omo M10 under Programa Contisuyo in the 1980s (see Chapter 5), and more recently at Rio Muerto M43.

In 1965, archaeologists Hans Dusselhoff, Gary Vescelius and Rogger Ravines, excavated 17 intact burials at Chen Chen, noting the presence of “hundreds of looted cylindrical and some rectangular stone cists” (Dusselhoff 1968:213). The tombs were covered with stone slabs and sometimes sealed with mud. Eight of 17 burials contained children. Seven of the 15 burials contained decorated ceramic offerings of keros, tazones and vasijas (Dusselhoff 1968:214–5, figures11–16), two decorated wooden spoons, and textiles.

During salvage excavations in 1987 and 1988, Vargas excavated 33 cemetery sectors at Chen Chen, of which 13 were excavated completely. The project recorded 4291 burials (334 intact, 2042 partially disturbed, the remaining tombs completely looted).
Most interments contained single individuals, save for one tomb with three individuals and five tombs with two individuals (Blom 1999:78–9). Tiwanaku burials at Chen Chen adhered to the known pattern of seated-flexed bodies, still wrapped in preserved textiles and braided plant fiber rope. The typical offerings consisted of *tazones, keros, vasijas,* and wooden spoons. Offerings were occasionally found above the capstone rather than within the tombs (Blom 1999:80). Cist structures were more frequent than other tomb types, and tomb architecture correlated with cemetery area. Burials at Chen Chen had moderate offering assemblages; the wealthiest tomb contained two *tazones,* an *olla,* a *vasija,* a spoon, spindle, comb, and gourd. Offerings varied across cemeteries and age groups, but males were more frequently found with *zampoñas* and with decorated ceramic vessels (Blom 1999:80–2). Vargas discovered four urn burials of children at Chen Chen, and an anomalous interment of a child placed in a shallow oval pit in extended position wrapped in a mat of vegetable fiber and cord (Blom 1999:79 fn21).

Further salvage excavations at Chen Chen in 1995 recovered 132 burials from eight sectors. The total number of burials at Chen Chen is estimated to be over 12,800 (Owen 1997:7). They included partial and complete stone cists and pit tombs. Owen noted that the number of grave goods was relatively low, consisting of between zero to two Chen Chen-style ceramic vessels, and sometimes wooden spoons or other artifacts (1997:6). The excavated tombs were divided into three taphonomic categories: completely empty or looted, lightly to heavily disturbed, and intact (without intact capstones). For the intact tombs, it was possible to establish that the cist or pit had been partially refilled with the original sediment (Owen 1997:6). Additional excavations at the site by Pari in 2002 recovered 1101 tombs, 11% of them intact (Sharratt 2011:129). In
her reanalysis of 138 intact tomb lots from excavations by Owen and Pari, Sharratt confirmed many of Vargas’ original observations. Seventy percent of tombs were stone-lined cists. Where tomb covers had been present and recorded, they included both single and multiple stones (including grinding stones). A few burials contained multiple individuals, and others contained only partial remains and may have constituted secondary burials (Sharratt 2011:141). Children of all ages and adults of both sexes were present. Ninety-three percent of tombs (n=129) had single-individual interments, but six burials contained between two and four individuals (Sharratt 2011:143). Sharratt analyzed over 65 textile specimens that included 33 mantas, 20 frasadas, most of them warp-faced with some interlocking warp-weave (2011:144).

Ceramic vessels at Chen Chen were highly standardized in size and showed evidence of use prior to interment, including damage and repair and modification for re-use (Sharratt 2011:145). Ceramic vessels included tazones (42%), keros (20%), vasijas (18%), cups (8%), bottles (4%), cántaros and ollas (3.5%), incensarios and sahumadores (3.5%), miniatures (0.8%) and bowls (0.8%). Ceramic vessels depicted anthropomorphic, zoomorphic and geometric designs with black, white, and orange paint on red slip in the typical Tiwanaku Chen Chen-style (Goldstein 1985, 1989, 2005). Sharratt reports the presence of vessel pairs or highly standardized vessels interred in different cemetery sectors. LA-ICP-MS analysis of ceramic fragments from Chen Chen burials showed that the “majority of analyzed sherds were likely produced using Moquegua Valley clays and thus the result of crafting activities within the colony” (Sharratt 2011:151).

The most common non-ceramic artifacts were wooden spoons, fiber baskets, wooden boxes, combs and cane flutes, spindles and needles, and shell beads. Sharratt
concludes that social difference was “downplayed” within the Chen Chen community, with no significantly spatial correlation in tomb architecture, burial style, textiles, or ceramic forms or decoration (2011:165–7). While certain tomb structures, ceramic and non-ceramic offerings varied in frequency between male and female interments, there were no absolute divisions of burial attributes based on sex.65 The age of the deceased also did not influence his or her grave offerings. Status and occupational distinctions may have been present but were difficult to establish due to the low quantity of burial goods (Sharratt 2011:176–7).

Unusual funerary treatment at Chen Chen was afforded to an adult female interred with “backward”-spun (SZ) coils of wool. Another female adult had been buried in a boot tomb and was accompanied by a non-Tiwanaku ceramic vessel that could not be associated with other Tiwanaku regions (Sharratt 2011:177–8). Six multiple-individual interments were recorded (child-child, adult-child, adult male-adult female).

In 1984 and 1987, Programa Contisuyo conducted test excavation of 69 burials — many of them heavily disturbed — at eight cemetery sectors at the Omo M10 site. Because a more detailed description of these contexts will be included in the data description of the next chapter, I provide here a brief summary and the interpretation of the data. A little less than half of the tombs at Omo M10 were stone-lined cists, and wooden tomb markers may have been used to distinguished corporate groups within the larger Tiwanaku Moquegua community (Goldstein 2005:247). Funerary garments consisted mostly of warp-faced camelid-fiber cloth, but included rare cases of interlocking tapestry. Decorated Chen Chen-style red-slipped keros dominated the

65 except weaving tools and flutes, which have very small numbers.
ceramic vessel assemblage. Non-ceramic artifacts resembled those found at Chen Chen (Goldstein 2005:250–2). Goldstein asserts that gender did not correlate with status, but gender distinctions existed in the form of women and children being primarily associated with *ollas*, whereas *keros* were found only with adult males and children (2005:254). This would correspond with the changing gender patterns in Cochabamba that saw the restriction of *keros* used only in male burials by the Late Piñami phase. Status distinctions may have been more pronounced at Omo M10 than at Chen Chen. The comparatively large quantity of grave goods in Cemetery M included decorated serving wares, textiles, and a silver earspool (Goldstein 2005:260–1). Overall, the preference for single-individual subterranean burial, and seated-flexed funerary bundles wrapped in camelid fiber textiles and accompanied by the emblematic set of grave offerings perpetuated the conservative nature of highland mortuary practices in the colonies (Goldstein 2005:266–267).

No intramural burials have been reported at Tiwanaku sites in Moquegua. In addition to multiple-individual interments, which extremely rare, there are a few other burials in the region that fall outside the normative spectrum of Tiwanaku mortuary variability. As mentioned earlier, at the site of Chen Chen, Vargas found the oval pit burial of a child in extended position. Multiple burials, while rare, did occur occasionally but otherwise adhered to normative Tiwanaku interment practices. Excavations at Omo M10 identified a possible cluster of these interments near the temple (Goldstein 2005:258; see Chapter 5). Excavations of Cemetery M10-29 at Chen Chen in 2005,

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66 Household excavations of Moquegua Tiwanaku sites are not as extensive as mortuary excavations, and the absence of sub-floor intramural interments may be the result of archaeological sampling.
revealed shallow oval pit burials with stone collars. Adults and children were interred in a flexed position on their sides. The lack of ceramic offerings made it difficult to confirm the cemetery’s cultural affiliation. A few small, thin-walled vessels of unusual forms and made from a fine orange paste were found (Figure 4.4). In addition, the burials contained high frequencies of silver and copper rings, and small tools from shark teeth (Palacios 2007). Cemetery M43C at Rio Muerto also consisted of very shallow tombs but had been looted completely, with textile and ceramic fragments of Tiwanaku and non-Tiwanaku styles (Goldstein and Palacios 2009:56).

4.5 Regional and Local Variability of Tiwanaku Mortuary Practices

Mortuary excavations in the capital, heartland, and provinces of the Tiwanaku state have produced a substantial sample of burials that provide information about social identities and regional variability in mortuary practices. Nevertheless, the fragmentary nature of the existing mortuary samples poses some challenges for reaching more comprehensive conclusions about Tiwanaku social identities, relationships and structures (see also Korpisaari 2006:154–155). Unsystematic excavation and recording techniques during early mortuary excavations at Tiwanaku and other altiplano sites make it difficult to assess the degree to which the presence of Tiwanaku ceramic grave offerings represent direct or indirect influence of the state at the local level—i.e., whether they reflect the ethnic or cultural identity of the interred as in the case of Moquegua, or the use of foreign prestige objects to materialize local status differences. This issue cannot be resolved with certainty, unless the mortuary excavations were conducted in combination with
household excavations, for example in the case of Chucaripupata on the Island of the Sun, or in Moquegua and Cochabamba.

For the larger mortuary samples that were scientifically excavated in the *altiplano* (e.g., Lukurmata, Chucaripupata, Tiraska), archaeologists have argued for a scenario in which local populations adopted Tiwanaku burial patterns (i.e., use of extramural cemeteries, uniform single-individual below-ground pit or cist interments, serving vessel offerings) to signal their participation in the cultural-ideological phenomenon that was Tiwanaku. Based on evidence of ancestor veneration from earlier time periods (e.g., Hastorf 2003; Machicado 2009; Scott and Pérez Arias 2015), the ideology of feasting with the dead as promoted by Tiwanaku must have been a familiar one to people living in the Lake Titicaca Basin. The known use of serving vessels in burials may have aided in the more profound transformation of mortuary ritual during the Middle Horizon.

The limited or partial nature of many of the mortuary samples and the poor preservation of organic and skeletal remains in highland environments make it difficult to make systematic observations about social identities like gender, age, or kinship that can only be derived from patterns of variability in mortuary treatment. Discussions and conclusions about gender and other types of social identities vary across regions, a likely result of the different mortuary samples available to date. In the highlands, discussions of social identities have focused largely on status as indicated by the quantity and quality of grave offerings, and the location of tombs relative to social spaces of power and community. Both at the Tiwanaku capital and smaller sites in the *altiplano* (and in the provinces, e.g., Omo M10), the placement of burials near or inside monumental structures, elite compounds, and community patios reflects the elevated social status of
the interred compared to that of individuals buried in extramural community cemeteries. In contrast, the intramural burials found in Tiwanaku-affiliated settlements in Cochabamba seem to reflect a hybrid local-immigrant mortuary tradition that does not conform to the Tiwanaku burial style in terms of location. The Cochabamba burials were also unusual for their high level of differentiation in terms of grave goods. Instead of location, Cochabamba-Tiwanaku communities interred high-status individuals with large grave assemblages (in excess of 10 vessels), whereas Tiwanaku-affiliated burials in the altiplano and in Moquegua commonly included one to three offerings, and very rarely more than that.

Kinship or community identity in Tiwanaku society was also expressed through space, but more in terms of bounded discrete space rather than location, e.g., residential compounds and community mounds within the capital and in the Moquegua provinces (e.g., Goldstein 1993b, 2000b, 2005; Janusek 2004). At Tiraska, the presence of two discrete contemporaneous cemetery areas appears to reflect community groups based on their access or preference for Tiwanaku serving wares as grave offerings. In Moquegua, the use of discrete cemetery areas is even more pronounced. Multiple discrete cemeteries accompanied settlement complexes at Chen Chen, Omo, and Rio Muerto; they highlight both the large size and the segregated social organization of Tiwanaku’s provincial population. Even though the Tiwanaku cemeteries in Moquegua have been studied intensively over the last decades, archaeologists have found little evidence for the use of different burial styles to distinguish between cemeteries and the different community-based identities within provincial society. Although Vargas (1994) proposed that tomb style frequencies at Chen Chen varied between cemeteries, Sharratt (2011) did not
confirm this observation. Neither did she detect any differential preferences for grave offerings, body position, or funerary textiles between cemeteries. Goldstein proposed that “future consideration of more subtle stylistic and technical variation among artifacts from different cemetery groups has the potential to isolate some of [the] distinct segments of the colonial Tiwanaku population” (2005:255). In support of this, he cites the study of cranial vault modification style techniques conducted by Hoshower and colleagues (1995) at Omo M10.67

A review of the excavation data from several cemeteries in Moquegua and Azapa suggests that there may a distinct burial style associated with the smaller Omo-style (agro-pastoralist) Tiwanaku group. Diagnostic characteristics for these cemeteries include the use of greater grave wealth, rock accumulation on the cemetery surface, and surface offerings (Goldstein 2005:261–265). The question of whether community identity was expressed in the burial style requires further investigation. On the one hand, this will reveal the extent and depth of social heterogeneity and practice within Tiwanaku society. On the other hand, it will also help discern whether social differences were also linked to inequality and unequal access to resources. Together, these observations provide valuable information about the social organization of Tiwanaku society, and the degree to which

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67 The results of the study conducted by Hoshower et al. (1995) are problematic for several reasons. New excavations and radiocarbon dating at Omo M10 (this dissertation) show that there are no substantial temporal differences between the Omo M10 cemeteries to suggest that change in CVM style technique was based on time. Secondly, the study did not reveal absolute differences in CVM style technique across cemetery populations; only a few sectors contained exclusively one particular style technique. Sample sizes were relatively small (between 4–6 crania per cemetery). Lastly, a preliminary reanalysis of CVM styles and techniques based on a larger sample by Dahlstedt and Baitzel (2014) did not support the previously made observations; instead it found that CVM style technique varied equally between and within cemeteries.
social differences between communities were expressed and performed in settings beyond the domestic sphere.

Previous mortuary investigations have made some progress on identifying and understanding social identities at the level of the individual, such as gender and age. In many of the burials from the altiplano, the more humid environment prevented the ageing and sexing of skeletal remains. The consensus among archaeologists who have excavated and analyzed larger Tiwanaku burial samples in the Tiwanaku heartland and provinces is that age and sex identities of the deceased were acknowledged through the choice of grave offerings, but played a relatively minor role compared to status, community, and a broader cultural identity of being Tiwanaku. In Cochabamba and in some places in Moquegua, male individuals were more often buried with keros more often than female individuals, who received cooking pots and occasionally spindles instead (e.g., Anderson 2009:186; Goldstein 2005:254; Sharratt 2011:169). However, these differences were not absolute. Investigations into age identities in Tiwanaku society have been limited to the assertion that adults often received more offerings than children overall, but it remains unclear whether there exist other differences in style or degree.

With better excavation methods, archaeologists have more recently been able to identify and recover evidence of post-interment activities in Tiwanaku mortuary rituals. Compared to the above-ground funerary structures used in the central Andes during the Middle Horizon and in the Late Intermediate Period throughout the Andes, the subterranean individual burials used by Tiwanaku communities do not suggest high visibility or continued access and veneration (Isbell and Korpisaari 2015). Nevertheless, deposits of smashed ceramic vessels, baskets, and foodstuffs on Tiwanaku cemetery
surface in Moquegua and Cochabamba (Baitzel et al. 2008; Döllerer 2013) suggest that Tiwanaku cemetery may have functioned as sites of prolonged interactions with the dead. A desire to commune with particular individuals who may have held exceptional social positions is also reflected in the placement of isolated burials in residential patios or in secluded cemetery areas in elite residential compounds (Couture and Sampeck 2003; Janusek 2004).

4.6 Non-Normative Tiwanaku Mortuary Practices

After reviewing the mortuary evidence from the Tiwanaku capital, altiplano sites and provincial settlements, I want to return briefly to the issue of sampling and non-normative burial practices. As the overwhelmingly homogeneous style of burials in Tiwanaku-affiliated sites outside the capital has illustrated, the normative Tiwanaku mortuary practices involved the use of extramural cemetery space, seated-flexed east-facing interment in subterranean pit or cist tombs, accompanied with offerings of serving wares, metal jewelry, and sometimes tools or other personal objects. In light of this consistent funerary behavior, the non-normative character of burials found at Tiwanaku (and a few smaller Tiwanaku sites) is even more striking.

The number of burials recovered to date from Tiwanaku does not account for the site’s multi-generational residential occupation, or even just the number of residents of the excavated residential spaces, and no discrete cemetery areas have been formally identified or excavated. It is probable that substantial cemeteries outside the residential sectors have not yet been identified; Bandelier (1910) speculated that the main location
for Tiwanaku burials was located in the area covered by the modern town of Tiwanaku. As a result, there is a lack of normative Tiwanaku burials from the capital site with which to compare the few urban burials and the numerous tombs from secondary and provincial settlements.

Most burials excavated at the Tiwanaku site can be categorized as non-normative based on their affiliation with monumental or public spaces, a recurring use of facedown-flexed position or comingling of remains, tomb structures, or associated materials. Within non-normative burials, I distinguish between formal elaborate tombs that complied with many of the normative features in terms of body position and tomb structure, but stood out in location and offering assemblages, and the less elaborate deposits of human bodies or body elements on the other hand. The former were deep subterranean tombs with stone or adobe lining, occasional side chambers, and formal closure by means of capstones indicate a high level of investment in the comfort and accommodation of the deceased individual. These included the cist and shaft burials in the south compound of the Putuni (Tiwanaku IV), the sumptuous sub-floor burials in the Putuni mortuary area (Tiwanaku V) (Couture 2003; Couture and Sampeck 2003), and the seated-flexed interments found in the patios of the Ch’iji Jawira, Akapana East 1 and 2 compounds (Janusek 1994, 2004; Rivera C. 2003). The interment of these individuals close to home—but not inside actual dwellings—suggests that the physical presence of these deceased individuals was important for sustaining their memories in the context of daily life. The distinct offering assemblages seen across this sample reflect the status differences of their respective communities. Patio interments of important individuals were may have been a remnant of
Late Formative intramural burial practices and continued during the Tiwanaku IV and V periods.

A second, more compelling group of non-normative Tiwanaku burials were human remains placed in different body position or states of association in or around monumental spaces at the capital city, Lukurmata, and Tiraska. Three individuals found at the Akapana (Kolata 1993a), multiple individuals in an informal deposit near the Kalasasaya (Verano 2013), and several facedown flexed burials in the Putuni platform (Couture and Sampeck 2003) were found in shallow pits buried in facedown flexed position. The same burial style was used for three individuals at Lukurmata (Bermann 1994), three at Tiraska (Korpisaari 2006), and four at Omo M10 (Goldstein 1989). Together, they present a relatively large corpus of non-normative burials, especially considering the small number of burials that have been excavated in many of these locations in general.

At the city of Tiwanaku, these burials were also associated with disassociated human or camelid remains as well as broken finewares. Most commonly, they were associated with architectural features like foundation walls, entrances, or canals, and sometimes even with particular episodes in the lifecycle of a monument. These burials have been consistently identified as dedicatory offerings or sacrifices, although the cause of death often could not be determined.

In contrast to normative burials which contained intact and complete individuals, maintaining the appearance and integrity of the human body, dedicatory burials contained either complete bodies placed in aberrant, facedown positions, or included isolated, modified, curated, or comingled body elements. It is possible that these contexts
represent later stages in a sequence of funerary events. Initially burying the deceased in shallow pits made the remains more accessible at a later moment to remove and modify the individual elements of the body.

Although only a few individuals showed skeletal evidence for a violent cause of death, it is unlikely that they had died of natural causes (e.g., old age, illness). The treatment of the human remains in these dedicatory offering deposits resembles the treatment of associated materials. Like the metal and ceramic objects, the bodies had been literally and metaphorically destroyed and disassembled. This ritual process signified the transformation of the integral human body (or vessels) into a high-valued object used to consecrate domestic and public space. The recurring association of human remains with other human or camelid remains in elite and commoner offerings suggests also that the potency of the offering was enhanced by the complementary matching of human-animal, young-old, or same-age pairs. I would argue that human remains found in dedicatory burials were only associated with the most valuable items in Tiwanaku material culture. By virtue of their location and association, these burials presented the most precious form of offering.

4.7 Research Hypotheses

Existing studies of Tiwanaku normative and non-normative burial practices have made significant contributions to understanding social status and community identity as two of the major structuring principles in Tiwanaku, that was also subject to influences based on regional traditions, and the personal characteristics of the deceased.
Nevertheless, many of the observations summarized in this chapter remain preliminary or inconclusive due to small, unsystematic or incomplete burial samples. They can only be addressed through the systematic and scientific study of a large sample of burials that is sufficiently well preserved to determine biological age and sex, and include the entire range of offering objects (both organic and inorganic); takes the form of bounded cemetery areas to compare stylistic variables across cemetery populations; and relates to Tiwanaku’s social landscape and structure in a meaningful and comprehensive manner beyond the physical boundaries of the cemeteries.

In what follows I present data from more recent mortuary excavations at the Omo M10 site to investigate the sources, nature, and effects of inequality and unranked diversity in Tiwanaku society (Chapters 5–9). These mutually exclusive hypotheses are constructed on the assumption that Tiwanaku cemeteries at Omo M10 represented different social units, likely kin or lineage groups (see Chapters 5 and 8).

**Hypothesis 1:** Social diversity and inequality were rooted in individual experiences related to age and gender, and Tiwanaku society was pluralistically organized into autonomous, equal social units fraught with internal hierarchies held together by a cultural ideology of reciprocity between the living, and the living and dead.

This hypothesis would support current models of Tiwanaku as a segmentary, pluralistic society of loosely integrated lineage groups. Kin-based communities living at Omo M10, and elsewhere in the Tiwanaku state, were not ranked hierarchically, although it is possible that the social organization of the capital city differed from that of smaller provincial settlements. Individuals, rather than whole groups, had access to greater prestige or wealth. The experience of life in the Tiwanaku provinces, terms of social
relations and status were shaped by age and gender, which, in turn, were constructed and maintained within the social unit of the kin community. In this internally divided society, death-related ideology and practice were important integrative mechanism that formed part of the wider cultural canon of reciprocity.

**Test Implications:** In this scenario, mortuary variables would be expected to correlate positively with age and sex of the deceased. Features of Tiwanaku mortuary rituals that have been found to vary stylistically with regard to the age and sex of the deceased include tomb structure, funerary dress, and grave vessel forms. I would expect the investment in burials to differ, and possible increase, with age and differ between the sexes. Certain types of grave offerings, such as *keros, vasijas*, or spindles, would be found consistently with male or female individuals across the Omo M10 population as gendered activities were publicly recognized and acknowledged. The offerings used within each group would display a certain degree of homogeneity in style or material resource, because access and production of objects found inside the tomb were controlled by individual communities. Finally, evidence for commemorative activities would be pronounced across the site, because the dead as ancestors were important to the reproduction of the group’s social memories and identity; feasting and smoke offerings would be found at all cemeteries, although they could vary in their nature from one group to another. Non-normative mortuary rituals would be used to mark individual social transgressions or exclusion based on age or sex.

**Hypothesis 2:** Social diversity and inequality in provincial Tiwanaku society were mediated through ranked kin or corporate identity communities that existed within a
society-wide hierarchy, which downplayed group-internal differences in favor of a kin-based dominant class system or ideology.

This hypothesis lends support to models of Tiwanaku as a politically unified, hierarchical organism. As kinship formed the basis of inequality, it conditioned the emergence of a kin-based class system. This would also mean that the Tiwanaku provinces were more closely controlled by the highland capital, whose elite class would send emissaries to the provinces. Kin affiliation determined access to wealth and prestige. Age and gender-based differences, if they existed, would be subtle, secondary, and conditioned by the community’s position within the social hierarchy. Death-related ideology would have aided the elite class to legitimize inequalities, especially in the form of non-normative mortuary rituals that would emphasize elite power over life and death, and from which subjects of the state were not protected regardless of age, gender, or kin affiliation.

Test Implications: In this scenario, mortuary variables correlate most strongly with cemetery space. In the absence of existing mortuary studies that can attest to inter-cemetery variability, I draw on stylistic and material differences from residential excavations. I would expect ceramic ware types, form types and iconographic styles to vary between cemeteries, because these are among the defining characteristics of group identity in the highlands and in Moquegua. Another line of evidence of kin group affiliation is textile design, which would correlate with the spatial segregation at Omo M10. Tomb structure styles have been known to vary regionally, and may also correlate positively with cemetery space. Because funerals and commemorative presented opportunities to enact the differences in rank that separated communities, I would expect
investment in these activities to differ significantly between cemeteries in terms of
visibility and extent, for example, through the variable use of feasting and burning rituals.
Non-normative funerary rituals could be applied to individuals based on age or gender, or
on entire social classes; they may be homogeneous in their manipulation of body
treatment and offerings.

Throughout the following chapters, I present additional “sub-hypotheses” in
relation to specific topics (age and gender in Chapter 7, kinship communities in Chapter 8). These are designed to aid the final synthesis of the different lines of inquiry in the
Conclusion.
CHAPTER 5: MORTUARY EXCAVATIONS AT OMO M10

Introduction

Mortuary archaeology in the Moquegua Valley has made significant contributions to the identification and understanding of fundamental aspects of Tiwanaku mortuary practice, social organization and identity in provincial Tiwanaku life (see Blom 1999; Buikstra 1995; Goldstein 1989, 2005; Hoshower et al. 1995; Sharratt 2011). The hyperarid natural environment of the region ensures the preservation of organic materials like plant and animal fibers that formed such an essential part of Tiwanaku material culture, including objects used in interring the deceased.

The site of Omo M10, as described in Chapters 3 and 4, is unique among the Tiwanaku settlements in the Moquegua Valley due to its monumental temple complex. Over the last 33 years, Omo M10 has been intensively investigated, particularly in the 1980s and again since 2010 (e.g., Goldstein 1989, 2005, 2013; Goldstein and Palacios 2015; Bermann et al. 1990). Here I present data that were newly recovered through scientific excavation and in 2010 and 2011, and analysis of the excavated materials in 2011 and 2012. I also incorporate excavation data from cemetery excavations conducted in the 1980s based on the original field notes and interpretations (Goldstein 1989, 2005), as well as a re-analysis of the materials according to the methods of analysis used in 2011-2012 to obtain comparable data sets.

This chapter lays out the geography and research history of the Omo M10 site, describes excavation and analysis methodologies, and provides a brief description of the
excavated cemetery sectors, units, and burials. In doing so, I present and justify the criteria used for recording context and materials in the field and laboratory. These criteria ultimately form the bases for the analysis and interpretation of Tiwanaku funerary processes, social identities, and community-state interactions in Chapters 6, 7, and 8, respectively. A subsection of this chapter is dedicated to natural and man-made taphonomic processes that affected the burial contexts at Omo M10, re-evaluating and expanding some of the arguments made by earlier investigators (Goldstein 1989, 2005). The last section of the chapter gives a general overview of the excavated cemetery sector at Omo M10 with the number of excavated contexts, their condition, and a brief summary of general mortuary characteristics like tomb architecture and body position, as well as the types of grave offerings associated with the burials.

5.1 Geography and Research History of the Omo M10 Site

5.1.1 Site Location and Geography

As mentioned in Chapters 3 and 4, the Omo M10 site is located in the Middle Moquegua Valley, some 250 km west of the Tiwanaku capital and 90 km east of the Pacific Coast. M10 is the southernmost site within the Omo settlement complex (to the north are M11, M16, M12, and M13, in order of increasing distance) located on the eastern side of the Moquegua River overlooking a large portion of the Middle Moquegua Valley to the north and south. An additional area of domestic occupation M96, was located to the east of M10 by the Moquegua Archaeological Survey in 1994 (Goldstein 2005).
The site boundaries of Omo M10 reach from approximately UTM N8092050 to 8092650 and E 289200 to 289900 (WGS84)\(^6\), with an average elevation of 1,120 m asl (Figure 5.1).

**Figure 5.1** Omo M10 site with monumental sector (M10A), domestic sector (M10C), and cemetery sectors (M10B, H–J, M, N, P–Y).

The main components of the Omo M10 site (monumental, domestic, and most cemeteries) are located on the flat *mesa* circa 20–30 m above the valley bottom. The *mesa* is bordered on all sides by slopes that are steepest on the north and east side. It has an irregular shape in the west where erosion from rainfall has carved out three *quebradas* between four discrete bluff top extensions. Toward the eastern end of the M10 *mesa*, a

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\(^6\) The indicated extent of the site includes Cemetery R and geoglyphs to the south of main site components. The legal site perimeter designated by the INC Peru in the 1990s only reaches as far south as UTM N8092200.
small natural hill rises approximately 15 m above the plain. To the south, the site is separated from another natural hill by a *quebrada* that features a natural spring. The opposing hillside was used as a cemetery (M10R), and includes a series of geoglyphs on its western slope, facing the river. On the northern side, at the bottom of the bluff is a natural aquifer used today for irrigation of agricultural fields. The surface of the bluff is wind-deflated and naturally covered with aeolian sediment, small rocks and gravel.

5.1.2 Research History of Omo M10

The site was first identified from the air by Michael Moseley and Robert Feldman, and registered in 1983 through aerial photographs and initial survey by the Programa Contisuyo, a bi-national archaeological research program affiliated with Field Museum, Chicago, directed by Moseley. Mapping and test excavations in 1983 and 1984 were directed by Moseley, Feldman and Luis Watanabe, and conducted with the help of several U.S. archaeologists and graduate students (Marc Bermann, Paul Goldstein, David Jessup, Charles Stanish, Daniel Rogers and Don Rice). Using a Wild T3 theodolite, Goldstein, Stanish and Bermann in 1983 created a 1:1,000 map of the topography of the site, the layout of the monumental temple complex, the plazas in the habitation sector, and the boundaries of the domestic and cemetery areas. The M10 map was updated by Goldstein in 1987 with the location of some of the 1984 excavated tombs, and a site grid for systematic surface collection and domestic excavation units; and again in 1990 with detailed topography of the temple sectors and Cemetery Y, using plane tables and total stations. M10 site mapping in 2010-2012 is detailed below.
The various sectors of the M10 site were designated using letters, beginning with the main monumental structure (M10A) and its lateral platform (M10B) in the eastern part of the M10 bluff, and the habitation sector (M10C) located directly to the west and northwest of the temple in the center/west of the bluff (Figure 5.1).

The initial 1983 survey, as supplemented by the 1993 Moquegua Archaeological Survey, documented 19 cemetery sectors, lettered M10H through X\(^69\) (Bermann, et al. 1989; Bermann, et al. 1990; Goldstein 1985, 1989, 2005). An additional sector designated in 1986, Sector M10Y was a Formative Huaracane boot-tomb cemetery near the northwestern site edge. Cemetery sectors M10K, L, and O were all located in the large quebrada at the northern base of the M10 bluff, and have since been largely destroyed by agriculture, pasturing, looting and road construction. A road cut along the bottom of the bluff in the late 1990s, and the excavation of a sewage trench in 2006 exposed some tombs in profile, but their content was not formally recorded or recovered. Cemetery sector M10N was identified as being of the derived Tumilaca (post-Tiwanaku) style, leaving 17 cemetery sectors that could be considered to belong to the Tiwanaku occupation of the site, of which 13 were extant in 2011.

In 2009, Paul Goldstein and myself, in collaboration with Luis Gonzales of the INC Moquegua mapped and recorded seven geoglyphs on the hillside they share with Cemetery R, south of the Omo M10 main bluff. The site boundaries were formally

\(^69\) Approximately 10-15 burials on the southwestern side of the Temple’s upper court were included in the area of Sector A. The burials were heavily looted, and those visible in 2011 seem to consist mostly of collared, stone-lined cists. A layer of volcanic ash on the inside edges of several of the tombs indicate that looted occurred both pre- and post-A.D.1600. A single tomb, A-7, was excavated in 1984; the most diagnostic materials recovered from this context were multiple polychrome textiles that may be of Tiwanaku or post-Tiwanaku affiliation.
extended in 2011 to include these features. The geoglyphs at Omo M10 included, in order from north to south, a large camelid, a kero or funnel-like shape/triangle, as well as three more camelids of varying sizes.

Excavations under the Programa Contisuyo in 1984 concentrated on obtaining stratigraphic information from the upper court and lateral platform of the temple (trenches M10A-1 to A-7, B-1 to B-12) and the domestic portion of the site (M10C-1 to C-4, D-1, E-1). They also included the excavation or cleaning of 68 partially disturbed tombs at eight cemeteries (M10B, M, N, P70, Q, R, S, T). Tomb sediments were not screened, so that some smaller artifacts may not have been recovered. Recording techniques for the excavation of the tombs were not standardized and varied significantly. Osteological analysis was conducted by Bermann in the field, and a more extensive review (human remains inventory, age, sex, some paleopathology) was conducted by Lisa (Leuschner) Hoshower under the supervision of Jane Buikstra in 1986 and included in this analysis (Buikstra 1990, 1995; Buikstra et al. 1990; Hoshower et al. 1995). For his MA thesis, Goldstein analyzed the excavated ceramic vessels and artifacts from the 1984 M10 cemetery excavations along with vessels from private collections and some surface-collected sherds (Goldstein 1985). Amy Oakland consulted on the analysis of the mortuary textiles in 1986. In 1986 and 1987, Goldstein’s dissertation research focused on household excavations in four areas at Omo M10. As part of the 1987 field season,

70 On the original 1:1000 scale map of the Omo M10 site from 1983, the cemetery sector located ca. 100m east of Sector A was labeled M10P, while the cemetery located approximately 150m to the north of Sector A was labeled M10U. In subsequently published site maps (Goldstein 1989, 1990, 1993a, 2005), the labels of the sectors are reversed. Since pilot excavations were conducted at the original M10P sector in 1983, I maintained the original sector designation for the purpose of the excavations in 2010-2011.
Goldstein also excavated one additional burial (B-13) in sector M10B, and six “boot” tombs in the Formative period cemetery sector M10Y, as well as three tombs at the neighboring Omo M11 site. A summary of the 1984 and 1986 excavated tomb structure, disturbance, age, sex and MNI of human remains, as well as the inventory and minimal description of recovered artifacts is provided in Goldstein’s dissertation Appendix B and subsequent book (Goldstein 1989:284-299, 2005:248-253). These interpretations are discussed in Chapter 4.

Separate from the mortuary excavations in 1984, 1987, and 2010–2011, human remains were also found at the M10A temple complex during excavations in 1990 and 2010–2012. Although no formal tombs were identified in the main temple M10A complex, human teeth and cranial fragments were found throughout the fill of the temple’s upper court (Goldstein and Palacios 2015). In 2011, a large pit (Feature AR-183/AR-266) containing the disturbed and poorly preserved remains of multiple individuals was found in the southeastern patio of the upper court (Dahlstedt and Goldstein 2013). The partial remains of at least three juveniles and one adult showed no evidence of modification.

Subsequent studies of the Omo M10 mortuary collections have included the analysis of 28 crania for the comparison of cranial vault modification styles and techniques by Hoshower and colleagues (1995), the carbon and nitrogen stable isotope analysis for the study of diet in ten individuals from sectors M10S and M10M by Karin Sandness (1992 see also Somerville et al. 2015), and an analysis of muscle-stress markers for the study of labor activities by Sara Becker (2013). Ongoing analyses incorporating the 1984-87 sample with the greatly expanded 2011 sample include an expanded study of
diet and migration patterns at Omo M10 using stable isotope of carbon, nitrogen, oxygen and strontium (Dahlstedt n.d.), and the analysis of dental morphology for reconstructing long-term population dynamics in the region (Johnson n.d.).

5.2 Mortuary Excavations in 2010-2011

In 2010, the Proyecto Arqueológico Omo M10 initiated a three-year\(^{71}\) project of archaeological fieldwork at Omo M10, followed by two seasons of laboratory analysis. The project was directed by Paul Goldstein and Patricia Palacios Filinich, and approved by the Peruvian Ministerio de Cultura under the permits RDN-1618/INC (2010-2011) and RDN-265-2012 (2012). The 2010–2012 Omo project comprised distinct programs of temple excavations directed by Goldstein at Sector M10A, and mortuary excavations directed by myself.

5.2.1 Mapping of Omo M10 Cemetery Areas and Units

In 2009, preliminary mapping and excavation datum points were shot in various datums at the site with a differential GPS\(^{72}\), including the site boundary markers of the

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\(^{71}\) From July to September 2010, April to August 2011, and May to August 2012, excavations were conducted by Goldstein at the Omo Temple M10A, with funding from NSF 1067986 in conjunction with the UCSD Archaeological Field School. From September 29 to December 21, 2010, and February 3 through April 28, 2011, I conducted excavations at the mortuary sectors with support of Fulbright and NSF DDIG 1240007 Cemetery material analyses were finalized between August and December 2012 in Moquegua. In summer 2013, I returned for a brief 6-week season for a re-evaluation of osteological and ceramic materials.

\(^{72}\) I thank Dr. Frank Magilligan for making his DGPS equipment available to me in 2009. The points were recorded in PSAD56, and later converted into WGS84 with DPGS points
Ministerio de Cultura. These points served as the basis for all subsequent mapping activity in 2010 and 2011. Cemetery boundaries were remapped in ArcGIS by georeferencing aerial photographs of the site taken in 1946 (Series Number 1837-20) to known points from the 2009 reconnaissance.73

Due to the wind-deflated surface of the Omo M10 site and the lack of organic soil formation in the region, many of the cemeteries remain exposed and visible even today.

Table 5.1 2010 tomb counts, trenched area, and tomb density.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Tomb Count</th>
<th>Area Excavated (m²)</th>
<th>Tomb Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>12</td>
<td>72*</td>
<td>0.18</td>
</tr>
<tr>
<td>H</td>
<td>20</td>
<td>62</td>
<td>0.32</td>
</tr>
<tr>
<td>I</td>
<td>21</td>
<td>48</td>
<td>0.44</td>
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<td>14</td>
<td>43</td>
<td>0.33</td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>16</td>
<td>0.07**</td>
</tr>
<tr>
<td>P</td>
<td>18</td>
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<td>0.56</td>
</tr>
<tr>
<td>Q</td>
<td>10</td>
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<td>T</td>
<td>13</td>
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</tr>
<tr>
<td>U</td>
<td>16</td>
<td>53</td>
<td>0.30</td>
</tr>
<tr>
<td>V</td>
<td>19</td>
<td>48</td>
<td>0.40</td>
</tr>
<tr>
<td>W</td>
<td>21</td>
<td>49</td>
<td>0.43</td>
</tr>
<tr>
<td>X</td>
<td>39</td>
<td>32</td>
<td>1.22</td>
</tr>
<tr>
<td>Total</td>
<td>233</td>
<td>585.5</td>
<td>0.4</td>
</tr>
</tbody>
</table>

* Normalized for units within cemetery area of B-platform.
** Unit was placed on edge of cemetery, but visual assessment of cemetery area suggests density was similar to other cemeteries.

Cemetery areas were easily identifiable by the concentration of large rocks scattered or arranged in circular groups, and by the abundance of shallow silt-filled circular depressions that indicate the presence of looted or intact tomb features. Cemetery areas mapped in 1983 were revised based on new excavations, ground survey and visual

taken at the site in 2012 by Dr. Hans Barnard using a standard linear equation for the southern Andes (x-210.4064, y-359.7618).

73 The reliability mapping cemetery boundaries through aerial photographs was tested by
assessment of cemetery extents in 2010 and 2011 (see Table 5.1). The result is a
significantly higher estimate of burials in most cemeteries and at Omo M10 overall than
previously thought, based on wider extents of cemeteries and higher densities of tombs
per square meter, based on the tomb densities noted in the 2010 excavations. Only two
cemeteries, B and P, were found to be significantly smaller in area than previously
estimated (Table 5.2).

Table 5.2 Estimated and revised cemetery areas and tomb counts at Omo M10.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>A</td>
<td>200</td>
<td>40</td>
<td>-</td>
<td>40</td>
</tr>
<tr>
<td>B</td>
<td>1,650</td>
<td>330</td>
<td>661</td>
<td>119</td>
</tr>
<tr>
<td>H</td>
<td>450</td>
<td>90</td>
<td>1,272</td>
<td>420</td>
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<tr>
<td>I</td>
<td>120</td>
<td>24</td>
<td>385</td>
<td>169</td>
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<tr>
<td>J</td>
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<td>K</td>
<td>300</td>
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<td>120</td>
</tr>
<tr>
<td>L</td>
<td>150</td>
<td>30</td>
<td>-</td>
<td>60</td>
</tr>
<tr>
<td>M</td>
<td>990</td>
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<tr>
<td>N</td>
<td>90</td>
<td>18</td>
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<td>84*</td>
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<tr>
<td>P</td>
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<td>264</td>
<td>893</td>
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<td>Q</td>
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<td>300</td>
<td>60</td>
<td>1,202</td>
<td>505</td>
</tr>
<tr>
<td>T</td>
<td>300</td>
<td>60</td>
<td>492</td>
<td>202</td>
</tr>
<tr>
<td>U</td>
<td>400</td>
<td>80</td>
<td>507</td>
<td>152</td>
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<td>V</td>
<td>190</td>
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<td>155</td>
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<td>W</td>
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<td>X</td>
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<td>432</td>
</tr>
<tr>
<td>Y</td>
<td>2125</td>
<td>425</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>9,917</td>
<td>1,977</td>
<td>11,760</td>
<td>5,359</td>
</tr>
</tbody>
</table>

*calculated using site average of 0.4 tombs/m².

In 2010 and 2011, baselines were placed in each cemetery using a Topcon Total
Station. Units were then measured in from these baselines using measuring tapes with
sub-centimeter accuracy. The locations of the excavation units were chosen with the aim of exposing and excavating undisturbed burial contexts. This trenching strategy was done partially in response to the pilot sample from the 1984 excavations, which had targeted large, surface-visible stone cists, likely resulting in an over-representation of such features. I therefore deliberately avoided recently looted contexts and placed units in seemingly undisturbed areas between looted features, in the assumption that sediments from looted tombs had covered – and therefore protected – small tombs. The goal was to recover a comparable, representative number of burial features from each cemetery sector (approximately 20 burials) regardless of the overall size of the sector (Table 5.1). In cemeteries without an existing mortuary sample, more units were excavated (3 units in unexcavated cemeteries, 2 units in excavated cemeteries). An additional objective and advantage of the trenching strategy of the 2010-2011 excavations was to expose the use surfaces of cemeteries to test whether there existed materials remains relating to extra-tomb activities in each cemetery.

5.2.2 Excavation Methodology

Levels: Prior to excavation, unit surfaces were photographed from lateral and plan views and drawn in 1:20 cm with elevations using a local datum (Appendix A). Unit levels were excavated in natural strata where possible, and arbitrary strata if the natural deposit was deeper than 10cm. Volumes of excavated rocks and sediments were counted. Except for soil samples, sediments from levels were passed through ¼” metal screens. Piece plots of in situ artifacts were mapped on the level maps. The base of each level was photographed and drawn. Excavations continued until the occupational surface associated with tomb
construction and use was exposed, or to sterile sediment, in cases when the use surface could not be identified. All artifacts were bagged and labeled by category.

Areas: Areas within the level that seem to be distinct from the general depositional history of the unit were excavated as areas, e.g., middens, or backdirt from looting deposited around tombs.

Features: Features were excavated following the level in which they were first identified to minimize the risk of looting. On field forms (Appendix B), both the level of excavation and the level of association were noted. Mortuary and non-mortuary features were excavated similarly. The loose wind-blown deposits that covered most tombs were removed to detect traces of volcanic ash, the quantity and placement of which could indicate the timing and degree of tomb disturbance (see below). The upper fill sediments were bisected to allow a profile drawing; below this level, sediments were generally too loose to continue profiling. The feature would be opened entirely and excavated in layers, allowing for the recording of artifact finds in order of deposition. Artifacts from each excavation layers were photographed and drawn in situ, and their elevation relative to a local tomb datum was annotated on the drawing. All sediments from features were passed through a 2mm fine mesh to ensure the recovery of small artifacts. Empty features were drawn to obtain a visual representation of the tomb space and architectural characteristics. All artifacts were bagged and labeled by category.

74 Deposits of fine light-grey volcanic ash in this region stem from the eruption of the Huayna Putina volcano in the neighboring department of Arequipa in February 1600 (Goldstein 1989:98).
5.2.3 Characteristics of Mortuary Features

The following characteristics were recorded for mortuary features during excavations in 2010-2011.

Location: The location of the feature was recorded using the last four digits of the nearest southwest UTM coordinate (PSAD56) on a 1x1m grid (e.g., “E9876” represents the last four digits of “UTM E 289876”).

Dimensions: Maximum dimensions of width and length were recorded for the opening and base of each feature, as well as maximum depth measured from the use surface of the cemetery. These dimensions were used to calculate the volume of the tomb interior using the formula $V=2\pi((l+h)/2)^2h$. Tomb openings had a minimum diameter of 20 cm and a maximum diameter of 200 (average: 59 cm). The depth varied from 10 cm to 150 cm with an average of 43 cm.

Tomb Structure: Observations regarding the tomb structure included the types of building materials and their position within the tomb. Distinctions were made between angular rocks, cobbles and slabs (rocks with large flat surfaces). Based on the excavation data, six distinct mutually exclusive tomb architecture types were identified at Omo M10:

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75 For mapping in the field, UTMs were recorded in PSAD56 (based on the datums established in 2009). For subsequent making of site and excavation maps, the coordinates were converted into WGS84 (see Fn5), as required by the Ministerio de Cultura del Perú. The four-digit coordinates listed on field forms and material tags remain in PSAD56.

76 This typology modifies and expands on existing Tiwanaku burial structure typologies (Goldstein 2005:246; Korpisari 2006:142-145; Sharratt 2011:140-141), which typically consist of unlined pits and stone-lined cist tombs, with variants based on their interior and surface architecture (see also Chapter 6).
1. “Simple Pits” were cylindrical or conical depressions without stone architecture. This type corresponds with pits as described by Goldstein (2005:246), Korpisaari (2006:142) and Sharratt (2011:140).

2. “Partial Cists” were cylindrical pits in which only some portion of the sidewalls had been lined with rocks, usually the lower or upper half of the tomb, or one or two sides of the pit. Partial cists have not been previously identified as a separate category.

3. “Inset Cists” were excavated as wide cylindrical pits with a narrowing base. The bottom half of the pit was lined with stone slabs and other rocks to form a complete “inset” stone-slab cist that would reach to the middle of the pit. The lower cist portion was covered separately, while the upper half of the pit remained unlined. Inset cists were not previously identified as a separate category, although they likely would have been included in the category of cist tombs more generally.

4. “Chamber Cists” were rectangular pits that had been lined with stone slabs and angular rocks on all sides to a box-like interior space.

5. “Stone-lined Cists” were cylindrical and had sidewalls that were completely stone lined from the base to the tomb opening with angular rocks or cobbles.

6. “Slab Cists” were lined with cobbles and angular rocks in the upper half and had a single course of vertically arranged stone slabs along the base of the tomb. ‘Semi-subterranean cists’, a shallow depression lined with small stone slabs that protruded above the cemetery surface (Green et al. 2007), are included in this category.
In existing typologies, tomb structure types 4–6 were lumped into a more general category of “cist” tombs (Goldstein 2005:246; Korpisaari 2006:142-145; Sharratt 2011:140-141).

**Surface Structure/Type of Cover**: The surface architecture and tomb covers were recorded separately, because the type of tomb covers did not correspond with a single architecture form.

1. **None**: We would expect all tombs to have been covered originally with roofs made from stones or organic materials, the absence of the cover would be indicative of human activities post-dating the burial. Tomb covers were often affected by looting and could not always be reconstructed based on the available evidence. Surface stones may also have been moved or removed for other reasons.

2. **Stone Piles** of several large and smaller stones placed around the tomb opening and build up into a low mound completely sealing the opening of the tomb.

3. **Large Rocks** that covered most of, or the entire, tomb opening.

4. **Organic materials** like grass or cane used to roof the tomb.

Stone piles or large rocks were often supported by rock “collars” – rings of large stones or boulders placed along the opening and projecting over the rim to narrow the tomb opening. Mud was also sometimes used to seal the open spaces between stones or wood, but was only preserved in a few cases.

**Degree of Disturbance**:
Sixty percent of tombs at Omo M10 (174 of 290) had been disturbed prior to excavation, ranging from seemingly non-intrusive removal of capstone to moving and removal of the tomb contents. Further distinctions were made as an index between tombs that were undisturbed, partially disturbed, or heavily disturbed.

1. Undisturbed tombs: tomb covers were in situ or had collapsed into interior of tomb above the tomb content.

2. Partially disturbed tombs: some of the materials were moved or removed, but enough remained in situ to determined age, sex, position, orientation, and some of the original grave assemblage.

3. Heavily disturbed tombs: significant moving or removal of the tomb content excluded burials from inclusion in systematic comparison.

**Timing of Disturbance:**

1. Pre-A.D.1600 disturbances were identified based on the presence of volcanic ash from the Huayna Putina volcanic eruption inside or on top of tombs with disturbed capstones. Usually, small concentrations of ash were found in the shallow depressions on the surfaces of filled-in disturbed tombs. Occasionally, ash deposits as thick as 65 cm were recorded. However, the presence of volcanic ash was in part determined by the location and topography of the cemeteries, so that cemeteries in the southern half of the site (M10S, T, R) had significantly fewer ash traces than cemeteries in the north, even in extensively disturbed tombs. This may be the result of the site topography, which provides windshelter to some areas.
2. Post-A.D.1600 disturbance could only be determined in tombs where a previously deposited ash layer had been removed and traces of the ash remained along the edges of the structure.

3. In cases where no ash was present, the timing of the looting could not be determined. Fill sediments were not consistent in their make-up across the site, and appear to be influenced by the location and size of the tomb, surface architecture, and the timing of the disturbance. As a result, I am not using fill sediments to assess the antiquity of looting here.

**Fill Sediments:** Tomb sediments were recorded according to compactness, sediment type, and inclusions. If notable changes in tomb fill existed between layers, the depth of the change was noted on the form. Compactness ranged from loose to very compact. Sediments consisted mainly of silt with sandy inclusions, and occasionally volcanic ash. Inclusions included small gravel (<1cm length), small (1-5 cm length), medium (5-15cm) and large (>15cm) rocks. In a few cases in which tombs had been disturbed and exposed for some time, the silt had sometimes been compacted into thin sediment layers that indicated repeated water entry over long periods of time.

**Body Position:** The position of the interred was recorded according to the most likely position of the human remains at the moment of interment. Existing typologies of Tiwanaku body positions have distinguished primarily between seated-flexed and facedown-flexed individuals (Bermann 1994:221-222; Goldstein 2005:245; Korpisaari 2006: table 7.2; Sharratt 2011:143; Vargas 1988). The majority of burials at Omo M10 conformed to these types. A few exceptions were also identified, that expand the typology:
1. Seated-Flexed was the predominant position found in Tiwanaku tombs at Omo M10. This describes individuals found with their torso in an upright position and their legs tightly flexed against the torso (with the knees drawn toward the chest). The arms were either folded over the lap between the thighs and stomach, or extended alongside the body. The head faced forward or was resting against the knees.

2. Reclining-Flexed individuals were flexed in the same manner as described above, but their back was reclining diagonally. Based on the interior space of the tomb it could usually be determined whether the reclining position was intentional or the result of the seated-flexed body sliding forward. Individuals that appear to have slid downward were recorded as seated-flexed.

3. Supine-Flexed position was rare in the Tiwanaku tombs at Omo M10. Lying on their backs, these individuals had tightly-flexed legs that were often resting to one side.

4. Facedown-Flexed positions were also rare, and included the tight flexing of legs alongside the torso in ventral position. The arms were either tightly flexed or extended.

**Body Orientation:** Orientation was recorded based on the alignment and direction of the lower vertebral column and pelvis (if seated or reclining-flexed) or the direction in which the cranium pointed (in supine or facedown flexed individuals).

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77 This category includes individuals whose bodies were found lying partially on their sides with their lower bodies, because the lower torso would have been pulled into this position by the weight of the flexed legs as they came to rest next to the torso.
**Body Articulation:** Human remains were found in various states of articulation, ranging from fully articulated to completely disarticulated (or disassociated). The articulation of human remains depended primarily on the taphonomic processes that affected the tomb, and was used to reconstruct “taphonomic pathways (see below). Goldstein’s assessment of burial taphonomy of disturbed tombs (2005:247-248) is here further refined in regard to particular groups of bones and their range of movement in the tomb depending on their original location and taphonomy.

1. Crania either remained in-situ (associated with the post-cranium or not, if the cervical vertebrae had moved), or were found away from their original position, usually inverted, between the knees, or to the sides or in front of the flexed legs.

2. Upper Body disassociation most often affected the cervical vertebrae, upper ribs and humerus/scapula/clavicle articulation.

3. Lower Body disassociation mostly took the form of flexed legs falling laterally to one or both sides, resulting in the movement of the patellae in adults.

4. Complete disassociation of human remains due to disturbance events, lack of tomb sediments, or secondary burial.

**Artifact Location and Position** was recorded descriptively for materials used in the preparation of the funerary bundle (*fardo*) and for other in-tomb offerings within the tomb and in relation to the body where it could be determined.
5.2.4 Non-Mortuary Features

Non-mortuary features were identified based on the absence of human remains. From the surface, they often resembled tombs. Most frequently, non-mortuary features were midden deposits placed in pits, especially in areas near the habitation sector, or where midden layers were recorded on the surface (M10W, M10V, M10U) or in architecture (M10B). Carbon or ash pits were also included in this category, although their function may have been domestic or ritual (see Chapter 3 on Tiwanaku ritual activities).

5.2.5 Analysis of Mortuary Materials

Artifacts were assigned unique specimen numbers based on material (human remains; ceramics, textiles, artifact; artifact-basketry; botanical; faunal; organic; sample). Each specimen was given a description, weighed and counted for the inventory. During lab analysis in 2011, 2012 and 2013, cleaning and conservation treatment of the individual artifact classes was undertaken based on material in the laboratory of the Museo Contisuyo (Moquegua, Peru) in consultation with the museum curator Lic. Patricia Palacios. The details of the analysis and results are listed in Appendices D–G.

Human Remains: The recording criteria for human remains included a full inventory of osteological materials to determine the MNI per context, completeness of the individual, approximate age range, sex, cranial vault modification style, basic paleopathology, and preservation throughout the skeleton.

Ceramics: Complete ceramic vessels and fragments were examined in regard to their count, weight, ware type, thickness (max/min), diagnostic elements, form type, form variant, exterior and interior decoration, and modification.
Textiles: For complete and fragmented artifacts made from plant or animal fiber I recorded the number and condition of the pieces, structure, the raw material, thread diameter, spin/ply, and color of warp and weft, the thread density, diagnostic elements, superstructure, and modification or repair. A summary and glossary of the textile analysis is presented in Appendix D.

Artifacts: Based on visual analysis, I recorded count, raw material, form, decoration, and modification for all artifact categories (wood, metal, basketry, lithic, gourds), and probable function.

Botanical remains: Plant remains and soil samples were inventoried by Mag. Yenny Umire using fine screens and visual analysis, identifying by genus or species level, where possible.

Faunal remains: Faunal remains were analyzed by Dr. Susan deFrance.

Radiocarbon Samples: Twenty radiocarbon samples from 18 contexts were submitted to the AMS Laboratory at the University of Arizona. For results, see below.

Fardo Unwrapping: Two of the 9 complete fardos recovered at Omo M10 (M10S-16 and M10P-18B) were unwrapped in collaboration with museum staff at the Museo Contisuyo, in order to conserve the textiles found on the bundles and to gain a better understanding of the wrapping process. Each layer of the bundles was recorded through photographs and drawings and description, the materials recovered were given sub-specimen numbers in the order in which they were removed from the bundle.

5.3 Taphonomic Processes at Omo M10
One of the distinguishing features of the mortuary sample from Omo M10 is the remarkably good preservation of many of the organic materials used in Tiwanaku funerary processes, like textiles and basketry. Because such objects are rarely found in highland or wetter climates, this case study widens our understanding of what materials are present and how they came to play in ritual practices. This can be particularly important in regard to understanding the time frames involved in stages of the funerary ritual, and for reconstructing the original tomb context and content.

Nevertheless, even at Omo M10, preservation and taphonomy are not homogenous across the sample and have affected the burials in different ways. Although much of the subsequent analysis and interpretation treats burial contexts as “equals” regardless of preservation and condition for the sake of preserving a statistically significant sample, in this section I want to address and acknowledge how preservation and taphonomy can ultimately alter archaeological interpretations.

Called “archaeothanatology” by European scholars, the reconstruction of burial taphonomy, i.e. depositional and post-depositional processes, can have a significant impact on the interpretation of burials in two ways (Duday 2006; Parker Pearson 1999; Roksandic 2002). Inside the tomb, the decomposition of human tissue and the geomorphological processes of tomb refilling create a micro-environment that can significantly alter its appearance between the time of the initial interment and the excavation and recovery of the materials by archaeologists often many centuries later.

Furthermore, the differential preservation of organic artifacts under different burial conditions may cause the comparative study of artifact distribution to become skewed in favor of inorganic objects (e.g., ceramics), giving them an important and
exclusive role in the interpretation of funerary practices. In reality, objects made from inorganic materials often formed but one part of a widely diverse set of objects and materials that contributed to the funerary record. In order to obtain an accurate representation of the mortuary sample, it is necessary to account for any materials no longer present due to human or natural processes, such as looting, or extended exposure to air or water that caused organic materials to decompose. Looting and man-made disturbances create another influential aspect in the post-interment modification of archaeological burial remains. To be able to account for these often-concurrent processes, I established two features that help for an easier identification of the taphonomy in each burial. The preservation index identifies four degrees of preservation that affect different materials based on their fragility or durability. The taphonomic pathways elaborate on the different depositional sequences that could occur within tombs at Omo M10.

5.3.1 Taphonomic Pathways

In his description of the burial taphonomy from the Omo M10 pilot sample, Goldstein distinguished between recently and anciently looted contexts, the latter having the appearance of shallow depressions filled with layers of fine airborne silt (1 to 15 cm) over a layer of volcanic ash from the A.D.1600 Huayna Putina eruption (1989:165-167). Underneath, numerous water laminations of silt that had filtered into the exposed tomb cavity attest to the prolonged period of exposure that negatively affected the preservation of tissue, textile and other organic materials. At the same time, the silt immobilized objects in the tomb, including human remains, which are often found in situ or relatively unaltered from the time of interment. Only the bones of the upper body were frequently
disarticulated as soft tissue preservation and gravity took effect before the geomorphology. Regarding the looting of tombs, Goldstein found that “virtually no metal or jewelry objects were found in any prehistorically disturbed Tiwanaku tombs” (1989:166).

The 46 tombs found with intact and sealed capstones at Omo M10 in 2010–2011 suggest that tombs were not filled-in before closing, and if they were, only a shallow layer of sediments covered the bottom of the tomb. These pathways distinguish between different filling-in sequences of tombs, refining Goldstein’s observation that “the decay process in Moquegua Tiwanaku tombs was a race between the disintegration of the remains and their encasement and immobilization in silt” (2005:248).

1. **Pathway 1:** After the *fardo* was deposited and the tomb sealed, the seal remained intact. In the interior, the decomposition of textiles, and later human soft tissue, resulted in the disassociation of the skeleton: the cranium (moving forward or laterally, then down), the upper body (collapsing inward and forward), and the legs (leaning outward or laterally).

2. **Pathway 2:** After the *fardo* was deposited and the tomb sealed, the seal remained intact. The decomposition of textiles, and later human soft tissue, resulted in the almost total disassociation of the different parts of the skeleton: the cranium (moving forward or laterally, then down), the upper body (collapsing inward and forward), and the legs (leaning outward or laterally). Subsequently, fine silt and sand filtered into tomb cavity, stabilizing the bones.

3. **Pathway 3:** After the *fardo* was deposited and the tomb sealed, fine sediments began to filter into the tomb cavity and become deposited around the *fardo*. 
Decomposition within empty space of textiles enabled cranium and upper body to move, legs stay in situ or move slightly to sides. As textiles decompose, sediments fill in around disassociated remains, stabilizing them.

4. Pathway 4: *Fardo* deposited, tomb sealed, sediments filter in as textiles and soft-tissue decompose, immediately filling-in of newly created vacuum, thereby stabilizing bones in-situ, and original body position is maintained.

The density of the fine, silt particles is an additional indicator of the speed with which the tomb filled in. Most of the intrusive sediments were semi-compact to compact, and in many contexts prolonged exposure to standing water had hardened the fine silts in the upper portion of the tomb had also caused the human remains (cranium, upper thorax, and knees) to become whitened and brittle.

5.3.2 Preservation Index

The preservation index distinguishes contexts based on the degree to which taphonomic processes have negatively affected the condition and completeness of the burial assemblage, a feature that can significantly alter the interpretations resulting from the study of burials. By taking into consideration the post-interment taphonomy and the fragility of artifact classes, such as textiles vs. ceramics, it would be possible to potentially exclude certain contexts from the analysis as the absence of particular artifact types would not be the result of distinct funerary behavior but instead that of taphonomy. Moreover, based on the comparison of intact burials and recurrent patterns of associated materials, it would be possible to tentatively infer the original presence of artifacts (post-looting). Wooden spoons found in highly disturbed tombs may indicate the original
presence of *tazones*, because spoons are invariably associated with *tazones* in all non-looted contexts. Conversely, the association of *tazones* and spoons may be used to infer the presence of a spoon in tombs with poor organic preservation.

Because archaeothanatology is not the main focus of this dissertation, the preservation index proposed here is a preliminary one that will require further elaboration and detail in the future. Individual preservation indices for each burial context are included in the burial descriptions in Appendix E. The description of taphonomic processes and preserved materials, as well as the estimated number and frequency of burials belonging to each Preservation Index number is laid out in Table 5.3. As I mentioned before, the taphonomic pathways and Preservation Index can have considerable impact on archaeological interpretations. However, because such a large number of burials were found belonging to Index 1 and 2 (n=210; 90%), excluding these contexts from the analysis would significantly reduce the number of burials. For example, in the case of cemetery M10I—a sector with a high frequency of undisturbed tombs—76 percent of tombs had a Preservation Index number of 1, the rest of 2. Therefore, to maintain the statistical significance of the sample, I decided to include all tombs in the sample, which has been the practice elsewhere and should therefore produce comparable results to Tiwanaku mortuary analysis in Moquegua and the altiplano.

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78 Because capstones were not sealed in an airtight manner, even intact tombs were often found with a low preservation index.
79 The observations about differential disturbance and preservation conditions provide a starting-off point for reconstructing burial assemblages in a more critical fashion, especially when including burial samples from other Tiwanaku sites in Moquegua. Future applications of statistical methods will be able to test the results of this study.
Table 5.3 Preservation Index and associated taphonomic processes at Omo M10 (2010-2011 sample).

<table>
<thead>
<tr>
<th>Preservation Index</th>
<th>Taphonomic Process</th>
<th>Materials Present</th>
<th>Burials (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prolonged exposure to air, water from opening of tomb or collapse of tomb cover</td>
<td>inorganic materials (ceramic, lithic, metal, shell, bone)</td>
<td>122 (52%)</td>
</tr>
<tr>
<td>2</td>
<td>Rapid sedimentation of lower tomb cavity protects organic material in that area from decomposition, often leaving upper part of tomb exposed to air/water repeatedly or continuously</td>
<td>inorganic materials; resilient plant materials (gourd, leather, wood, some rope); some textile; occasional preservation of soft tissue near tomb bottom (pelvis, feet)</td>
<td>88 (38%)</td>
</tr>
<tr>
<td>3</td>
<td>Tomb is intact and completely sealed from air or water intrusions OR Looting of well-preserved tombs followed by quick sedimentation that sealed off materials from air/water exposure</td>
<td>inorganic materials; plant fiber; all plant parts; wood; textiles; human and non-human soft-tissue</td>
<td>23 (10%)</td>
</tr>
</tbody>
</table>

5.3 Overview of Cemetery Sectors at Omo M10

To frame the analysis and discussion of mortuary data from Omo M10 that follows in Chapter 6, 7, and 8, I present here a short description of each cemetery sector with an overview of mortuary excavations from 1984 and 2010. The accompanying tables list cemetery-specific details regarding absolute dating (Table 5.4), a list of ceramic materials recovered from cemetery surface areas (Table 5.5), a summary of the numbers and conditions of excavated mortuary and non-mortuary features (Table 5.6),
tomb structure types (Table 5.7), and interment styles (Table 5.8). Planview of cemeteries
and excavated units can be found in Appendix A.

Table 5.4 Radiocarbon dates for cemetery sectors at Omo M10 (calibrated using Oxcal
SHCal13).

<table>
<thead>
<tr>
<th>Context</th>
<th>Specimen</th>
<th>Material</th>
<th>Radiocarbon Years</th>
<th>cal. A.D. (95.4%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-32</td>
<td>M10=9427</td>
<td>reed</td>
<td>1,017 +/- 40</td>
<td>995-1156</td>
</tr>
<tr>
<td>H-22</td>
<td>M10=7734</td>
<td>reed</td>
<td>923 +/- 42</td>
<td>1035-1229</td>
</tr>
<tr>
<td>I-22</td>
<td>M10=8859</td>
<td>reed</td>
<td>1,153 +/- 40</td>
<td>861-1022</td>
</tr>
<tr>
<td>I-24</td>
<td>M10=8871</td>
<td>reed</td>
<td>1,160 +/- 40</td>
<td>791-1020</td>
</tr>
<tr>
<td>M-39</td>
<td>M10=8494</td>
<td>reed</td>
<td>1,041 +/- 40</td>
<td>988-1150</td>
</tr>
<tr>
<td>P-18</td>
<td>M10=7270</td>
<td>reed</td>
<td>1,140 +/- 40</td>
<td>885-1020</td>
</tr>
<tr>
<td>Q-7</td>
<td>M10=7358</td>
<td>reed</td>
<td>1,169 +/- 40</td>
<td>780-1015</td>
</tr>
<tr>
<td>Q-7</td>
<td>M10=7357</td>
<td>camelid fiber</td>
<td>1,165 +/- 40</td>
<td>787-1018</td>
</tr>
<tr>
<td>R-23</td>
<td>M10=9209</td>
<td>reed</td>
<td>1,194 +/- 40</td>
<td>773-989</td>
</tr>
<tr>
<td>S-12</td>
<td>M10=8937</td>
<td>reed</td>
<td>1,203 +/- 40</td>
<td>773-986</td>
</tr>
<tr>
<td>S-16</td>
<td>M10=8964(1)</td>
<td>reed</td>
<td>1,365 +/- 40</td>
<td>643-832</td>
</tr>
<tr>
<td>S-16</td>
<td>M10=8964(2)</td>
<td>camelid fiber</td>
<td>1,121 +/- 40</td>
<td>890-1025</td>
</tr>
<tr>
<td>S-16</td>
<td>M10=8964(3)</td>
<td>camelid fiber</td>
<td>1,208 +/- 40</td>
<td>772-981</td>
</tr>
<tr>
<td>T-20</td>
<td>M10=9109</td>
<td>reed</td>
<td>1,130 +/- 40</td>
<td>890-1020</td>
</tr>
<tr>
<td>U-1</td>
<td>M10=7387</td>
<td>cotton</td>
<td>1,204 +/- 43</td>
<td>772-985</td>
</tr>
<tr>
<td>U-3</td>
<td>M10=7426</td>
<td>reed</td>
<td>1,078 +/- 40</td>
<td>895-1144</td>
</tr>
<tr>
<td>U-8</td>
<td>M10=7451</td>
<td>carbon</td>
<td>547 +/- 38</td>
<td>1391-1455</td>
</tr>
<tr>
<td>V-20</td>
<td>M10=8392</td>
<td>reed</td>
<td>1,094 +/- 39</td>
<td>890-1128</td>
</tr>
<tr>
<td>W-36</td>
<td>M10=8097</td>
<td>reed</td>
<td>1,015 +/- 40</td>
<td>995-1158</td>
</tr>
<tr>
<td>X-17</td>
<td>M10=8640</td>
<td>reed</td>
<td>1,249 +/- 42</td>
<td>683-965</td>
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</tbody>
</table>
Table 5.5 Ceramic fragment assemblages recovered from cemetery unit levels and non-mortuary features at Omo M10 in 2010–2011.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Unit</th>
<th>Area (m²)</th>
<th>Depth (cm)</th>
<th>Vol. (m³)</th>
<th>Tiwanaku Plain</th>
<th>Tiwanaku Red</th>
<th>Tiwanaku Black</th>
<th>Other</th>
<th>Total (n)</th>
<th>Fragments/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>830</td>
<td>16</td>
<td>9</td>
<td>1.44</td>
<td>37 (80%)</td>
<td>6 (13%)</td>
<td>0</td>
<td>3 (7%)</td>
<td>46</td>
<td>31.9</td>
</tr>
<tr>
<td>B</td>
<td>842</td>
<td>8</td>
<td>12</td>
<td>0.96</td>
<td>25 (100%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>25</td>
<td>26.0</td>
</tr>
<tr>
<td>B</td>
<td>854</td>
<td>17</td>
<td>19</td>
<td>3.23</td>
<td>86 (84%)</td>
<td>12 (12%)</td>
<td>0</td>
<td>4 (4%)</td>
<td>102</td>
<td>31.6</td>
</tr>
<tr>
<td>B</td>
<td>850</td>
<td>16</td>
<td>13</td>
<td>2.08</td>
<td>89 (93%)</td>
<td>7 (7%)</td>
<td>0</td>
<td>0</td>
<td>96</td>
<td>46.2</td>
</tr>
<tr>
<td>B</td>
<td>861</td>
<td>8</td>
<td>10</td>
<td>0.8</td>
<td>230 (95%)</td>
<td>9 (3%)</td>
<td>0</td>
<td>4 (2%)</td>
<td>243</td>
<td>303.8</td>
</tr>
<tr>
<td>B</td>
<td>862</td>
<td>16</td>
<td>11</td>
<td>1.76</td>
<td>135 (97%)</td>
<td>4 (3%)</td>
<td>0</td>
<td>6 (4%)</td>
<td>145</td>
<td>82.4</td>
</tr>
<tr>
<td>B-total</td>
<td></td>
<td>6</td>
<td>81</td>
<td>10.27</td>
<td>602 (92%)</td>
<td>38 (6%)</td>
<td>0</td>
<td>17 (3%)</td>
<td>657</td>
<td>64.0</td>
</tr>
<tr>
<td>H</td>
<td>707</td>
<td>18</td>
<td>22</td>
<td>3.96</td>
<td>12 (100%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>3.0</td>
</tr>
<tr>
<td>H</td>
<td>708</td>
<td>21</td>
<td>18</td>
<td>3.78</td>
<td>27 (82%)</td>
<td>1 (3%)</td>
<td>0</td>
<td>5 (15%)</td>
<td>33</td>
<td>8.7</td>
</tr>
<tr>
<td>H</td>
<td>709</td>
<td>23</td>
<td>16</td>
<td>3.68</td>
<td>70 (90%)</td>
<td>0</td>
<td>0</td>
<td>7 (10%)</td>
<td>78</td>
<td>21.2</td>
</tr>
<tr>
<td>H-total</td>
<td></td>
<td>3</td>
<td>62</td>
<td>56</td>
<td>11.42</td>
<td>109 (89%)</td>
<td>1 (1%)</td>
<td>12 (10%)</td>
<td>123</td>
<td>10.8</td>
</tr>
<tr>
<td>I</td>
<td>721</td>
<td>16</td>
<td>12</td>
<td>1.92</td>
<td>31 (76%)</td>
<td>7 (17%)</td>
<td>0</td>
<td>3 (7%)</td>
<td>41</td>
<td>21.4</td>
</tr>
<tr>
<td>I</td>
<td>722</td>
<td>16</td>
<td>13</td>
<td>2.08</td>
<td>140 (81%)</td>
<td>33 (19%)</td>
<td>0</td>
<td>0</td>
<td>173</td>
<td>83.2</td>
</tr>
<tr>
<td>I</td>
<td>723</td>
<td>16</td>
<td>14</td>
<td>2.24</td>
<td>24 (83%)</td>
<td>5 (17%)</td>
<td>0</td>
<td>0</td>
<td>29</td>
<td>12.9</td>
</tr>
<tr>
<td>I-total</td>
<td></td>
<td>3</td>
<td>48</td>
<td>39</td>
<td>8.48</td>
<td>195 (80%)</td>
<td>45 (19%)</td>
<td>0</td>
<td>243</td>
<td>28.6</td>
</tr>
<tr>
<td>M</td>
<td>716</td>
<td>20</td>
<td>8</td>
<td>1.6</td>
<td>16 (84%)</td>
<td>3 (16%)</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>11.9</td>
</tr>
<tr>
<td>M</td>
<td>717</td>
<td>23</td>
<td>14</td>
<td>3.22</td>
<td>3 (38%)</td>
<td>5 (62%)</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>2.5</td>
</tr>
<tr>
<td>M-total</td>
<td></td>
<td>2</td>
<td>43</td>
<td>22</td>
<td>4.82</td>
<td>19 (70%)</td>
<td>8 (30%)</td>
<td>0</td>
<td>27</td>
<td>5.6</td>
</tr>
</tbody>
</table>
Table 5.5 Continued Ceramic fragment assemblages recovered from cemetery unit levels and non-mortuary features at Omo M10 in 2010–2011.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Unit</th>
<th>Area (m²)</th>
<th>Depth (cm)</th>
<th>Vol. (m³)</th>
<th>Tiwanaku Plain</th>
<th>Tiwanaku Red</th>
<th>Tiwanaku Black</th>
<th>Other</th>
<th>Total (n)</th>
<th>Fragments/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>700</td>
<td>20</td>
<td>12</td>
<td>2.4</td>
<td>551 (85%)</td>
<td>72 (11%)</td>
<td>8 (1%)</td>
<td>20 (3%)</td>
<td>651</td>
<td>271.3</td>
</tr>
<tr>
<td>N-total</td>
<td>1</td>
<td>20</td>
<td>12</td>
<td>2.4</td>
<td>551 (85%)</td>
<td>72 (11%)</td>
<td>8 (1%)</td>
<td>20 (3%)</td>
<td>651</td>
<td>271.3</td>
</tr>
<tr>
<td>P</td>
<td>701</td>
<td>16.5</td>
<td>18</td>
<td>2.97</td>
<td>116 (93%)</td>
<td>8 (6%)</td>
<td>1 (1%)</td>
<td>0</td>
<td>125</td>
<td>42.1</td>
</tr>
<tr>
<td>P-total</td>
<td>2</td>
<td>32.5</td>
<td>37</td>
<td>6.01</td>
<td>225 (82%)</td>
<td>48 (17%)</td>
<td>1 (0%)</td>
<td>2 (1%)</td>
<td>276</td>
<td>45.9</td>
</tr>
<tr>
<td>Q</td>
<td>703</td>
<td>16</td>
<td>11</td>
<td>1.76</td>
<td>7 (78%)</td>
<td>0</td>
<td>0</td>
<td>2 (22%)</td>
<td>9</td>
<td>5.1</td>
</tr>
<tr>
<td>Q-total</td>
<td>2</td>
<td>32</td>
<td>29</td>
<td>4.64</td>
<td>9 (75%)</td>
<td>0</td>
<td>0</td>
<td>3 (25%)</td>
<td>12</td>
<td>2.58</td>
</tr>
<tr>
<td>R</td>
<td>728</td>
<td>16</td>
<td>29</td>
<td>4.64</td>
<td>20 (74%)</td>
<td>7 (26%)</td>
<td>0</td>
<td>0</td>
<td>27</td>
<td>11.6</td>
</tr>
<tr>
<td>R-total</td>
<td>2</td>
<td>32</td>
<td>45</td>
<td>7.2</td>
<td>34 (29%)</td>
<td>81 (70%)</td>
<td>0</td>
<td>1 (1%)</td>
<td>116</td>
<td>9.0</td>
</tr>
<tr>
<td>R-surf.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>5 (10%)</td>
<td>45 (88%)</td>
<td>0</td>
<td>1 (2%)</td>
<td>51</td>
<td>N/A</td>
</tr>
<tr>
<td>R-total</td>
<td>2</td>
<td>32</td>
<td>45</td>
<td>7.2</td>
<td>34 (29%)</td>
<td>81 (70%)</td>
<td>0</td>
<td>1 (1%)</td>
<td>116</td>
<td>9.0</td>
</tr>
<tr>
<td>S</td>
<td>724</td>
<td>16</td>
<td>14</td>
<td>2.24</td>
<td>9 (41%)</td>
<td>13 (59%)</td>
<td>0</td>
<td>0</td>
<td>22</td>
<td>9.8</td>
</tr>
<tr>
<td>S-total</td>
<td>2</td>
<td>33</td>
<td>27</td>
<td>4.45</td>
<td>23 (59%)</td>
<td>16 (41%)</td>
<td>0</td>
<td>0</td>
<td>39</td>
<td>8.8</td>
</tr>
<tr>
<td>T</td>
<td>726</td>
<td>16</td>
<td>17</td>
<td>2.72</td>
<td>47 (78%)</td>
<td>13 (22%)</td>
<td>0</td>
<td>0</td>
<td>60</td>
<td>22.1</td>
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<tr>
<td>T-total</td>
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<td>32</td>
<td>5.12</td>
<td>78 (66%)</td>
<td>38 (32%)</td>
<td>2 (2%)</td>
<td>0</td>
<td>118</td>
<td>23.0</td>
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<tr>
<td>U</td>
<td>704</td>
<td>20</td>
<td>13</td>
<td>2.6</td>
<td>12 (67%)</td>
<td>6 (33%)</td>
<td>0</td>
<td>0</td>
<td>18</td>
<td>6.9</td>
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</tbody>
</table>
Table 5.5 Continued Ceramic fragment assemblages recovered from cemetery unit levels and non-mortuary features at Omo M10 in 2010–2011.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Unit</th>
<th>Area (m²)</th>
<th>Depth (cm)</th>
<th>Vol. (m³)</th>
<th>Tiwanaku Plain</th>
<th>Tiwanaku Red</th>
<th>Tiwanaku Black</th>
<th>Other</th>
<th>Total (n)</th>
<th>Fragments/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>U</td>
<td>705</td>
<td>17</td>
<td>19</td>
<td>3.23</td>
<td>95 (91%)</td>
<td>9 (9%)</td>
<td>0</td>
<td>0</td>
<td>104</td>
<td>32.2</td>
</tr>
<tr>
<td>U</td>
<td>706</td>
<td>16</td>
<td>14</td>
<td>2.24</td>
<td>36 (97%)</td>
<td>1 (3%)</td>
<td>0</td>
<td>0</td>
<td>37</td>
<td>16.5</td>
</tr>
<tr>
<td>U-total</td>
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<td>3</td>
<td>53</td>
<td>46</td>
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<td>143 (90%)</td>
<td>16 (10%)</td>
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<td>159</td>
<td>19.7</td>
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<tr>
<td>V</td>
<td>714</td>
<td>16</td>
<td>17</td>
<td>2.72</td>
<td>66 (99%)</td>
<td>1 (1%)</td>
<td>0</td>
<td>0</td>
<td>67</td>
<td>49.3</td>
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<tr>
<td>V</td>
<td>715</td>
<td>16</td>
<td>15</td>
<td>2.4</td>
<td>3 (100%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1.25</td>
</tr>
<tr>
<td>V-total</td>
<td></td>
<td>3</td>
<td>48</td>
<td>41</td>
<td>6.56</td>
<td>96 (92%)</td>
<td>7 (7%)</td>
<td>0</td>
<td>104</td>
<td>15.9</td>
</tr>
<tr>
<td>W</td>
<td>710</td>
<td>16</td>
<td>14</td>
<td>2.24</td>
<td>24 (89%)</td>
<td>3 (11%)</td>
<td>0</td>
<td>0</td>
<td>27</td>
<td>12.1</td>
</tr>
<tr>
<td>W</td>
<td>711</td>
<td>17</td>
<td>14</td>
<td>2.38</td>
<td>293 (89%)</td>
<td>31 (9%)</td>
<td>0</td>
<td>62 (2%)</td>
<td>330</td>
<td>138.7</td>
</tr>
<tr>
<td>W</td>
<td>712</td>
<td>16</td>
<td>25</td>
<td>4</td>
<td>2,378 (96%)</td>
<td>47 (2%)</td>
<td>0</td>
<td>54 (2%)</td>
<td>2,479</td>
<td>619.8</td>
</tr>
<tr>
<td>W-total</td>
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<td>49</td>
<td>53</td>
<td>8.62</td>
<td>2,695 (95%)</td>
<td>81 (3%)</td>
<td>0</td>
<td>2,836</td>
<td>329.00</td>
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<td>X</td>
<td>718</td>
<td>16</td>
<td>18</td>
<td>2.88</td>
<td>134 (64%)</td>
<td>0</td>
<td>0</td>
<td>74 (36%)</td>
<td>208</td>
<td>72.2</td>
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<tr>
<td>X</td>
<td>719</td>
<td>16</td>
<td>10</td>
<td>1.6</td>
<td>60 (52%)</td>
<td>29 (25%)</td>
<td>0</td>
<td>27 (23%)</td>
<td>116</td>
<td>72.5</td>
</tr>
<tr>
<td>X-total</td>
<td></td>
<td>2</td>
<td>32</td>
<td>28</td>
<td>4.48</td>
<td>194 (60%)</td>
<td>29 (9%)</td>
<td>0</td>
<td>324</td>
<td>72.3</td>
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Table 5.6 Excavated feature types by cemetery sector at Omo M10.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Int.</th>
<th>Dist.</th>
<th>Heav. Dist.</th>
<th>Total</th>
<th>Refuse Pit or Lense</th>
<th>Carbon Pit or Lense</th>
<th>Architect. Feature</th>
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Table 5.6 Continued Excavated feature types by cemetery sector at Omo M10.

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<td>1</td>
</tr>
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Table 5.7 Distribution of 2010–2011 tomb structure types by cemetery sector at Omo M10.

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<th>Inset Cist</th>
<th>Stone Cist</th>
<th>Slab Cist</th>
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* 2 unknown because of incomplete records from 1984.
Table 5.8 Burial type, body position and orientation by cemetery sector at Omo M10.

<table>
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<th>Orientation</th>
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<td>Single - Secondary</td>
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<tr>
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</table>

* Fardo H-11 and fardo P-18B were placed head down.
** some individuals were only lightly flexed.
Detailed descriptions and illustrations of burial contexts and artifacts, including a listing of their “preservation” indices, can be found in Appendix E for the 2010–2011 sample and in Appendix B of Goldstein’s dissertation (1989) for the 1984/7 sample. The cemeteries are listed here in alphabetical order. Counts and weights of non-mortuary artifacts are listed in the site report for the Omo M10 project (Goldstein and Palacios 2015).

5.3.1 Cemetery B

This cemetery is located on the southern half of the “B” platform of the M10 temple (Figure 5.1, Appendix A). This artificially raised platform extended westward abutting the lower court of the Omo temple (Goldstein 1993:32). A later addition to the main temple complex, the platform was built by filling interior stone cribs with dense domestic refuse and sealing the surface with compacted red granular “moro moro” clay (Goldstein 1989:159). It appears the northern edge of the platform was never finished. The radiocarbon sample from Burial B-32 yielded a date of cal. A.D. 995–1156 (2-sigma) (1,017±40 years BP) (Table 5.4). The surface revealed a moderate to high degree of disturbance of burials as well as several shallower looter’s depressions. The cemetery boundaries were refined based on the presence of large rocks used as tomb collars and capstones to the north. No tombs were identified along the western revetment of the platform, although several were excavated in the southern terrace of the platform. To the east, the cemetery was delineated by the lower court platform. The new area estimate for this cemetery was 661 m².
Excavations of isolated visible tombs in 1984 recovered eight burials. Only six of these had context information (Goldstein 1989:284–286). Five of the individuals were children, the other three adults (Table 5.9). The tomb structures included collared pits, stone and slab cists. Where the burials had not been extensively disturbed, the individuals were observed as consistently placed in seated-flexed position oriented east or northeast. Two of the burials were more elaborate, containing multiple textiles used for wrapping the body. The offerings from the 1984 burials included a decorated kero (B-7), a plainware olla (B-10), and a wooden spoon (B-13).\(^8\)

The existing sample of tombs was expanded in 2010 with 7 excavation units (with a total area of 81 m\(^2\)) (Appendix A). A trench consisting of two-and-a-half 4-x-4-m units was placed on the western edge of the platform, and a second trench of two-and-three-quarters 4-x-4-m units was placed in the south-central part of the platform. Both trenches reached from the platform surface to the natural ground. In addition to twelve burials, nine non-mortuary features were excavated (Table 5.6). Seven of the non-mortuary features were shallow depressions or old looter’s pits from which construction fill was eroding. Two features (B-23 and B-37) were foundations of a perimeter wall that followed the outer edge of the “B”-platform in the south and east. The walls were oriented perpendicular (east-west) and parallel (north-south) to the temple’s long axis. The informal construction of the walls using cobbles and dried-mud plaster differs clearly from the ashlar-block foundations of the temple’s adobe walls. The material found on the surface had eroded out of the interior platform fill (domestic refuse), and contained

\(^8\) Because the tombs had been dug into the construction fill of the platform, ecofacts and ceramic sherds were not included in the analysis of tomb contents, because they appear to have eroded into the tomb cavity after burial.
animal and plant materials, and carbon. The excavation levels very uniformly contained large quantities of ceramic fragments (n=657) of Tiwanaku plainware (n=602), red-slipped Tiwanaku serving wares (n=38), and a few fragments of unidentified ware (n=17) (Table 5.5). Fragments from an almost complete red-orange slipped *tazon* were found just north of Unit 854. The *tazon*, which had probably been removed from a tomb, had been repaired as evinced by two drill holes on the vessel rim.

The additional twelve tombs excavated in 2010 included, two intact tombs (16.7%) eight lightly disturbed tombs (66.7%), and two heavily disturbed tombs (16.7%) (Table 5.6). Eight of the recovered individuals were children, while three others were adults (Table 5.10). Burial structures included pits, partial, stone and one slab cist, many of them with stone collars, and a few stone pile and stone slab covers intact (Table 5.7). All were single-individual interments in seated-flexed position facing east, northeast, southeast, or south (Table 5.8). The 18 tombs excavated in this sector are close to the site-wide average of 22 burials per cemetery, making this a robust sample size.

Goldstein proposed that the cemetery on the “B”-platform was associated with the terminal Tiwanaku occupation of the site, because one of the exposed disturbed tombs had been lined with cut ashlar blocks from the temple (Goldstein 1989:160). The trenching of the cemetery further confirmed this (Baitzel 2013). Several tombs outside the excavation trenches along the platform edge crosscut the dismantled wall foundations. On the lower southern terrace of the platform, tombs seem to have been placed away from the collapsing retention walls of the upper platform terrace. Lastly, the two
ceramic vessels with repair holes\textsuperscript{81} were the only ones identified in the mortuary ceramic assemblage at Omo M10, pointing to the curation of Tiwanaku-associated artifacts in the wake of sociopolitical collapse. Nevertheless, aside from the later radiocarbon date, which still overlaps with several dates from other cemeteries, the funerary treatment, tomb structures, and grave offerings show little evidence of ideological change or disruptions of ritual practices. The estimated total number of tombs based on the revised cemetery area and tomb density of 0.2 tombs/m\textsuperscript{2} was 119.

5.3.2 Cemetery H

This sector was located on the western edge of the M10 bluff near the river valley stretched out east-to-west along the middle section of a south-facing bluff slope (Figure 5.1, Appendix A). Cemetery V was located to the south and across a quebrada from Cemetery H, and Cemetery W was located tot the southeast atop the bluff itself. Cemetery M10H spanned an area of ca. 1,300 m\textsuperscript{2}. The cemetery boundaries were established using aerial photographs from 1946 (see above) and surface reconnaissance to confirm that the absence of large rocks coincided with the absence of shallow circular depressions indicative of unmarked tombs. The disturbance of the cemetery area was most advanced in the western half of the sector. A radiocarbon dates from Burial H-22 yielded a date of cal. A.D. 1035–1229 (2-sigma) (923\textpm 42 years BP) (Table 5.4).

Cemetery H was excavated for the first time in 2010. I excavated three 4-x-4-m units with extensions (total area 62m\textsuperscript{2}): one on the eastern edge of the sector (Unit 707) and two near each other in the central upper area of the sector (Units 708 and 709). In addition to 20 tombs features, I also excavated one concentration of domestic refuse (H-

\textsuperscript{81} The kero found in Burial B-17 had drill holes along the rim, where the vessel had been repaired prior to interment.
15) and several natural depressions (Table 5.6). The low rate of disturbance in this cemetery was reflected in the small amount of materials contained in the cemetery surface levels: human and animal bone, shell, wood and plants, and carbon (Goldstein and Palacios 2015). The surface ceramic assemblage (n=123) consisted Tiwanaku plainware ollas and sahumadores (n=109), Tiwanaku red-slipped keros (n=1), and other ware types (n=12).

The sample of 20 burials from Cemetery H included nineteen intact and one heavily disturbed tomb (Table 5.6), close to the site-wide average of 22 burials per cemetery sample. Seventeen of the recovered individuals were children, and only three were adults (Table 5.10). The tombs were predominantly pits with an average depth of 84 cm (Table 5.7). Intact capstones occasionally included batanes. All burials were single-individual primary interments, placed in seated-flexed position facing east, northeast, or southeast (Table 5.8). Preservation conditions in Cemetery H were below average where only nine of the 20 burials were found with textile remains.

The burial sample from Cemetery H was mainly undisturbed. Because of this, it was possible to record intact tomb covers and new information about cemetery surface materials (see Chapters 6 and 8). The burial treatment of individuals interred at Cemetery H was relatively homogenous in terms of tomb structure, body position, etc. Ceramic grave offerings were popular at this cemetery, although this may be the result of poorer preservation conditions. The estimated total number of tombs in Cemetery H based on the tomb density of 0.32 tombs/m² and the cemetery area was 420 tombs.
5.3.3 Cemetery I

Cemetery I was located along the southwestern edge of the M10 bluff some 100 m west the monumental complex (Figure 5.1, Appendix A). The cemetery covered the opposing slopes of a shallow *quebrada* but was not visible from the site’s domestic and monumental sectors. Burials at the lowest points were disturbed by water run-off from the bluff top in the east toward the west. The cemetery covered an area of ca. 385 m$^2$. The limits of the cemetery were designated based on aerial photographs from 1946 (see above) and on ground-truthing by locating the edge of the rock-covered cemetery surface with its highly visible tomb depressions.

The first excavations took place in 2011 and included three 4-x-4-m units (48 m$^2$): two units (Units 721 and 722) were placed near one another at the mid-level of the southern *quebrada* slope facing north, while the third (Unit 723) was placed near the top of the northern (south-facing slope) at the edge of the cemetery (judging by the lower density of burials and absence of large surface rocks). Two radiocarbon samples from Burials I-22 and I-24 produced dates of cal. A.D. 861–1022 (2-sigma) (1,153±40 years BP) and cal. A.D. 791–1022 (2-sigma) (1,160±40 years BP) (Table 5.4).

In addition to 21 tombs, I excavated one shallow deposit of domestic refuse (I-17) in the center of the cemetery. The southern cemetery area had been moderately disturbed, but the northern area appeared relatively intact. In some areas, the cemetery surface was covered with fragmented human bone, probably from disturbed burials, and small amounts of carbon. The unit levels contained a large amount of ceramic fragments (n=243), including Tiwanaku plainware (n=195, 80%), higher-than-usual frequencies of Tiwanaku red-slipped wares (n= 45, 19%), and non-Tawanaku ware types (1%) (Table
The vessel forms found on the surface included keros, tazones, vasijas, ollas, and sahumadores. The density of ceramic sherds was significantly higher in Unit 722 than in the other two units, perhaps related to the non-mortuary Feature I-17.

Twelve of the 21 tombs excavated in Cemetery I were found intact (57%), eight tombs were disturbed (28%), and one was heavily disturbed (5%) (Table 5.6). The sample of burials is close to the site-wide average of 22 burials per cemetery, and included five adult and fifteen subadult individuals (Table 5.10). The majority were pit tombs, with rare cases of inset, stone and slab cists, covered by stone piles and slabs supported by rock collars (Table 5.7). The average tomb depth was 59 cm. Only single-individual interments were present in Cemetery I, with individuals in seated-flexed oriented to the east, northeast, and southeast (Table 5.8). Three burials (I-10, I-14, and I-22) were shallow collared pits that contained adolescent and young adult individuals interred in supine-flexed position with different orientations (Appendix E). Preservation of textiles and other organic materials was below average in this sector, but I found several baskets and wooden objects.

Cemetery I displayed a relatively high degree of mortuary variability among the 21 excavated burials in terms of tomb structure, grave wealth, and even highly standardized body position and orientation. The cemetery was small, but dense (0.44 tombs/m²) with an estimated total of 169 burials.

5.3.4 Cemetery J

Cemetery J was reported in Goldstein 1989 (Appendix 2) as being located 300 m southwest of the Omo M10 domestic sector containing round stone-lined cists and a camelid burial. Based on the aerial photograph from 1946, the cemetery was located
along the lower northern side of the quebrada that bisects Cemetery I farther to the east (Figure 5.1). The moderate degree of pitting resembles that of more intact cemeteries like H and T. Cemetery J was not visited in 2010 or 2011. Using the site average tomb density of 0.4 m² and the cemetery area estimate based on the aerial photograph, Cemetery J contains approximately 300 burials (Table 5.2).

5.3.5 Cemetery K

Cemetery K was reported in Goldstein (1989:Appendix 2) as being located at the base of the north slope of the M10 bluff. Overburden from the slope partially covered the cemetery, and a modern access road had cut through the sector. When I surveyed the area in 2009 and 2010, some exposed profiles of cemeteries were visible in the modern road cut, but the narrow strip between the access road and the steep bluff slope had been claimed for agricultural terrain, destroying surface evidence of burials. Based on the original area estimate of 300 m² and the site average tomb density, Cemetery K would have contained around 120 burials (Table 5.2).

5.3.6 Cemetery L

Cemetery L was reported in Goldstein (1989:Appendix 2) as being located at the base of the north slope of the M10 bluff near a small log bridge, presumably to the west of Cemetery K. Overburden from the slope partially covered the cemetery, and a modern access road had cut through the sector exposing stone-lined cists and some bone fragments. When I surveyed the area in 2009 and 2010, there were no tombs visible along the road. The construction of a sewage line along the road in 2010–2012, however, exposed several more stone-lined cists in the profile of the trench. The narrow strip between the access road and the steep bluff slope had been claimed for agricultural terrain, destroying any remaining surface evidence of burials. Based on the original area
estimate of 150 m² and the site average tomb density, Cemetery L would have contained around 60 burials (Table 5.2).

5.3.7 Cemetery M

Cemetery M was located on the far west edge of the M10 site covering the flat area of a westward bluff top extension (Figure 5.1, Appendix A). The cemetery was delineated by the bluff edge on three sides; in the east, the absence of shallow depressions and large rocks (e.g., in Unit 717) indicated the cemetery boundary. Cemetery M measured approximately 2,868 m² in area (Table 5.2), based on the surface survey confirmation of aerial photographs. As already mentioned by Goldstein (1989:Appendix 2), Cemetery M was heavily disturbed, its surface strewn with displaced large capstones and exposed collared cists, although hardly any materials were seen, which suggests no recent looting. The disturbance was heaviest on the southern and western side of the cemetery, which is why excavations in 2011 focused on the northern and eastern sides. The Tiwanaku affiliation of the cemetery was confirmed by a single radiocarbon date from feature M-39 dating to A.D. 988–1150 cal. A.D. (2-sigma) (1,041±40 years BP).

The excavations in 1984 recovered 22 tombs, all of which had been looted or disturbed (Goldstein 1989:286–289). Nine of the recovered individuals were adults, four were subadults (Table 5.9). Tomb structures included collared pits and the more popular cist tomb. Because all of the contexts had been disturbed moderately or heavily it was not always possible to determine body position and orientation, but seated-flexed position and east orientation seemed to prevail. Many of the tombs excavated in 1984 in Cemetery M had contained remains of offerings: one or several ceramic vessels (including keros, tazones, vasijas, and ollas), baskets, wooden spoons, and a silver ear spool (Goldstein
Goldstein (1989:167, 2005:figure 7.3) described Cemetery M as the “elite” cemetery at Omo M10, noteworthy for its high frequency of ceramic offerings, ubiquity of wooden spoons, and the presence of a silver earspool in the fine textiles from funerary bundle M-7 and a piece of a four-pointed hat in tomb M-17.

In 2011, I excavated two 4-x-4-m units with extensions with a total area of 43 m². The units were placed in the eastern half of the cemetery near the center (716) and near the edge (717). The surface appeared undisturbed. The absence of domestic refuse deposits was indicated by the low density of ceramic sherds (5 sherds/m³). The ceramic fragments (n=27) consisted of Tiwanaku plainware (n=19, 70%) and some Tiwanaku redwares (n=8, 30%) Non-ceramic finds included, human bone, wood, metal fragments, and basket fragments. Animal bone and plant remains were not found. A complete basket found flat on the cemetery use surface in Unit 716 indicates primary, extra-burial activities (Chapter 6).

Of the 14 tombs excavated in 2011, only three burials were found intact. Fourteen tombs were lightly disturbed and 19 were heavily disturbed (Table 5.6). The excavations added seven subadult and one adult burial to the population sample from Cemetery M (Table 5.10). Tomb architecture styles ranged from pits to inset, stone and slab cists, covered with stone piles (Table 5.7). All fourteen 2011 burials were single-individual primary interments in seated-flexed or reclining-flexed position oriented to the east, northeast, southeast, or west (Table 5.8). Several partial grave assemblages were recovered from disturbed contexts: a non-Tawanaku ceramic bowl (M-26); a kero and tazon, spoon, and stone beads (M-27), and a wooden spoon (M-29). The red-slipped vasiya found in Burial M-28 was found on top the interior capstone (Appendix E).
The heavy disturbance of Cemetery M makes it difficult to assess all its characteristics. The revised density of tombs in Cemetery M (0.3 tombs/m$^2$) raised the estimated number of burials to 1,262, making Cemetery M the largest cemetery sector at Omo M10. Many of the grave assemblages were partial and fragmented, but it appears that wealth items like silver jewelry and beads were used in addition to the popular ceramic vessel offerings. However, the grave wealth found in Cemetery M did not exceed that found at other cemeteries, e.g., S or R. Tomb structures were variable, but the treatment of bodies adhered to the known Tiwanaku mortuary patterns.

5.3.8 Cemetery N

Situated just 50 m north of the temple complex, Cemetery N covers an area of 210 m$^2$, clearly indicated by large rocks and circular tomb depressions noted on aerial photographs and ground survey (Figure 5.1, Appendix A). In recent years, a bulldozer driven along the southern edge left a trench that disturbed several tombs.

In 1984 excavations recovered 13 tombs containing five subadults and four adults (Table 5.9; Goldstein 1989:289–291). The tombs were cist and pits with prominent stone collars, a characteristic that Goldstein (1989:208) and Bermann (1989:89) associated with the initial development of *chullpas* in the south-central Andes. In the lightly disturbed tombs, individuals were found in seated-flexed east-facing position, accompanied by ceramic vessels (*keros, tazones*) and wooden spoons (Goldstein 1989:289-291). The presence of identical ceramic forms and textiles styles in Cemetery N (tomb N-9) and the Tumilaca-style site of Omo M11 led Goldstein to argue for a late occupation of Cemetery N (Goldstein 1989:161, 207–208, 2005:85, 243, 339).
In 2011, one 4-x-4-m unit with extension (20 m²) was placed on the northwestern edge of the cemetery next to Tomb N-3 to establish the limits of the cemetery and expose surface area. The unit surface appeared undisturbed, unlike most of the cemetery surface. I excavated one intact tomb and three concentrations of domestic refuse that stratigraphically pre-dated the use of the area as a cemetery. No radiocarbon dates were obtained from this sector.

The cemetery surface was covered with refuse material that became deeper toward the west side of the unit, creating a 10-cm thick layer below the rock collar of Tomb N-3. The density of ceramic sherds for this unit (271 sherds/m3) was significantly higher than the site-wide average of 64 sherds/m3, pointing to the presence of non-mortuary deposits (Table 5.6). Ceramics fragments (n=651) consisted of 85 percent (n=551) of Tiwanaku plainware, 11% (n=72) of Tiwanaku and Tumilaca red-slipped wares with dark to light-orange slip, 1% (n=8) Tiwanaku blackware, and 3% (n=20) other ware types. The ceramic materials were found along with abundant animal bones and fiber, shell, plant remains carbon, and textile pieces (Goldstein and Palacios 2015). The only tomb excavated in 2010 was a simple pit containing a subadult in seated-flexed position facing southeast (Table 5.10, Appendix E).

Because only one tomb was found in Unit 700 at the edge of the cemetery area, the re-evaluation of the cemetery area was only possible using the site-wide average of 0.4 tombs/m². The estimated total number of tombs in Cemetery N based on the tomb density of 0.4 and the cemetery area was 84 tombs. The ceramic style and stratigraphy of domestic refuse layers underlying the tomb surface structures confirms the late- or post-Middle Horizon dating proposed by Goldstein (1989:207–209).
5.3.9 Cemetery P

Cemetery P is the only cemetery located on the eastern edge of the M10 site (Figure 5.1, Appendix A). Situated at the edge of the bluff, the cemetery covered an area of approximately 890 m², as indicated by the presence of large rocks and shallow depressions. The surface displayed signs of significant looting activity throughout the cemetery area. A single radiocarbon date from feature P-18 dates the cemetery to A.D. 885-1020 cal. A.D. (2-sigma) (1,140±40 years BP) (Table 5.4).

The excavations of eight tombs in 1984 were not systematically recorded. The sample included four subadult individuals and two adult individuals (Table 5.9). Tomb structures included pit and cist tombs (Goldstein 1989:291–292). The interment style in Cemetery P included seated-flexed burials, but many were too disturbed to make definitive assessments. For the same reason, grave offering assemblages were partial and fragmented and included one wooden spoon (P-2).

Excavations in 2010 consisted of two 4-x-4-m units (701 and 702) with a total area of 32.5 m² placed in the central western and eastern parts of the cemetery some 20 meters apart from one another. The excavated cemetery surface contained abundant ceramic materials (n=276) of Tiwanaku plainwares (n=225, 82%), Tiwanaku redware (n=48, 17%), blackware (n=1, 0%), and non-Tiwanaku ware (n=2, 1%). The density of ceramic fragments was low (46 sherds/m³) but not so low as to rule out the presence of non-mortuary domestic refuse. Evidence of looting and other surface activities took the form of broken artifacts (wooden kero fragments) and human bone. Animal bone, cane, wood, and maize, carbon and fire stains, on the other hand, especially when found directly on the cemetery use surface reflect possible mortuary ritual activities.
Of the 18 burials excavated in 2010, six tombs (23%) were found intact, 14 (54%) had been disturbed, and six (23%) heavily disturbed (Table 5.6). The population sample was expanded by 16 subadult and four adult individuals (Table 5.10). The tomb structure types in Cemetery P varied from simple pits, partial cist, inset cists, complete stone and slab cist, chamber cist, and a semi-subterranean cist, with stone piles and large stone covers, as well as rock collars (Table 5.7). The average tomb depth was 64 cm. Individuals were interred in seated-flexed (or reclined-flexed) position oriented toward the east. In addition to the 21 single-individual interments, two burials (P-18 and P-21) were double burials (Table 5.8).

Cemetery P stands out among the M10 cemeteries for a number of reasons. For one, it was one of only two cemeteries located east of the monumental complex at Omo M10, overlooking the ancient caravan route that passes east of the Omo M10 bluff. It had a comparatively high tomb density (0.56 tombs/m²), which indicates an estimated number of 500 burials for the whole cemetery, making it one of the largest cemeteries at the site. The burials from Cemetery P displayed several characteristics that set distinguished it from other Tiwanaku-style cemeteries: the high variability of tomb structures, the use of double and secondary burials, the paucity of ceramic offerings and the preferences for basket and gourd containers. The latter are particularly easy to transport and together with the location of the cemetery point to increased mobility of this group (see Chapter 8).

5.3.10 Cemetery Q

The cemetery is located on an informal horizontal artificial platform that extended to the northeast away from the upper court of the Omo M10 temple (Figure 5.1, Appendix A). Covering approximately 225 m², this cemetery is estimated to have
contained 70 tombs. Two radiocarbon dates taken from one burial (Q-7) closely overlap and date the cemetery to cal. A.D. 780-1015 (2-sigma) (1,169±39 years BP) and cal. A.D. 787-1018 (2-sigma) (1,165±40 years BP) (Table 5.4).

The excavations in 1984 recovered five burials of which contained one subadult and four adult individuals (Table 5.9). The adults were found in facedown flexed position inside pit tombs (Goldstein 1989:292–293). One of these tombs (Q-3) contained a female with the remains of a neonate (Goldstein 1989:293, 2005:258). The tombs also contained multiple textiles but no grave offerings. Only one individual (Q-5) was found in a stone cist in seated-flexed position and may have been wrapped in textiles and a reed mat (Goldstein 1989:293).

In 2010 and 2011, I expanded the sample with two adjoining 4-x-4-m units located in the southwest area of the cemetery, between several large looter’s pits. In addition to ten burials, I also excavated several natural depressions and false looter’s pits, and a displaced ashlar block (Q-18) (Table 5.8). The excavated surface were very clean, suggesting little disturbance, absence of domestic refuse, or lack of ritual activity at the cemetery. The density of ceramic sherds was 3 sherds/m3. Ceramic materials included nine sherds of Tiwanaku plainware and 3 sherds of non-Tiwankau ware types.

Of the ten burials excavated in 2010–2011, thirteen (86%) were intact, one was disturbed (7%), and one heavily disturbed (7%) (Table 5.6). Four subadults and six adult individuals were added to the original sample population (Table 5.10). Simple pits (some with stone rings at tomb bottom) dominated, with the exception of a partial cist and a stone-lined cist (Table 5.7). The average tomb depth was 76 cm. All but one individual
were found in facedown-flexed position, covered with reed mats, and buried under several layers of large stones (Table 5.8).

Based on the revised tomb density (0.31 tombs/m²), which is lower than the site-wide average, the estimated total number of burials in Cemetery Q is 70 (Table 5.2), making it one of the smallest cemeteries at the Omo M10. The radiocarbon dates date Cemetery Q to the Middle Horizon occupation of the site, refuting Goldstein’s proposal that the cemetery was occupied late in the site’s history due to the “superior preservation, possibly intrusive location, and textiles” (1989:161). As observed originally by Goldstein (1989:164, 2005:258), individuals found in Cemetery Q had been buried facedown in deep pits without offerings. He interpreted this as a potential marker of taboo or outsider status.

The 2010 excavation confirmed this pattern and determined that Cemetery Q had a divergent but very homogenous in style. The interment style, small size and location of the cemetery, and Middle Horizon dates associate Cemetery Q with the nearby temple complex and possible ritual activities that differ from the normative set of mortuary practices (see Chapter 8).

5.3.11 Cemetery R

Cemetery R was situated farthest from the domestic sector of Omo M10 on the northwest facing slope of a hill south of the M10 bluff top (Figure 5.1, Appendix A). The cemetery extended east-to-west along the center of downhill slope of the hill. To reach the cemetery, it was necessary to cross the deep quebrada that runs along the southern edge of the M10 bluff. From Cemetery R it was possible to see the M10 site, in particular Cemetery T across the quebrada. The cemetery measured ca. 1,198 m² in area (Table
5.2). The extent of the cemetery as seen on aerial photographs were confirmed by surveying the area and noting the extent of large rocks and tomb depressions on the surface. Based on the presence of several looted burials, the cemetery disturbance can be described as moderate to heavy. The radiocarbon date from Burial R-23 (cal. A.D. 773-989, 2-sigma; 1,194±40 years BP) assigned Cemetery R to the Middle Horizon occupation of the site (Table 5.4).

The nine burials excavated in 1984 were mostly disturbed (Table 5.6). The original population sample for Cemetery R consisted of five subadults and three adults (Table 5.9). They consisted mainly of stone and slab cists, and one adobe-lined cist (Goldstein 1989:294–296). Less disturbed burials showed individuals in seated-flexed east-facing position, accompanied by ceramic vessels (tazon, and fragmented remains of red-slipped and blackware vessels), baskets and wooden spoons. Burial R-8 contained a wooden spindle whorl.

In 2011, I excavated two 4-x-4-m units in the eastern (upper) area of the cemetery (Unit 729) and the southern (lower) area of the cemetery (Unit 728). The surface levels contained low amounts of wood, carbon and artifacts. Baskets placed on the cemetery use surface point to extra-burial mortuary activities (see Chapters 6 and 8). The density of ceramic fragments was also low (9 sherds/m³). Tiwanaku redware sherds were more frequent (n=36, 55%) than Tiwanaku plainwares (n=29, 44%) (Table 5.5). Surface ceramic remains came from keros, tazones, effigy vessels, incensarios and sahumadores. The unit assemblages were supplemented by ten spot finds from the unexcavated cemetery area, which included 51 fragments of sahumadores, incensarios, tazones, and vasos.
Of the 15 tombs excavated in 2011, twelve tombs (52%) were intact, five (22%) disturbed, and six (26%) were heavily disturbed (Table 5.6). The population sample was expanded by adding an additional 12 subadult and four adult individuals (Table 5.10). They included pits and partial cists, stone and slab cists (average depth 95 cm) that had been covered with stone piles or large stones (Table 5.7). Eighteen tombs contained single primary interments in seated-flexed or reclining-flexed position. One double burial of a mother and neonate (R-24) was also recorded, in which the bodies had been covered by several layers of rocks (Table 5.8).

Although Cemetery R was placed at a greater distance from the site center than the other cemeteries at Omo M10, it was one of the most populous cemeteries. Based on the tomb density of 0.47 tombs/m², Cemetery R contained an estimated total of 563 burials (Table 5.2). The high visibility of the cemetery on the hill slope likely contributed to its extensive looting. The expanded sample of burials confirmed the use of standardized mortuary practices observed in 1989 by Goldstein, but also showed an increase in burial offerings and grave wealth, including metal ornaments. The double burial presents an exception within the cemetery because of its MNI and the use of multiple rock layers in the tomb. The preference for red-slipped ceramic offerings in tombs was complemented by the uniquely intensive use of ceremonial in extra-burial ritual activities at Cemetery R (see Chapter 8).

5.3.12 Cemetery S

Cemetery S was located south of the natural hill connected with the upper court of the Omo temple (Figure 5.1, Appendix A). The cemetery was situated on the bluff top some meters away from the bluff edge. It was not visible from any of the other site
components because low ridges surrounded it. Cemetery S measured ca. 1,200 m² and its extent was clearly marked in aerial photos and on the ground by large rocks from displaced capstones and shallow depressions. The cemetery had been cut by the modern access road that exposed several tombs in profile. Disturbance was moderate in the northern half of the cemetery but light in the southern half. To date the occupation of Cemetery S, I took samples from two textiles and plant-fiber rope in Burial S-16, and from plant-fiber rope in Burial S-12. Burial S-16 dated to cal A.D. 643-832, 772-981, and 890-1025 (2-sigma) (1,365±40; 1,208±40; and 1,121±40 years BP, respectively). Burial S-12 dated to cal A.D. 773-986 (2-sigma, 1,203±40 years BP) (Table 5.4).

Eight burials excavated in 1984 included two subadult and five adult individuals interred in seated-flexed position oriented east and northeast inside pit and cist tombs (Table 5.9; Goldstein 1989:295–296). Only one kero offering was found in Cemetery S in 1984, alongside several textiles per tomb and maize cobs. Goldstein also noted the presence of identical blue-and-red striped tunics in Burials S-4 and S-5 (1989:fn 27).

In 2011 I excavated two 4-x-4-m excavation units in the eastern (725) and central (724) areas of the cemetery ca. 10–15 m south of the access road. The only non-mortuary features that were excavated were non-mortuary features. The scarcity and nature of materials recovered from the surface suggests that tomb disturbance was minimal, that no domestic refuse was deposited on the surface, and that the wood and intact baskets were used in extra-burial ritual activities (see Chapters 6 and 8). Ceramic sherd density was 8.8 sherds/m³, and the assemblage included Tiwanaku plainware fragments (n=23, 59%) from ollas and Tiwanaku redware (n=16, 41%) from vasijas, and kero/tazones (Table 5.5).
Of the 14 burials excavated in 2011, ten tombs were found intact (48%), seven were disturbed (33%), and four were heavily disturbed (19%) (Table 5.6). The population sample from Cemetery S in 2011 included nine subadults and five adults (Table 5.10). Tomb structure types included simple pits, inset, stone, slab and chamber cists, covered with stone piles, large slabs, mud, or reed mats (Table 5.7). All the tombs contained single primary interments. The majority was positioned seated-flexed facing mostly east, but also northeast, north, southeast and south. One individual had been buried facedown flexed with the head to the east (Table 5.8).

Cemetery S was among the largest cemetery with an estimated 505 burials based on the revised cemetery area and observed tomb density of 0.42 tombs/m² (Tables 5.1 and 5.2). The wealthier grave assemblages from the 1984 sample were confirmed by the 2011 excavations, in which tombs often contained more than two offerings (Appendix E). The variability in grave wealth and tomb structures, together with the presence of one non-normative but wealthy burial (S-9), suggests a moderate degree of cemetery-internal diversity (Chapter 8).

5.3.13 Cemetery T

Cemetery T was situated on the upper slopes of the southern M10 bluff edge. Not visible from the bluff top, the cemetery faced Cemetery R on the opposite hill slope (Figure 5.1, Appendix A). Cemetery T covered an area of ca. 500 m². The cemetery surface was clearly marked by large stones and shallow depressions visible on aerial photographs and confirmed by surface reconnaissance in 2011. The level of disturbance was light to moderate throughout the cemetery area. The only radiocarbon date came
from Burial T-20 (M10=9109) and was dated to cal. A.D. 890-1020 (1,130±39 years BP) (Table 5.4).

Excavations in Cemetery T in 1984 recovered seven burials of four subadults and three adults (Table 5.9). The structures included pits and stone-lined cists (Goldstein 1989:297–299). The individuals in seated-flexed positions were found facing east, and accompanied by multiple offerings (ceramic vessels, wooden spoons) in four of the seven tombs. One burial of an older female (T-2) stood out for including 9 offerings and several textiles.

In 2011 I excavated two 4-x-4-m units on the cemetery’s northeastern edge (726) and the central area (727). The surface levels of the excavated units contained few materials such as human bone, carbon, wood and baskets that resembled the non-refuse assemblages found at other cemeteries with low surface material densities (Goldstein and Palacios 2015). Ceramic density was low with 23 sherds/m$^3$. Although Tiwanaku plainware sherds were most frequent (66%, n=78), Tiwanaku redwares were also frequent (32%, n=38) and Tiwanaku blackwares were present in low numbers (n=2, 2%) (Table 5.5). The sherds belonged to keros, tazones, vasijas, ollas and incensarios.

Of the total sample of 13 tombs, twelve tombs (60%) were found intact, seven (35%) were disturbed and one (5%) was heavily disturbed (Table 5.6). The burials contained the remains of seven subadults and five adults (Table 5.10). The tomb architecture types included all types except for chamber cists (Table 5.7). Tomb covers consisted of stone piles or large rocks. All tombs contained single primary interments in seated-flexed or reclining-flexed position. Individuals were facing east, north, or southeast (Table 5.8).
Cemetery T contained an estimated total of 200 burials based on the revised cemetery area and tomb density of 0.41 tombs/m$^2$. Because Cemetery T was placed far from the domestic site, it was possible to observe evidence of extra-burial mortuary activities. The location on the southern edge of the site bluff associates Cemetery T with Cemeteries R and S, but the grave wealth in Cemetery T was distinctive less than that found in R and S. Tomb structure and grave good variability compared to that of other Tiwanaku cemeteries at Omo M10. A few wealthy tombs (T-2 and T-12) stood out among a relatively “poor” cemetery population (Chapter 8).

5.3.14 Cemetery U

Cemetery U is located along the northeastern edge of the M10 bluff directly north of the monumental sector between the bluff edge and the modern access road (Figure 5.1, Appendix A). The cemetery had an extent of approximately 507 m$^2$ and was covered with large rocks from disturbed tomb capstones. The cemetery was moderately disturbed based on some opened cist tombs throughout the area. The tombs seem to be associated with the Tiwanaku occupation of the space, dating to 772-985 and 895-1144 cal. A.D. (2-sigma) (1,204±43 and 1,078±40 years BP, respectively) (Table 5.4).

Cemetery U was first excavated in 2010. Three 4-x-4-m units were placed to obtain a representative sample of burials. Unit 704 on the eastern side of the cemetery contained few burials indicating the boundary of the cemetery area, while Units 705 and 706 were placed in the center of the cemetery. Excavations recovered 16 tombs, a comparatively small sample compared to the average 22 burials per cemetery, because the tomb density in Unit 704 was extremely low. I also excavated a carbon pit (U-8) next to tomb U-10, two shallow pits filled with domestic refuse, and two natural depressions
without materials. One radiocarbon sample from the carbon fill of U-8 dated to the Late Horizon period (547±38 years BP, cal A.D. 1391–1455, 2-sigma) (Table 5.4).

The excavated unit surfaces contained a mix of materials from cemetery and domestic refuse deposits that included shell beads, camelid bone and wool, cane and maize, basket and gourd fragments, and a cactus spine (Goldstein and Palacios 2015). The density of ceramic fragments in Cemetery U was low (19.7 sherds/m$^3$) (Table 5.5). The ceramic assemblage consisted to 90% of Tiwanaku plainware sherds (n=143) and 10% of Tiwanaku redware sherds (n=16) from *keros*, *tazones*, and *ollas*. There were no materials on the surface that suggested in-situ ritual activities.

Of the 16 burials, six (38%) were intact, four were disturbed (31%), and six heavily disturbed (38%) (Table 5.6). The population sample included 11 subadults and five adult individuals (Table 5.10). Tomb structure types at Cemetery U included simple pits, partial cists, inset cists, and slab cists, covered with stone piles or single large rocks (Table 5.7). The average tomb depth was 76 cm. All identifiable burials contained single individuals in seated-flexed position facing northeast or east (Table 5.8).

Cemetery U was visible and easily accessible, but also spatially isolated from other cemeteries at the site. The surface deposits of mixed domestic refuse and disturbed cemetery materials made it difficult to identity primary surface activities. The radiocarbon date and cultural materials confirm the cemetery’s Middle Horizon date. In terms of mortuary treatment, Cemetery U burials are relatively standardized, although there exists some variability in tomb structure and burial assemblages across the sample. The estimated total number of tombs in Cemetery U based on the tomb density of 0.30 tombs/m$^2$ and the estimated number of burials was 152 tombs.
Cemetery V was located on the western edge of the M10 bluff (Figure 5.1, Appendix A). It was stretch out east-to-west along the bluff edge and did not follow the downhill slope. To the north across the quebrada was Cemetery H, and to the east, separated by a small gully, was Cemetery W. On the surface around the cemetery (marked by shallow depressions and large rocks), there were ceramic sherd scatters and other cultural materials that seem to be associated with the edges of the domestic sector. The cemetery covered an area of ca. 388 m²; its boundary was confirmed by surface survey against the 1946 aerial photographs. The surface of Cemetery V appeared moderately disturbed, with more looted tombs visible on the western side. A radiocarbon date from Burial V-20 dated to cal. A.D. 890-1128 (2-sigma) (1,094±39 years BP) (Table 5.4).

In 2011, I excavated three 4-x-4-m units over a total area of 48 m². Unit 713 was placed on the eastern border of the cemetery near the bluff edge with a relatively low density of tombs and materials. Units 714 and 715 were placed at the center of the cemetery (Figure 5.10). In addition to 19 burials, I excavated one extensive shallow deposit of domestic refuse (V-18) and a small carbon pit (U-12) associated with Burial U-11. The density of ceramic sherds (19/m³) was below the site average of 64 sherds/m³ (Table 5.5). The fragments (n=104) were 92% (n=96) Tiwanaku plainwares (ollas), 7% (n=7) Tiwanaku red-slipped wares (tazones), and 1% (n=1) non-Tiwanaku. Non-ceramic materials included animal and plant remains, shell beads, sandals and string-wrapped camelid phalanges (in middens), and reed mats and baskets (Goldstein and Palacios
2015). Of these, several basket and reedmat fragments were found directly on the cemetery use surface, indicative of their use in association with the burials.

Of the 19 excavated burials, eight (42%) tombs were found intact, 10 (53%) were disturbed, and one (5%) was heavily disturbed (Table 5.6). The population sample included 15 subadult and two adult individuals (Table 5.10). Most were simple pits, although partial and stone cists were also identified (Table 5.7). Intact tomb covers included stone piles, large rocks, wooden trunks and organic remains. The average tomb depth was 82 cm. All identifiable burials contained single-individual interments in seated-flexed or reclining-flexed position facing east, northeast or southeast (Table 5.8).

Cemetery V was spatially associated with Cemeteries H and W through visual contact and common access paths. It was also situated very closely to the domestic sector, so that dispersed refuse was deposited on the cemetery surface at some point (although the temporal relationship with the burials could not be clearly established). The estimated total number of tombs in Cemetery V based on the tomb density of 0.40 tombs/m² and the estimated number of burials was 155 tombs. On the less disturbed surface of Unit 715, some materials seem to have been directly associated with the construction and use of the burials. The high standardization of mortuary treatment was offset by some variability in tomb structure and grave assemblages (Chapter 8).

5.3.16 Cemetery W

Cemetery W was located on the western side of the site at the tip of the bluff with two gullies to the north and south that join west of the cemetery to form the *quebrada* between Cemetery H and V (Figure 5.1, Appendix A). Cemetery W covered an area of ca. 450 m². The limit of the cemetery could only clearly be determined in the west, where
it coincided with the bluff edge (indicated by low number of tombs in Unit 710). In the east, the cemetery had been buried under a thick layer of domestic refuse that obscured the visibility of tomb openings and merged seamlessly into the domestic area to the east. Based on the high density of tombs in Unit 712, it was assumed that the limit of the cemetery lay several meters farther to the north and east. The cemetery surface appeared undisturbed, due to the presence of the midden layers. The radiocarbon sample from Burial W-36 yielded a date of cal. A.D. 995-1158, 2-sigma; 1,015±40 years BP (Table 5.4).

Cemetery W was first excavated in 2010 with three 4x4m units and extension (49 m²): Unit 710 was placed on the west edge of the cemetery, and Units 711 and 712 were placed farther to the east and north (Appendix A). While Units 710 and 711 contained exclusively mortuary features, Unit 712 contained burials along with non-mortuary features (n=34) of refuse pits, small cylindrical pits, carbon deposits and concentrations, and natural depressions found at the same stratigraphic level as the burials (Table 5.6). The change in area function from west (cemetery) to east (domestic) is reflected in the sharp rise of ceramic densities from 12 sherds/m³ (Unit 710) to 619 sherds/m³ (Unit 712). The ceramic sherds (n=2,836) were mostly Tiwanaku plainware fragments (n=2,695), a few Tiwanaku red-slipped serving ware sherds (n=81, 3%) from *keros* and *tazones*, and some unidentified ware types (n=60, 2%). Plant and animal remains (bone, fiber and excrement), shell, and miscellaneous broken artifacts were present in great abundance in the dense domestic refuse deposits that covered Unit 712 and, to some extent, Unit 711.

Of the 21 excavated burials, twelve tombs (57%) were found intact, eight (38%) were disturbed and one (5%) was heavily disturbed (Table 5.6). The sample included 16
subadults and 4 adult individuals (Table 5.10). Most were simple pits with an average depth of 74 cm, and only one was a partial cist (Table 5.7). The tombs were covered with stone piles and single slabs supported by rock collars. All tombs contained single-individual interments in seated-flexed position, oriented to the east, northeast, southeast, and west. Preservation was relatively good and textiles and basket remains were found in many of the tombs throughout the cemetery.

Cemetery W formed a spatial cluster with Cemetery V and H on the western limit of the site, overlooking the valley to the west with the residential sector of Omo M10 directly to the east. The estimated total number of tombs in Cemetery W based on the tomb density of 0.43 tombs/m² and the estimated number of burials was 189 tombs, although this number may increase with a clearer notion of the eastern limit of the cemetery. Because of the refuse deposits, not observations could be made about burial-associated surface activities. Based on the intactness of the burials especially in Unit 712, the deposition of refuse seems to have protected the burials from later looting activity. The burials were highly standardized, even in tomb structure, a characteristic that Cemetery W shared with Cemetery H. Similar to Cemeteries V and H, ceramic vessels in Cemetery W appear to have been readily available and preferred as tomb offerings.

5.3.17 Cemetery X

Cemetery X was located on the northwestern edge of the M10 site bluff. The cemetery was not visible from the bluff top itself as it followed the downhill slope of the bluff edge from south to north (Figure 5.1, Appendix A). The cemetery faced north-northwest toward the valley and irrigable lands. The cemetery covered an area of ca. 360 m² with medium-sized rocks covering the surface. The limits of the cemetery boundary
were determined using the extent of the rock cover, because there were not clearly visible tomb opening or mortuary materials present on the surface. Compared to the other cemeteries at Omo M10, this seemed to indicate minimal disturbance of burial contexts. The radiocarbon sample from Burial X-17 dates Cemetery X to cal. A.D. 683-965 (2-sigma) (1249±42 years BP), slightly earlier than most of the other cemeteries but still within the broader range of absolute dates (Table 5.4).

Cemetery X was excavated for the first time in 2011. Two 4-x-4-m units were placed on the southern (upper) edge of the cemetery for a total excavated area of 32 m². Besides the 39 tomb features in these units, I excavated 6 natural depressions that had the appearance of filled-in tomb openings. The excavated areas were covered in cultural materials, most of them ceramic sherds and a few shells. The above-average density of sherds (72.3 sherds/m³) was probably in part caused by overburden and erosion of domestic refuse materials from the top of the bluff. The ceramic fragments (n=324) from the surface included 60% undecorated plainware sherds (n=194), not all of which were identifiable as Tiwanaku, 9% (n=29), and Tiwanaku red-slipped serving ware fragments from tazones, vasijas, cuencos and vasos. Thirty-one percent of sherds (n=101) were non-Tiwanaku ware types.

Of the 39 excavated tombs, 24 were found heavily disturbed (61%), eight (21%) had been moderately disturbed, and seven (18%) were found intact (Table 5.6). In only 20 burials could the age of the interred be determined (17 subadults and 3 adults) (Table 5.10). Tombs in Cemetery X were simple shallow pits (average depth 39 cm), many with stone collars, and some covered with stone piles (Table 5.7). All were single primary interments, the bodies placed in reclining-flexed position, or lying flexed on their sides,
facing east, northeast, north, southeast, or south. Only one individual (X-34) was positioned seated-flexed facing southeast (Table 5.8).

Cemetery X was not only located far away and out of sight of the domestic sector. Its mortuary characteristics, surface ceramic assemblage, and sheer density of tombs within the excavated area differed drastically from the other Middle-Horizon cemeteries at Omo M10. Based on the estimated cemetery area and the derived average tomb density of 1.22 tombs/m² for Cemetery X, the total number of tombs was 432 tombs, among the more populated cemeteries at the site. The high frequency of non-Tiwanaku ceramic sherds, the lack of ceramic offerings in tombs (Appendix E), the preparation of the body and interments style sets this cemetery makes a clear break from the Tiwanaku-style mortuary practices used at other contemporaneous sectors at Omo M10 (Chapter 8).

5.4 Discussion and Conclusion

This chapter has set the stage for the subsequent analyses and discussions by familiarizing the reader with the location, layout and research history of the Omo M10 site, the methodologies used for field excavations and laboratory analysis, and summaries of the excavations conducted at each of the excavated cemeteries in 1984 and later in 2010–2011.

Because preservation conditions at the Omo M10 site are not homogeneous, I have included a discussion of the different taphonomic processes observed in the burials and how they may affect our understanding of funerary processes and their meaning. Looting of metal and other artifacts is the principal factor of disturbance at Omo M10,
but even burials found with intact tomb covers often underwent processes of infilling and decomposition that differently affected the preservation of organic materials like textiles, baskets or food remains, and caused the post-interment movement of artifacts and human remains inside the burial space. Therefore, I introduce the concepts of “taphonomic pathways” for the reconstruction of post-interment processes, and a “preservation index”, which includes three stages of preservation depending on the materials preserved, to acknowledge the potential impact of taphonomy on the interpretations. However, in order to preserve sample sizes and the ability to compare the different cemetery populations, in the subsequent analyses and interpretations burials are treated as “equal” in terms of preservation and intactness.

Chapters 6 to 9 will explore Tiwanaku funerary contexts at Omo M10 in more detail at the individual and cemetery levels. Though cursory, this overview already confirms some of the previously made observations by Goldstein (1989, 2005) regarding the timing and nature of the Omo M10 cemeteries. Usually only one radiocarbon date was obtained for each cemetery. Most of the cemeteries were used during the Middle Horizon period (Table 5.4). Therefore, it is plausible to assume that the cemeteries were occupied more or less contemporaneously. It is noteworthy that the later cemeteries B and N are located close to the temple complex in contrast to the earlier cemeteries, which are placed around the site periphery. This indicates, perhaps, a contraction of the social and ritual landscape and a shift in the meaning, importance, and use of the monumental space at the site associated with its destruction and collapse (Goldstein 1993a).

Trenching of cemetery areas in 2010–2011 had two important implications for the study of Tiwanaku burials in Moquegua and beyond. By exposing cemetery use surface
associated with the construction of tombs to recovered in-situ deposits of capstone offerings and other evidence of extra-burial ritual activity that is often lost when focusing excavations exclusively on tombs (see Chapter 6). By trenching, it was also possible to assess the average density of burials per square meter, which ranged from 0.3 to 0.5 burials/m². The mean of 0.4 burials/m² corresponds with Owen’s (1997) assessment of tomb densities at the Chen Chen Tiwanaku cemeteries. Using the newly estimated cemetery areas based on aerial photographs and surface survey, the total estimated number of burials for Omo M10 increased from 775 burials (Goldstein 1989:160) to 5,359 — more than doubling the original estimate (Table 5.2). Because the cemeteries were used over multiple centuries, the size of the Omo M10 population would have been only a fraction of this number. There is also the possibility that cemeteries were used by non-residents (see Chapter 8), perhaps linked to the role of Omo M10 as a provincial ceremonial center.

In addition to revising tomb densities, the trenching of cemeteries also had an effect on the demographic sample of cemetery population samples compared to the targeted excavation of highly visible tombs in 1984 and 1987. The demographic profile of individuals recovered in 1984 had an almost equal representation of adults (n=29) and subadults (n=25) (Table 5.9). This is probably the result of the sampling strategy used in the 1984 excavations, which focused on already disturbed or exposed tombs, many of which were large cists or pits with prominent stone collars. Because the size of Tiwanaku tombs generally correlates with the size of the interred body or funerary bundle (Korpisaari 2006:144) it is likely that sampling of larger tombs would lead to an overrepresentation of adults in the mortuary sample.
In contrast, the trenching of cemetery areas in 2010 and 2011 produced a different demographic sample, in which children (n=154) accounted for 75 percent of the total mortuary sample compared to 25 percent of adults (Table 5.10). This distribution matches more closely the expected age-at-death profile for self-reproducing premodern cemetery populations, for which subadults usually constitute at least one third of the cemetery population (Chamberlain 2006:178). The somewhat elevated numbers of subadults in the 2010–2011 mortuary sample from Omo M10 can, in turn be explained by the sampling strategy of placing the 4-x-4-m trenches in relatively undisturbed cemetery areas. By intentionally avoiding large looted tombs, I created a slight bias in the sample toward the smaller tombs of subadults. A chi-square test conducted to compare the unequal distribution of age groups in the two mortuary samples from Omo M10 revealed that the differences observed between the samples were significant (Table 5.11).

Elsewhere, I have argued that the underrepresentation of younger and older adults in fully excavated Tiwanaku cemeteries in the Moquegua region may have been the result of return migration or repatriation practices (Baitzel and Goldstein 2016). However, in the case of Omo M10, I cannot eliminate with absolute certainty that the high frequencies of infants and young children are the result of sampling strategies.
Table 5.9 1984/7 Omo M10 age-at-death profiles by cemetery sector (based on Goldstein 1989:Appendix 2).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Infant</th>
<th>Young Child</th>
<th>Older Child</th>
<th>Adolescent</th>
<th>Young Adult</th>
<th>Mid-Adult</th>
<th>Older Adult</th>
<th>Non-Specific Adult</th>
<th>Total Subadults</th>
<th>Total Adults</th>
<th>Total Individuals</th>
</tr>
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<td>7.7%</td>
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<td>15.4%</td>
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<td>38.5%</td>
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<td>4</td>
</tr>
<tr>
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<tr>
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<td>33.3%</td>
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<td>16.7%</td>
<td>0</td>
<td>11.1%</td>
<td>4</td>
</tr>
<tr>
<td>Q-1984</td>
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<td>12.5%</td>
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</tr>
<tr>
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</tr>
<tr>
<td>S-1984</td>
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<td>14.3%</td>
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<td>28.6%</td>
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<td>14.3%</td>
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</tr>
<tr>
<td>T-1984</td>
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<td>14.3%</td>
<td>0</td>
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<td>2</td>
<td>28.6%</td>
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</tr>
<tr>
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<td>7</td>
<td>12.5%</td>
<td>4</td>
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<td>12.5%</td>
<td>6</td>
<td>12.5%</td>
<td>9</td>
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<tr>
<td>Sector</td>
<td>Infant</td>
<td>Young Child</td>
<td>Older Child</td>
<td>Adolescent</td>
<td>Young Adult</td>
<td>Mid-Adult</td>
<td>Older Adult</td>
<td>Non-Specific Adult</td>
<td>Total Subadults</td>
<td>Total Adults</td>
<td>Total Individuals</td>
</tr>
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<td>0</td>
<td>8 (73%)</td>
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<tr>
<td>H-total</td>
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<td>6 (30%)</td>
<td>4 (20%)</td>
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<td>1 (5%)</td>
<td>1 (5%)</td>
<td>1 (5%)</td>
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<td>17 (85%)</td>
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</tr>
<tr>
<td>I-total</td>
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<td>3 (15%)</td>
<td>1 (5%)</td>
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<td>0</td>
<td>15 (75%)</td>
<td>5 (25%)</td>
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</tr>
<tr>
<td>M-2010</td>
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</tr>
<tr>
<td>P-2010</td>
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<td>7 (35%)</td>
<td>0</td>
<td>2 (10%)</td>
<td>0</td>
<td>2 (10%)</td>
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<td>16 (80%)</td>
<td>4 (20%)</td>
<td>20 (100%)</td>
</tr>
<tr>
<td>Q-2010</td>
<td>2 (20%)</td>
<td>1 (10%)</td>
<td>0</td>
<td>1 (10%)</td>
<td>0</td>
<td>2 (20%)</td>
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<td>4 (40%)</td>
<td>6 (60%)</td>
<td>10 (100%)</td>
</tr>
<tr>
<td>R-2010</td>
<td>4 (6.3%)</td>
<td>4 (6.3%)</td>
<td>2 (3.1%)</td>
<td>2 (3.1%)</td>
<td>2 (3.1%)</td>
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<td>0</td>
<td>12 (18.7%)</td>
<td>4 (6.3%)</td>
<td>16 (100%)</td>
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<td>S-2010</td>
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<td>14 (100%)</td>
<td></td>
</tr>
<tr>
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<td>0</td>
<td>1 (8.3%)</td>
<td>1 (8.3%)</td>
<td>2 (16.7%)</td>
<td>1 (8.3%)</td>
<td>7 (58.3%)</td>
<td>5 (41.7%)</td>
<td>12 (100%)</td>
</tr>
<tr>
<td>U-total</td>
<td>4 (25%)</td>
<td>3 (18.8%)</td>
<td>4 (25%)</td>
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<td>0</td>
<td>1 (6.3%)</td>
<td>2 (12.5%)</td>
<td>2 (12.5%)</td>
<td>11 (68.8%)</td>
<td>5 (31.2%)</td>
<td>16 (100%)</td>
</tr>
<tr>
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<td>0</td>
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<td>15 (88.2%)</td>
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<td>17 (100%)</td>
</tr>
<tr>
<td>W-total</td>
<td>9 (45%)</td>
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<td>1 (5%)</td>
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<td>2 (10%)</td>
<td>2 (10%)</td>
<td>0</td>
<td>0</td>
<td>16 (80%)</td>
<td>4 (20%)</td>
<td>20 (100%)</td>
</tr>
<tr>
<td>X-total</td>
<td>3 (15%)</td>
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<td>6 (30%)</td>
<td>0</td>
<td>1 (5%)</td>
<td>1 (5%)</td>
<td>1 (5%)</td>
<td>0</td>
<td>17 (85%)</td>
<td>3 (15%)</td>
<td>20 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>65 (31.8%)</td>
<td>59 (28.9%)</td>
<td>22 (10.8%)</td>
<td>8 (3.9%)</td>
<td>12 (8.3%)</td>
<td>12 (8.3%)</td>
<td>17 (8.3%)</td>
<td>4 (2%)</td>
<td>154 (75.5%)</td>
<td>50 (24.5%)</td>
<td>204 (100%)</td>
</tr>
</tbody>
</table>
Excavations in the 1980s produced a slightly higher frequency of male than female individuals (Table 5.12). The reverse is the case for the sample excavated in 2010–2011. To assess how significant these differences were given the different sample sizes, I conducted a chi-square test. The differences in the frequencies of sexed adults were deemed not significant at a $p$-value of 0.2915.

Table 5.13 displays the numbers and frequencies of male and female adult individuals by cemetery at Omo M10 (including non-Tiwanaku Cemetery X, see Chapter 9). Almost all of the cemeteries contain both male and female individuals, even Cemetery Q, which contained an unexpectedly high frequency of adults compared to the other cemeteries. This supports the argument made above that the cemeteries at Omo M10 were used by self-reproducing community groups that did not rely on in-migration or
intermarriage with other groups to reproduce. The absence of one or the other sex in Cemeteries U, V and X at Omo M10 is likely the result of small sample sizes, since these samples contain fewer than 4 adult individuals. Cemetery P presents a noteworthy exception to the balanced proportions of male and females in each cemetery sample. This sample of 26 individuals contained six male adults and no female adults. A social group with this demographic profile would not have been self-reproducing, and would have required in-migration or exogamy to reproduce. I return to the unusual nature of this demographic profile in Chapter 8 to discuss the possible implications for the subsistence and mobility strategies of the Cemetery P group.

The corrected age-at-death and biological sex profiles from the Omo M10 cemeteries create a more complete data set than the pilot sample recovered in 1984. The abundance of young individuals, especially below the age of 5 years and the presence of both male and female adults in most cemeteries strongly supports the claim, made

Table 5.13 Distribution of sexed individuals by cemetery at Omo M10 (1984 and 2010 samples).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
<th>Unknown</th>
<th></th>
<th>Total Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>3</td>
<td>50%</td>
<td>3</td>
<td>50%</td>
<td>0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>2</td>
<td>66.7%</td>
<td>1</td>
<td>33.3%</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>20%</td>
<td>4</td>
<td>80%</td>
<td>1</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>4</td>
<td>57.3%</td>
<td>3</td>
<td>42.9%</td>
<td>3</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>P</td>
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<td>0</td>
<td>0%</td>
<td>0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Q</td>
<td>3</td>
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<td>4</td>
<td>57.3%</td>
<td>3</td>
<td>10</td>
<td></td>
</tr>
<tr>
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<td>S</td>
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<td>37.5%</td>
<td>5</td>
<td>62.5%</td>
<td>2</td>
<td>10</td>
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</tr>
<tr>
<td>T</td>
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<td>100%</td>
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<td>6</td>
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<tr>
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<td>0%</td>
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<td>2</td>
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<td>W</td>
<td>1</td>
<td>25%</td>
<td>3</td>
<td>75%</td>
<td>0</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>0</td>
<td>0%</td>
<td>3</td>
<td>100%</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>47.1%</strong></td>
<td><strong>36</strong></td>
<td><strong>52.9%</strong></td>
<td><strong>14</strong></td>
<td><strong>82</strong></td>
<td></td>
</tr>
</tbody>
</table>
previously by others, that the Omo M10 cemeteries were used by self-reproducing kin groups or lineage groups. Pending future biological distance study analysis of human remains, I would argue that Cemeteries B, H, I, M, P, R, S, T, U, V, W, and X represent kin groups. It is probable that these groups lived in residences clustered around plaza groups, and that each cemetery formed an extension of one or multiple residential complexes. With the exception of the Cemetery P group, cemeteries with a heterogeneous age and sex demographic profile probably did not rely on in-migration or other means to reproduce biologically. This presents an important factor when studying the evidence for inter-cemetery or inter-group interaction (Chapter 8), and identities related to age and sex (Chapter 7), which would have mattered to all kin groups. Before exploring these dynamics, the next chapter presents a reconstruction of normative and non-normative Tiwanaku mortuary practices that took place within and beyond the realm of the kin community.
CHAPTER 6: PRACTICE AND MEANING IN TIWANAKU MORTUARY RITUALS AT OMO M10

Introduction

In this chapter, I investigate the different activities and materials involved in what we may consider communal or “normative” Tiwanaku mortuary ritual. Even though an extensive body of research and literature exists on Tiwanaku burials, our understanding of the funerary process and its meaning remains uncertain, in part due to the partial nature of burial samples, the poor preservation of highland contexts, or the looting and disturbance of excavated contexts. As the review of Tiwanaku mortuary studies in Chapter 4 demonstrates, previous investigations focused mainly on spatial analysis and quantitative analysis of burial contexts. However, I argue that it is important to contextualize the use of mortuary materials and practices more critically. The time frame and interpersonal context in which certain parts of the funeral are performed can have profound implications for their interpretation. Following current approaches to the study of social identity and organization as proposed by mortuary theory (laid out in Chapter 2), here I closely examine the Tiwanaku funerary process and its changing participants, objects and places with the goal of understanding not only “what” occurred, but also “why” and “for whom”.

The new mortuary evidence from Omo M10 provides unprecedented detail on the various steps and breadth of materials that constituted Tiwanaku funerals. By examining the common characteristics of burials across the Omo M10 site in regard to body
preparation, interment, and post-interment activities, I first reconstruct the different stages of normative mortuary ritual. This provides a more complete insight into the meaning and symbolisms underlying burials in Tiwanaku society. By critically examining the evidence for different temporal scales of funerary activities, I propose that cemeteries were important spaces for ancestor veneration, and that the early and later stages of funerary activities differed in terms of their ritual focus. Finally, I analyze and define the nature of non-normative Tiwanaku mortuary rituals as they occurred in distinct forms across the community. Overall, the definitions and range of Tiwanaku mortuary practices defined in this chapter present a baseline for identifying and understanding variability in mortuary ritual related to individual social identities like age, gender, and social relationships of status, and community (Chapters 7, 8, and 9).

6.1 Normative Tiwanaku Mortuary Rituals

Most of the cemeteries at Omo M10 could be considered “normative” or common Tiwanaku cemeteries. With the exception of two particular cemeteries and some individual burials discussed in the second half of this chapter, the burials found in these cemeteries displayed common characteristics concurrent with known Tiwanaku mortuary behavior. This normative Tiwanaku burial practice consisted of multiple stages, perhaps taking place over multiple days and weeks, and bears some resemblance to funerary practices documented historically and ethnographically in the Andean highlands.
6.1.1 Phase 1 of Normative Mortuary Ritual: Body Preparation and Funerary Dress

The first phase of Tiwanaku mortuary rituals consisted of the physical manipulation of the bodily remains prior to interment. Following death, the remains of the deceased member of the provincial Tiwanaku society were adorned with jewelry items like necklaces and bracelets, but more cumbersome and larger objects like hats or sandals were not worn directly on the body and instead formed part of the offering assemblage. Hairstyles seem to have differed based on sex and age, but it could not be determined whether these styles were used specifically for interments or worn in life, as well. His or her body would then be flexed tightly, positioning the deceased with knees drawn up to the chin (Figure 6.1). The arms would either be crossed in front of the stomach with the hands resting in the lap (73%), lain alongside the torso (15%), or a combination of both (12%).

Next, the deceased’s head and face were covered with cloth and, sometimes also raw camelid fiber. Although four selvage pañuelos seem to have been the preferred head-cloth when available, as seen in the case of the elite child M10S-16, any larger piece of cloth or assemblage of cloth pieces could also serve the same purpose. Two pañuelos from the M10 mortuary contexts were identified during the textile analysis, but because of their fragmented state it was not possible to determine whether these objects had been

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82 The reconstruction of the body preparation is based on the spatial association of skeletal remains and artifacts in intact tombs and two child fardos (S-16 and P-18B) that were unwrapped in 2012 and 2013.
83 Based on the 133 Tiwanaku burials for which arm positions could be determined.
84 see Chapter 6 for more detail on grave offering distributions.
Figure 6.1 Reconstruction of tomb profile S-22 facing south showing child individual in seated-flexed position oriented northeast with arms crossed in front of chest.

Figure 6.2 Warp-striped camelid fiber tunic (M10=8964.04) from funerary bundle M10S-16.
used as head-cloths.\textsuperscript{85} The sewn-together pieces of what likely were originally two tunics found with \textit{fardo} P-18B suggest that the presence of a head-cloth was desirable regardless of its appearance or quality. In addition to the cloth, fine unspun camelid fiber—likely from vicuñas or alpacas—was sometimes used to pad the face and neck area to prop up the head and prevent it from slumping to either side, as observed in \textit{fardos} S-16 and P-18B.

In addition to the head-cloth, tunics\textsuperscript{86} were as essential in the preparation of the \textit{fardo}, as they were to the dress code of living Tiwanaku peoples (Figure 6.2). Based on the evidence from three well-preserved and unwrapped funerary bundles from different cemeteries and age groups, it appears that the innermost layer of the bundle was usually a tunic that was slipped over the body with the covered head protruding from the neck slit, like it would have been worn in life.\textsuperscript{87} Rather than being put through the arm slits, the arms of the deceased remained inside the garment, possibly similar to the way the tunic would have been worn while sleeping.

\textsuperscript{85} In most tombs, the exposure of the top of the \textit{fardo} to air and water accelerated the decomposition of textiles so that no conclusions could be reached regarding the frequency of the use of head-cloths in Tiwanaku burials.

\textsuperscript{86} Tiwanaku tunics were rectangular four selvage structures that were folded over and stitched together along the sides leaving open holes near the shoulder folds for the arms. A slit left open during weaving in the center of the garment functioned as a neck slit; its base was occasionally decorated with an embroidered plaque for decoration and additional reinforcement. Similarly, embroidery could be found along the side seams. Tiwanaku tunics were woven in warp-face with plain natural colored wool or dyed bi-chrome or polychrome fiber, creating a pattern of vertical stripes (Oakland 1992).

\textsuperscript{87} This could not be determined for the intact, unwrapped funerary bundles, since the interior layers were covered and not visible. In tombs where textile remains were found, the cloth around the head was the first to decompose due to prolonged exposure. As a result, it was not possible to consistently ascertain the manner in which the tunics were worn in any of the excavated tombs.
This is partially inferred also from the dominant position of the arms and hands as crossed over the lap or stomach area in tombs with incomplete textile preservation. The arm position is the same as that observed in intact mummy bundles, and confirms speculative observations made by Goldstein (1989:165). There is no textile evidence to suggest that the armholes of tunics would have been stitched shut. Later, a secondary fabric was then used as a shroud to envelope the body entirely. Although it is generally assumed that Tiwanaku tunics were bound along the waist with a belt, or faja (Cassman 1997), no such item was found in Tiwanaku burials at Omo M10 or anywhere else in the Moquegua drainage.

Tunics present the most common garment type used for interment (83.3 percent of identifiable garments) (Table 6.1). Thirty-five percent of tunics had bichrome or polychrome warp-stripe designs, and two tunics were woven in weft-faced tapestry weave. In addition, 17.1 percent of identifiable garments were either tunics or llicllas (38.5 percent warp-striped). Ten percent of identifiable garments were llicllas or mantas, 87.5 percent of which were warp-striped. Only one polychrome loincloth was identified (see Section 6.4). Four-cornered hats, or gorros, and bags were rarely used for burial at Omo M10. They were not used to dress the dead but added to the offering assemblage.

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88 Tunics and llicllas were based on their diagnostic elements. Garments were identified as tunics based on the presence of joined weft selvages, in contrast to llicllas that do not have joined weft selvages but that are usually embroidered. However, because neckslits and armholes on tunics sometimes have embroideries, garments with small fragments were categorized as belonging to either garment group. Preservation does not appear to favor one or the other type of garment, so that the frequencies in the funerary textile assemblage likely reflect their original frequency.

89 Only two Tiwanaku burials in normative cemeteries (P-15 and U-1) contained fragments of gorros. Burial I-24 contained an embroidered chuspa (M10=8870), whereas
The variability of fardo textiles based on the age and sex of the deceased is further explored in Chapter 7.

Table 6.1 Numbers and percentages of textile garment types identified at Omo M10.

<table>
<thead>
<tr>
<th>Garment Type</th>
<th>Weave Type</th>
<th>Total Number of Garment Types</th>
<th>Percentage of Garment Types</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Warp-Faced Plain</td>
<td>2 (100%)</td>
<td>2.6%</td>
</tr>
<tr>
<td>Pañuelo</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Warp-Faced Striped</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Weft and Warp-Faced Tapestry</td>
<td>2 (3.8%)</td>
<td>68.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Tunic</td>
<td>32 (61.5%)</td>
<td>18 (34.6%)</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>4 (30.8%)</td>
<td>7 (87.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tunic/Lliclla</td>
<td>9 (69.2%)</td>
<td>17.1%</td>
</tr>
<tr>
<td></td>
<td>6 (87.5%)</td>
<td>1 (12.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 (100%)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lliclla/Manita</td>
<td>1 (12.5%)</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>1 (100%)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loincloth</td>
<td>0 (12.5%)</td>
<td>1.3%</td>
</tr>
<tr>
<td></td>
<td>1 (100%)</td>
<td>44 (57.9%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unidentifiable Total</td>
<td>115 (72.3%)</td>
<td>67.6%</td>
</tr>
<tr>
<td></td>
<td>40 (25.2%)</td>
<td>6 (2.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td></td>
<td>159</td>
<td>235</td>
<td></td>
</tr>
<tr>
<td></td>
<td>159</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Technological and structural characteristics of the funerary textile assemblage provide further information about the life history and use of these garments and their role in the funerary process. The argument that the deceased were dressed in their personal garments, rather than in cloth woven specifically for funerary use, is supported by the high rate of repair. Thirty percent of woven objects from burial contexts had been modified to extend their use life. The most common form of repair was the insertion of supplementary warps along the bottom selvage.\(^90\) In terms of weave quality, the textiles found in burial contexts at Omo M10 resemble those found in funerary assemblages at the makeshift bag found in burial U-18 consisted of a rectangular fragment of plainweave cotton folded over and stitched shut along the sides.\(^90\) Frequencies of repair of textiles from midden contexts were lower (16%), probably because the sample included fewer selvage fragments.
the Tiwanaku cemeteries at Rio Muerto M43. Funerary textiles at Omo M10 had a slightly lower fabric count (thread density) (170 threads/cm²) than those at Rio Muerto M43 (189 threads/cm², based on Plunger 2009:table 2). All threads were spun and plied (/2\) and woven in a warp-faced pattern, typical of the Tiwanaku weaving tradition.

The textile wrappings were fixed in place with single stitches of spun or unspun camelid fiber placed at different locations around the bundle. The outermost layer of the bundle was a net of three-strand braided (88.5%) or /2\-twisted (7%) plant fiber rope91 placed over the body leaving the head exposed.92 The ropes were looped and loosely knotted to one another allowing the persons preparing the bundle to tighten the net as necessary. The bundle was completed by wrapping a simple, dyed or undyed thread several times around the top of the covered cranium, and inserting up to ten short thin cane pieces (4–12 cm long) under the thread. Colored feathers (orange, red) were inserted into the top openings of the canes creating a headdress or crown (Figure 6.3).

The time frame and location in which the deceased was prepared is difficult to reconstruct. Nevertheless, entymological evidence in the form of blowfly (Calliphoridae sp.) larvae and puparia was found in facial and cranial cavities of human remains and between cloth folds. Their presence suggests that bodies were exposed long enough for the blowflies to lay their eggs before the wrapping took place. Also, because toe and foot phalanges were generally found articulated inside the bundles, the dead must have been

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91 To date, no formal identification of this plant species has been made, but the same species was consistently used throughout the mortuary assemblage. It is likely a variety of endemic river reeds or rushes.
92 2.6 percent of fardos were wrapped in both braided and twisted rope, and in 1 percent of burials the plant fibers were used unmodified. The overall sample size was 113 specimen.
prepared and transported prior to advanced decomposition of soft tissue. Although we have no concrete evidence regarding the location of the bundle preparation, it probably took place in or near the home of the deceased, where kin or close friends had easy access to tools and materials needed for their task.

![Image](image.jpg)

**Figure 6.3** Detail of headdress on funerary *fardo* M10P-18B showing a light-colored string wrapped around the cranium with small canes inserted (the top of the feather had broken off).

### 6.1.2 Phase 2 of Normative Mortuary Ritual: Tomb Construction

After the mourners finished preparing the *fardo*, they carried the bundle to the cemetery, which was located outside the village along the edges of the M10 bluff. Most of the cemeteries were located just outside the village (e.g., Cemeteries H, I, M, W, V, U), but others could only be reached passing the temple complex (Cemeteries P and S) or even a deep *quebrada* (Cemetery R). Upon arrival at the cemetery, or prior to the arrival of the funerary procession, members of the community gathered to excavate a pit 60 cm to 100 cm in diameter, and with a depth of between 80 cm and 130 cm. This was an arduous task given the compact, coarse, and rocky texture of the sterile sediments at the
bluff top. In many cases, the walls and bottom of the pit were left unmodified (57.8%) (Figure 6.4a, Table 6.2). Other pits were fully or partially lined with stones along the bottom and sidewalls forming cist tombs. Stones used for lining included medium-sized river cobbles, unworked angular blocks of locally available sedimentary rock, or slabs of andesite with at least one flat surface. The rocks were stacked, and in some cases held in place by *argamasa*, a cement-like mixture of sediment, gravel, and organic soils.

**Table 6.2** Frequencies of Tiwanaku tomb structures at Omo M10 (data not available for two burials excavated in 1984).

<table>
<thead>
<tr>
<th>Tomb Type</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple Pit</td>
<td>148</td>
<td>57.8</td>
</tr>
<tr>
<td>Ringed Pit</td>
<td>4</td>
<td>1.6</td>
</tr>
<tr>
<td>Partial Cist</td>
<td>19</td>
<td>7.4</td>
</tr>
<tr>
<td>Inset Cist</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Stone Cist</td>
<td>32</td>
<td>12.5</td>
</tr>
<tr>
<td>Stone-Slab Cist</td>
<td>33</td>
<td>12.8</td>
</tr>
<tr>
<td>Slab-Chamber Cist</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td>Other Cist (adobe, sandstone, semisubterranean slab)</td>
<td>4</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Total</strong>*</td>
<td><strong>256</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The large number of excavated burials at Omo M10 has made it possible to revise and expand previously used typologies of Tiwanaku burials in Moquegua (Goldstein 2005:246; Sharratt 2011:140–141) and the altiplano (Korpisaari 2006:142–145). These typologies distinguished between 2–3 types, usually consisting of unlined pits and stone-lined cist tombs, with variants based on their interior and surface architecture. At Omo M10, I established expanded the typology based on additional variants of simple and partial pits (with single or multiple courses of stone lining), stone and slab-lined cylindrical cists, and small rectangular chamber tombs.
The simplest variety of stone-lined tomb was a partial pit with a single course of cobbles along the base, middle, or opening (1.6% of tombs) (Figure 6.4b). Partial cists contained several courses of cobbles or angular rocks placed along the base or top of the pit. A variant of the partial cist, what I term the “inset cist” (7.4% of tombs), entailed a wide pit whose upper walls were unlined (Figure 6.4c). The lower half was completely lined with a single course of vertically set slabs or multiple courses of cobbles and angular stone to create a small cist of a more constricted diameter. Inset cists differed from partial cists in that the opening of the cist portion of the tomb was sealed separately even though the opening was usually 30 cm to 40 cm below the opening of the pit.

**Figure 6.4** Tomb structure types at Omo M10: (a) Simple Pit, (b) Partial Pit, (c), Inset Cist, (d) Stone Cist, (e) Stone-Slab Cist, (f) Rectangular Chamber Cist.
Complete cists were fully stone-lined, subterranean structures that included several variants. The most common cist variant (12.5%) was cylindrical in shape and lined with courses of angular rocks and cobbles (Figure 6.4d). An equal number of cists (12.8%), so-called slab-cists, had a bottom course of vertically placed stone slabs while the upper tomb section was lined with angular rocks and cobbles (Figure 6.4e). This construction style was most reminiscent of the architectural technique used for Tiwanaku monumental structures, in which a base course of large standing stone blocks was overlaid with courses of stone (in the highlands) or adobe (in the coastal valleys). Occasionally, other materials like adobe, sandstone, cut ashlars or flat slabs were also used to line tomb walls (1.6%).

A third, rare variant of the complete cist type was the slab-chamber cist (1.2%), a rectangular space lined with standing stone slabs placed at right angles, often equipped with a base and top cover slab (Figure 6.4f). This type variant resembles the Middle Horizon slab cists that were documented by archaeologists in the Lake Titicaca region. Occasionally, a flat stone had been put at the bottom of the tomb (25.4%), but packed earth or naturally compact ground was more common (74.6%).

93 Burial M10P-17 was the only semi-subterranean slab cist excavated at Omo M10. This structure variant has been defined based on the Rio Muerto M70B cemetery, where it was more frequent (Green et al. 2007).
94 Based on 240 Tiwanaku tombs for which this information was available.
have taken time to procure appropriately sized and shaped rocks, especially stone slabs, which not have been readily available atop the M10 bluff.

6.1.3 Phase 3 of Normative Mortuary Ritual: Interment, Offerings, and Closing of the Tomb

According to Tiwanaku custom, when the tomb structure was completed, the bundle was placed at the bottom of the pit typically facing east, northeast, or southeast, but occasionally individuals also faced north, south or west (e.g., Goldstein 2005:245; Korpisaari 2006:142; Sharratt 2011:143). At Omo M10, east-facing interments prevailed (58.5%) along with deviations to the northeast (19.3%) and southeast (13.6%). Less than 10 percent of individuals were interred facing north, south, or west.⁹⁵

Figure 6.5 Placement of grave offerings at bottom of tomb in Burial S-15.

⁹⁵ Based on the 176 normative burials for which orientation could be determined.
Before the opening of the tomb was sealed, offerings could be placed with the bundle. These objects were placed near to the bundle on the tomb floor or deposited on top of the bundle itself (Figure 6.5). Offering objects placed atop the bundle were prone to shift or fall as the bundle’s textiles disintegrated. Infilling of the tomb space before sealing the opening was not customary at Omo M10. Shallow deposits of coarse sediments with gravel and rock inclusions at the bottom of the tomb suggest that sometimes the tomb floor was covered with the excavated sediments. It is likely that no additional sediments were deposited at the moment of interment, as objects and human remains were able to move around the tomb cavity, and the upper tomb cavities were consistently filled with fine silts filtered in from the surface. Goldstein (1989:166, 2005:247) describes the silting-in process in relation to the removal of capstones during looting, but the high number of intact capstones on tombs filled with silt-sediments suggests this was

The final step of interment was the sealing of the tomb opening. The most common form of tomb cover was a pile of medium-sized and large rocks that was built by placing a ring or collar of large stones along the tomb opening (Figure 6.6). These stones projected over the rim of the tomb and provided a base for the placement of more rocks and stone. Wedged into one another, the piled stones covered the tomb cavity below. Dried mud residue on some intact stone covers suggests that the gaps between the rocks were sealed to prevent air or sediments from entering the cavity.
Large stone slabs acted as alternative tomb covers, either with a supporting stone collar or without. In a few cases, thick wooden trunks or multiple branches were placed across.
the opening to support the stone pile. Goldstein previously identified wooden posts in Tiwanaku tombs in Moquegua as possible tomb markers (1989:163, 2005:246). These posts or sticks were not found in their original position. The recent mortuary excavations identified the use of wooden sticks and trunks as support for stone capstones in 7 percent of identifiable capstones (n=103), leading me to reject Goldstein’s original proposal.

6.2 In-Tomb Offerings in Normative Tiwanaku Burials

During Tiwanaku funerals, mourners occasionally placed goods inside the tomb with the fardo before sealing the grave. Although offerings were usually placed inside the burial before the tomb was sealed, in four burials offerings had been placed on top of the intact capstones (Burials H-23, T-12, R-18, M-28) (Figure 6.7; see also Section 6.3). These offerings or sets of offerings were very similar to the objects found inside the burial. Their location on top of—rather than near the capstone—identifies them as personalized, rather than generalized cemetery offerings. For this reason, the following analysis will include the capstone offerings in the analysis of in-tomb offerings.

The inclusion of additional grave offerings was not the norm at Omo M10. Only forty-two percent of excavated burials (n=107) contained objects not used for the preparation of the funerary fardo (i.e., textile garments, plant-fiber rope, headdress). Based on the total number of excavated tombs at Omo M10 (including disturbed and looted burials), the maximum number of offerings per tomb at Omo M10 was ten; the average number of offerings per tomb was 1.06 objects.
The types of objects used as offerings in Tiwanaku interments at Omo M10 fall into three categories: objects related to food consumption, items used for personal adornment (jewelry, hats, sandals), and tools associated with ritual or craft activities.

6.2.1 Normative Grave Offerings Related to Food Consumption

Grave offerings at Omo M10 related to food were the most common type of inclusion, and consisted of vessels made from fired clay, wood, gourds or woven reeds, and of serving utensils (spoons, ladles) carved from wood or gourds (Table 6.3). Ninety-three percent of burials with offerings (n=118 of 127) contained at least one food-related item. More frequently these offerings were found in sets of two or more. The most common association between objects in this category existed between drinking cups and bowls, as well as bowls and wooden spoons.
Table 6.3: Types of food-related grave offerings at Omo M10.

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Number</th>
<th>Frequency</th>
<th>Food-related Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceramic Vessel</td>
<td>95</td>
<td>48</td>
<td>Preparation, Serving</td>
</tr>
<tr>
<td>Basket Vessel</td>
<td>35</td>
<td>17.7</td>
<td>Storage, Serving</td>
</tr>
<tr>
<td>Wooden Vessel</td>
<td>3</td>
<td>1.5</td>
<td>Serving</td>
</tr>
<tr>
<td>Gourd Vessel</td>
<td>9</td>
<td>2.3</td>
<td>Storage, Serving</td>
</tr>
<tr>
<td>Wooden Spoon</td>
<td>47</td>
<td>23.7</td>
<td>Serving</td>
</tr>
<tr>
<td>Gourd Ladle</td>
<td>9</td>
<td>2.3</td>
<td>Serving</td>
</tr>
<tr>
<td>Total</td>
<td>198</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Ceramic vessels (n=95) constituted forty-eight percent of food-consumption related offerings (Table 6.4, Figure 6.8). The majority of ceramic vessels were Tiwanaku-style red-slipped serving wares (n=71, 74.7%), and less than one quarter of vessels were unslipped serving or cooking wares (n=21, 22.1%). Polished blackware vessels (n=2, 2.1%) were almost as rare as non-

Figure 6.8 In-tomb ceramic vessel offering forms: keros (top left), tazon (top center), vasijas (top right), ollas (bottom left), miniatures (bottom center), effigy vessel (bottom right).

96 This includes an unslipped effigy vessel, miniatures, ollas, and several unslipped tazones and an unslipped kero.
Tiwanaku ceramic offerings (n=1, 1%). Because red-slipped vessels included mostly serving wares\(^7\), the most common vessel forms in this group were *tazones* (bowls) and *keros* (drinking cups). *Keros*\(^8\) (n=28, 29.5%) and *tazones* (n=29, 30.5%) made up over half of the ceramic mortuary assemblage, followed by *vasijas* (n=15, 15.8%). Unslipped vessels, including cooking *ollas* and miniature vessels\(^5\) accounted for 10.4% and 8.4% of the assemblage, respectively. *Cuencos* (n=2), *vasos* (n=1), and effigy vessels (n=1) were rarely used as offerings.

**Table 6.4**: Numbers and frequencies of ceramic vessel offerings at Omo M10.

<table>
<thead>
<tr>
<th>Vessel Form</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kero</td>
<td>28</td>
<td>29.5</td>
</tr>
<tr>
<td>Tazon</td>
<td>29</td>
<td>30.5</td>
</tr>
<tr>
<td>Vasija</td>
<td>15</td>
<td>15.8</td>
</tr>
<tr>
<td>Olla</td>
<td>10</td>
<td>10.5</td>
</tr>
<tr>
<td>Miniature</td>
<td>8</td>
<td>8.4</td>
</tr>
<tr>
<td>Cuenco</td>
<td>2</td>
<td>2.1</td>
</tr>
<tr>
<td>Vaso</td>
<td>2</td>
<td>2.1</td>
</tr>
<tr>
<td>Effigy Vessel</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>95</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The preference for serving wares as grave offerings at Omo M10 corresponds well to known Tiwanaku mortuary practices. *Tazones* and *keros* dominated mortuary ceramic assemblage at Chen Chen (Moquegua) and Tiraska (Bolivia), where they accounted for 42 percent and 20 percent, and 37 percent and 14 percent of the burial ceramic offerings, respectively (Korpisaari 2006:table 7.2; Sharratt 2011:144–145). Tiwanaku mourners chose from a large assemblage with diverse vessels forms (e.g., cooking pots of varying sizes, storage jars, serving wares) to include only objects

\(^7\) One miniature *escudilla* (M10=7824) was also red-slipped.
\(^8\) This includes the two portrait-head vessels (*keros retratos*) recovered from burials M10I-27 and M10T-12.
associated with certain types of food production (small *ollas*), serving of liquids (*vasijas*) and consumption of food and drink (*tazones*, *keros*, *cuencos*, cups, effigy vessels) (Goldstein 1989:71–74; Janusek 2003a:57–68). The predominance of *tazones* in the Omo M10 funerary assemblage reflects the general popularity of this ceramic type among the Chen Chen-style population in Moquegua (Goldstein 2005:158). Although most *tazones* at Omo M10 were decorated, 16.7 percent (n=5) were not painted or even slipped, and roughly burnished, a technological feature Janusek associated with the Tiwanaku V ceramic assemblage at Tiwanaku (Janusek 2003a:64).

The variability of vessel forms in burials at Omo M10 is also similar to that seen in larger burial samples at Chen Chen and Tiraska. Korpisaari reports nine different vessels forms in the burials at Tiraska, including popular forms (*vasijas*), as well as likely imports (one *challador* and one *escudilla*) and non-food related ceramic vessels (*sahumadores* and *incensarios*) not found at Omo M10. Chen Chen, Sharratt reports the presence of eleven ceramic vessel types, including cups, *vasijas* and bottles, *ollas* and *cántaros*, miniatures, *incensarios* and *sahumadores* (2011:144–145). The last two vessels were represented in the form of fragments without exact provenience. It is therefore noteworthy that the mortuary ceramic assemblage at Omo M10 consists exclusively of food-related ceramic objects.

The style and decoration of ceramic vessels placed in the Omo M10 burials closely followed the local variant of the Tiwanaku ceramic style, in particular the Chen-Chen style (Goldstein 1985:99–149) associated with the Tiwanaku V-style in the highlands (Janusek 2003a:75). Twenty-five red-slipped ceramic vessels had figurative design motifs (flamingos, felines, profile heads), while 39 were decorated with geometric
design motifs (steps, vertical wavy lines, Greek frieze, chevrons, pendant circles). Save for a few exceptions, the designs were mostly executed using the broad strokes and filled-in angular blocks arranged in the formalized design panels that were typical of the Tiwanaku Chen-Chen style (Goldstein 1985:101–145, 147).

![Figure 6.9 Wooden keros from burials I-24 (left) and S-15 (right).](image)

Three wooden *keros* recovered from tombs demonstrate that wooden vessels were crafted and used similarly to ceramic vessels (Figure 6.9). In Burials S-15 (banded wooden *kero*) and I-24 (portrait-head wooden *kero*), the intact wooden vessels formed sets with ceramic *tazones*. Although ceramic and wooden vessels were the most durable type of food consumption-related objects, the high number of baskets included in Tiwanaku burials at Omo M10 also played a significant role in storing and serving food and drink.

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99 Six ceramic vessels with red-slipped surfaces had been left unpainted and the surface of one vessel (M10=9173) was too eroded to determine its decoration.
Thirty-five basket containers found in 19 tombs suggest that, like ceramics, baskets were often placed in tombs as sets. Baskets have been reported in Tiwanaku burials in Moquegua elsewhere but without sufficient detail for comparison (Sharratt 2011:154). Baskets found inside burials were manufactured using a spiraling “warp” of several thin reed-like grasses (Stipa sp.) around which single reed “wefts” were wound from the base of the vessel to the rim. The rim commonly consisted of a simple wrapping, but more elaborately worked baskets had a braided rim.

Table 6.5: Frequencies of basket containers found in burials at Omo M10.

<table>
<thead>
<tr>
<th>Basket Vessel</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plates/low-rimmed bowls</td>
<td>17</td>
<td>48.6</td>
</tr>
<tr>
<td>Small flat plates</td>
<td>6</td>
<td>17.1</td>
</tr>
<tr>
<td>Deep bowls</td>
<td>8</td>
<td>22.9</td>
</tr>
<tr>
<td>Cups</td>
<td>2</td>
<td>5.7</td>
</tr>
<tr>
<td>Miniature kero</td>
<td>1</td>
<td>2.9</td>
</tr>
<tr>
<td>Miniature bottle</td>
<td>1</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>100</td>
</tr>
</tbody>
</table>

Basket forms were almost as diverse as those of ceramic vessels (Table 6.4, Figure 6.10). Low-rimmed bowls or plates made up 48.6% of the basket assemblage (n=19). Less common forms included deep bowls (n=8, 22.9%) and small flat plates (n=6, 17.1%). Cups (n=2, 5.7%), miniature keros and bottles\(^{100}\) (n=1, 3%) presented rare forms. Although it could not be determined whether basket cups, keros and bottles had the capacity for holding liquid substances, the possibility that they did cannot be excluded.

\(^{100}\) Bottles have the same general shape as vasijas (a high, restricted neck and bulbous body) but no handles or spout.
Decorations on baskets were achieved by replacing light-brown reeds with colored reeds (black, red, green) to weave in figurative and geometric designs. This limited the range of motifs, since it gives the design an angular “pixilated” appearance. Decorations were only visible on some baskets, and included diamonds, Greek friezes, profile heads, standing full-body frontal human figures and profile camelid figures. Lastly, gourds were also used as vessels and included in some funerary deposits at Omo M10. Gourd vessels (n=9) were made by cutting off at the elongated neck of the *Lagenaria sp.* fruit and hollowing it out, producing small containers with restricted openings (ca. 3 cm diameter) (Figure 6.11). No efforts had been made to decorate the hull through engravings or painting. Gourds were also used to make ladles (n=9) by removing a section of the body parallel to the fruit’s long axis. This left the intact neck as a handle or grip while the opened body could be used to hold food or liquids. Nine gourd ladles had been used as grave offerings at Omo M10.

101 Only specimen M10=7427 formed an exceptionally large bowl (18 cm body diameter).
Wooden spoons constitute a common grave offering in Tiwanaku burials in Moquegua (Goldstein 1989:168, 2005:252; Sharratt 2011:154). The 47 spoons recovered at Omo M10 measured between 10 cm and 20 cm in length. Their handles had a rectangular elongated shape, and 20 spoons had a narrow neck that separated the handle from the spoon bowl. Decorative notching, incisions, and carving on the sides, the upper surface, and the distal end of the handle were used to give the spoons distinctive appearances. The decorative motifs resembled those seen on ceramic and basket containers, and included geometric elements (steps, triangles, nested boxes) and figurative motifs (three-plumed feathers, profile camelid figures) (Figure 6.12), similar to those found at Chen Chen.

Most food-related grave offerings at Omo M10 showed signs of use wear. Goldstein previously observed use wear on ceramic vessels from Omo M10 (2005:251). In addition, I observed use wear in the form of broken handles on vasijas and ollas, and sheen and wear on the handles and bowl rims of wooden spoons attest to the repeated use of these objects before their interment. Fifty-one percent of spoons showed distinctive
asymmetrical wear on the distal-lateral rim of the spoon bowl. In contrast, the spoons found in Burials S-21, S-24 and T-9 showed no signs of polish or abrasion, and were probably around the time of death. Together with the high rates of repair seen in funerary garments, this pattern indicates that offerings were objects readily available to the mourners.

![Figure 6.12 Wooden spoons with plain (top), geometric (center), and llama (bottom) decorated handles.](image)

In several cases, ceramic vessels had been modified prior to interment. The spout of a large *vasija* in Burial S-11 had been broken off (intentionally or accidentally) and the hole in the body had been closed with a maize cob, either in an effort to repair the vessel (rendering it functional after breakage). On three of the ten two-handled small *ollas*, one handle had been broken off, and the site of the break smoothed. In all four cases, the
vessels were effectively transformed into single-handed *vasijas* (from *ollas*) and no-handled *vasijas* (from a spouted *vasija*). This may express a cultural ideal in regard to the type of vessels that would be desirable for funerary feasting.

This behavior differs from more rare instances in which functional objects had been purposefully de-commissioned prior to burial. In Burial S-16, the third tunic used to envelope the dead had been converted into a shroud by stitching shut the neckslit of the garment. In Burial I-27, a pair of a *tazon* and a portrait-head vessel, the vessels were rendered non-functional by breaking through the center of the vessel bases. This last case, in particular, is perplexing, since all the other ceramic offerings were fully functional vessels. No similar instances of de-commissioning of objects have been observed at other Tiwanaku cemeteries in Moquegua or the *altiplano*. I can only speculate that in the case of the two broken ceramic vessels the personal identity of the deceased may have had some bearing on the decision to de-commission the vessels before burial.

There is currently no direct evidence to suggest that serving containers and vessels inside tombs held foods or liquids at the time of interment. Their intactness and association with other complementary items point to the widespread belief that the deceased had the same need for serving wares—and food—as the living. Twentysix (or 29.9%) tombs with ceramic vessels had been equipped with more than one such object, less than the number of tombs found with only one vessel (n=61, 70.1%). Paired ceramic

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The missing base fragments were not found inside the tomb despite careful screening. Although the tomb had been opened, the lower deposits where the vessels were found had remained undisturbed. There was also no evidence on the vessels (e.g., polishing, grinding) that the breakage was worn down or modified.
vessels consisted most frequently of bowls, likely used for serving and eating stew, and drinking cups or serving pitchers for liquids. Of 16 burials with more than one ceramic vessel offering, eight contained keros and tazones, and five more contained tazones paired with vasijas. Including wood, gourd and basket vessels, the number of bowl-cup sets found in the Omo M10 burials increases to twelve.

Bowls and plates were also often found with spoons or ladles. Seventeen ceramic tazones were found with wooden spoons. Ten spoons were found with other ceramic vessel forms, and seven others were found with baskets. The remaining thirteen wooden spoons not associated with vessels of any type were found in disturbed contexts so that the original assemblage of grave offerings was undeterminable. The recurrent association of spoons with vessels of different forms and materials leads me to argue that spoons were not included as independent offerings but formed part of a set of food-related offerings.

Based on the abundance of serving offerings at Omo M10, I propose that providing the deceased with a functional set of serving dishes and utensils for the consumption of food and drink was considered a highly desirable—yet not necessary—part of Tiwanaku ritual behavior. Less than half of the mortuary population had received any food-related objects. Of individuals with serving ware offerings, only eleven had three or more of the listed food-related items, often a combination of bowl, cup, and spoon. Moreover, many vessels and spoons were hardly new, showing evidence of repeated use and sometimes repair. Because vessels were often found stacked inside the tomb, it appears unlikely that they would have contained food or drink at the moment of burial, and observation that was made also by Rydén in Cochabamba (1959:62).
In the Andes, the act of presenting other participants of Andean feasting and drinking rituals with serving objects is considered a way to form bonds of social obligation and reciprocity between giver and receiver. The presentation of serving dishes to the deceased by his or her family or community during Tiwanaku funeral therefore may have constituted a gift intended as a symbolic extension of the act of reciprocal feasting beyond death and into the afterlife. It also strengthens the emphasis placed on commensal consumption and feasting within public and domestic life, and the importance of food in daily Tiwanaku activities.

Figure 6.13 Maize cob on top of funerary *fardo* found in Burial U-7.

The symbolic feeding of the dead in Tiwanaku society, of providing the deceased with food for the afterlife, was further accomplished by placing entire maize cobs and other edible or medicinal plant species inside the tomb (Figure 6.13). The botanical remains found in tombs at Omo M10 were limited to a small number of edible plant species (maize, *molle*, gourds, beans), and non-comestibles (gourds, wood, grasses/reed,
Macro-botanical analysis of soil samples taken from vessel interiors identified maize, *molle*, *chenopodium*, and *algarrobo*. These were more likely to have been part of a funerary feast, and further analysis is needed to confirm the presence of micro-botanical remains in the sample.

### Table 6.6 Plant species identified in tombs at Omo M10 (Cemeteries B, V, and W excluded from mortuary contexts due to intrusion of domestic midden).

<table>
<thead>
<tr>
<th>Species</th>
<th>Common Name</th>
<th>Use or Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Zea mays</em></td>
<td>Maize</td>
<td>Food</td>
</tr>
<tr>
<td><em>Lagenaria sp.</em></td>
<td>Squash, gourd</td>
<td>Food, utensil</td>
</tr>
<tr>
<td><em>Inga feuillei</em></td>
<td>Pacae</td>
<td>Food, wood</td>
</tr>
<tr>
<td><em>Canna sp.</em></td>
<td>Canna lily</td>
<td>Non-comestible</td>
</tr>
<tr>
<td><em>Phaesolus vulgaris</em></td>
<td>Common bean</td>
<td>Food</td>
</tr>
<tr>
<td><em>Corryocactus</em></td>
<td>Cactus</td>
<td>Non-comestible</td>
</tr>
<tr>
<td><em>Poaceae sp.</em></td>
<td>Grasses</td>
<td>Non-comestible</td>
</tr>
<tr>
<td><em>Psidium guajava</em></td>
<td>Guava</td>
<td>Food (invasive)</td>
</tr>
<tr>
<td><em>Prunus persica</em></td>
<td>Plum</td>
<td>Food (invasive)</td>
</tr>
<tr>
<td><em>Phragmites australis</em></td>
<td>Reed</td>
<td>Construction</td>
</tr>
<tr>
<td><em>Cyperus sp.</em></td>
<td>Sedge</td>
<td>Non-comestible</td>
</tr>
<tr>
<td><em>Prosopis sp.</em></td>
<td><em>Algarrobo</em></td>
<td>Food, medicine, wood</td>
</tr>
<tr>
<td><em>Salix spp.</em></td>
<td>Willow</td>
<td>Medicine, wood</td>
</tr>
<tr>
<td><em>Schinus molle</em></td>
<td>Molle</td>
<td>Food, wood</td>
</tr>
<tr>
<td><em>Stipa sp.</em></td>
<td>Spear grass</td>
<td>Construction</td>
</tr>
<tr>
<td><em>Typha spp.</em></td>
<td>Cattail</td>
<td>Non-comestible</td>
</tr>
</tbody>
</table>

In addition to plant remains found in the tomb fill, there is also circumstantial evidence of the symbolic feeding of the dead in the form of maize cobs. In eight tombs at Omo M10, mourners had included maize cobs (found without kernels) near or atop the head of the deceased, a pattern that suggests that such inclusions were not accidental. The maize cob found in burial T-9 was lying in a basket plate, but in the other seven

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103 Several invasive species recovered from tomb openings suggest that rodents entered tomb cavities. This suggests that it cannot be ruled out that other endemic plant species entered the tombs through taphonomic processes, as well.

104 Burials I-24, P-26, R-22, S-12, S-21, U-7, and U-18 were all located in areas without surface midden deposits and had been sealed, so that the intrusion of maize cobs – given the absence of other botanical remains – probably did not present intrusive evidence.
burials the maize cob was found near the head of the interred. In only four of the eight burials with maize cobs the mourners had also included ceramic or basket vessels. It is not possible to determined whether or how the kernels had been removed prior to burial, or whether this is a result of rodent activity in the burials. However, the mere presence of maize cobs in intact tombs positioned close to the head of the interred presents an alternate way of feeding the dead that is different from the use of food-containing vessels.

Food-related objects were the most numerous grave offerings at Omo M10, available to a wide range of individuals of many different identities (see Chapters 7 and 8). Their widespread use suggests that they were fundamental offerings or gifts for the proper burial and passage to the afterlife. These objects, like the textile garments used for wrapping the deceased, were rarely manufactured for the sole purpose of interment and had been used for some time before burial. Although no paired vessels have been identified within the same tomb, it is possible that by presenting the deceased with one vessel of a matching pair, its twin vessel became a memento mori, ultimately forging a lasting bond of memory and reciprocity between the community and the deceased.

Although serving objects in Tiwanaku burials may have held a purely symbolic value, the inclusion of plant foods like maize suggests that even the symbolic feasting with the dead required real foods and serving wares.

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105 Two possible paired keros were identified at Omo M10. One pair of medium-sized keros with step-stair decoration was interred in Burials U-19 and U-20. The other pair, keros with a complex geometric design, was buried in tombs V-21 and W-12.
6.2.2 Normative Grave Offerings of Adornment

The second category of grave offerings in Tiwanaku burials at Omo M10 was adornment. Compared to serving objects, adornments were rare, and only nineteen individuals were found with such objects. It is therefore probable that adornments were neither a requisite part of the funerary process, like fardo preparation, nor was their inclusion a popular practice like the inclusion of serving wares. Instead, adornments were offerings probably made in connection with the deceased’s social persona.

![Figure 6.14 Pair of leather sandals found in Burial S-21.](image)

The category of adornments included in the broadest sense objects worn on the body, which were not textile garments, such as jewelry, pins, hats, and sandals. Fragments of knotted four-pointed hats were recovered from four burials. Sandals made from camelid hide consisted of elongated pieces of leather from which lateral strips

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106 Burials P-15, M-17, U-1, Q-7.
were separated, tied and looped to form cross- straps over the foot and ankle (Figure 6.14). At Omo M10, we recovered eleven sandals (complete or fragmented), eight of which formed pairs of similar size and had been buried as such.\textsuperscript{107} With the exception of Burial H-12, the sandals matched the feet of the deceased. Tombs H-12, H-16, and H-22 contained single sandals. Because the sandals found in children’s tombs H-12, and H-16 were adult sized, we can assume that they represented gifts for the deceased, or that they constituted heirlooms. However, all sandals except for those found in tomb S-16 showed clear evidence of use wear.\textsuperscript{108} Sandals were consistently placed outside the funerary bundle, although in several cases they had been tucked under the rope net.\textsuperscript{109}

Other bodily adornments included pins, necklaces and bracelets. Because the textile wrappings of the funerary bundles were often not preserved, it was difficult to assess whether beads had been strung on necklaces and worn by the deceased, or whether they had been added loose to the burial at the time of interment.\textsuperscript{110} Cactus spines\textsuperscript{111} provided long needles, which—with a perforated end—could be used for sewing (see below). More often, however, the spines were found unmodified near the human remains. The same cactus spines were also used as hair and cloth pins, like metal \textit{tupus}. The

\textsuperscript{107} Burials S-15, S-16, S-21, H-20.
\textsuperscript{108} In the case of H-20, one of the sandals had been worn for so long that all but a small part of the sole remained and was placed in the tomb.
\textsuperscript{109} Burials H-12, H-16, S-21.
\textsuperscript{110} Three examples suggest that jewelry was worn on the body inside the funerary bundle: The intact bundle S-16 contained a young child wearing a string of greenstone beads as a necklace. In tomb R-23, the remains of a bracelet of greenstones and silver ornaments were found under the disarticulated bones of the left wrist and hand. In burial S-9, hundreds of scattered shell and greenstone beads were found below the face, neck and chest of the interred.
\textsuperscript{111} Goldstein (2005:249) identifies these as \textit{Browningia candelabris}.
original position or function of pins found in seven other interments\textsuperscript{112} could not be determined at the time of excavation.

Jewelry items at Omo M10 were exceedingly rare and often consisted of a single object. Only twelve individuals contained complete or partial jewelry items. Most of them were necklaces or bracelets made from greenstone (*Chrysocolla*) disc beads (2-4mm diameter), although we only recovered between one to six beads in most of theburials (Figure 6.15). Only burials R-23 (n=53) and S-9 (n=14 greenstone disc beads, n=498 shell\textsuperscript{113} disc beads) contained significantly greater numbers of beads. The shell beads found in Burial S-9 were unique among the Omo M10 burials and may be linked to the divergent status of the individual in this tomb (see below). None of the Tiwanaku burials at the site contained regular shell beads made from *Olivela peruvianis*, as these were present in modified and unmodified form in domestic and ceremonial contexts (Sitek 2013).

![Figure 6.15](image)

**Figure 6.15** Jewelry offerings found in burials at Omo M10: greenstone beads (left) and silver ring (right).

Jewelry objects made from silver were very rare (n=4) (Figure 6.15), and included sheet metal ornaments that were part of a bead bracelet, a ring, a circular ornament that

\textsuperscript{112} Burials H-16, M-33, P-23, P-26, T-10, T-14, T-15.

\textsuperscript{113} The beads appear to have been made from *Olivela peruvianis* and *Choromytilus* sp.
may have been worn as a necklace, and a silver earspool. Of course, silver was among the
objects most coveted by looters, and it is possible that similar objects would have been
removed from the tombs during pre-Colonial, Colonial, and modern times (Goldstein
2005:248). Two of the objects were found in intact burials (R-23, I-3), one was found in a
tomb that had been opened (M-1), and one at the bottom of a looted Burial R-21. In all
cases, the metal objects were found near the bottom of the tomb, having been worn as
rings or bracelets, so that these objects were not easily accessible to looters. This implies
that metal objects could be expected in tombs that were intact or only lightly disturbed
(n=193, 80% of total Tiwanaku sample).

6.2.3 Normative Offerings of Tools and Specialized-Activity Objects

Tools and other specialized activity objects were relatively uncommon grave
offerings at Omo M10. Such objects were generally found in addition to food-related
offerings, and in sets of multiple objects. The range of craft and ritual objects
encountered in burials was narrow compared to the diversity of tools that have been
identified in Tiwanaku houses and workshops in Moquegua (Goldstein 1989:200–201,
2005:218–222). Objects used for textile production were the most frequent grave
offering, followed by ritual paraphernalia, whereas tools relating to agriculture, food
processing, hunting or other activities were never used as offerings at Omo M10.114

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114 The only such item was a stemmed projectile point in Burial B-7 that could not
unequivocally be identified as a burial offering. The burial contained larger quantities of
ceramic sherds, faunal and botanical remains, an indicator that construction fill from the
M10B platform entered the tomb cavity. This process was also observed in 2010 and
2011 (Baitzel 2013).
Textile Tools: At Omo M10, weaving and spinning tools usually formed sets of objects. Most frequently, sets included a spindle with wooden spindle whorl used to spin fine thread (n=7); a comb made from rounded-off cactus spines laid next to one another and held together on both sides by flat pieces of reed or wood tied with string a crosshatch pattern (n=3); and a needle of cactus spine whose dull end was perforated (n=2) (Figure 6.16). Wooden or bone wichuñas (weft beaters) were not found in burials at Omo M10, but have been recovered from Tiwanaku tombs in the highlands (Korpisaari 2006:124; Bermann 1994:221).

Wooden spindles present part of a broader spinning assemblage found in Tiwanaku domestic contexts in Moquegua and the highlands. In Moquegua, Goldstein found ceramic spindle whorls in domestic Omo-style contexts (1989:figure 50). Perforated modified ceramic discs are also thought to have functioned as spindle whorls (Goldstein, pers. comm. 2016). At Tiwanaku, ceramic spindle whorls tended to be lightweight and have narrow central perforations for the relatively standardized production of a fine thread (Rivera C. 2012:241–242). At Omo M10, wooden spindle

115 All spindle whorls found in M10 tombs were made from wood, which are used to produce finely spun thread compared to heavier materials like ceramic or stone (Rivera C. 2012).

116 Combs found in Tiwanaku burials have commonly assumed to be hair combs. Dransart reports finding combs in Middle Horizon work baskets from the Central Coast of Peru where they were included alongside spinning and weaving tools (1993:135). Gisbert et al. report the depiction of a comb and spindle on a Wari ceramic yarn holder (1987: figure 75). At Omo M10, two of the three combs are found in association with spindles. While it is possible that combs would have been used for combing human hair as well, I include them here among weaving tools based on association.

117 Several wooden objects in burial R-23 may have been weaving tools, although their specific function could not be ascertained. These included a flat trapezoidal wooden plate with cactus spines protruding from the narrow side with copper laminate inlays, cone-shaped wooden pegs, and three wooden stemmed semi-circles with notches.
whorls had narrow perforations (3–4 mm) and weighed between 2 and 5 g. Following Arnold and Espejo (2012:117–118), these spindles would have been suitable for spinning of fine, rather than coarse, thread.

Figure 6.16 Textile tools as burial offerings at Omo M10: spindle (left) and comb (right).

Ritual Paraphernalia: Here, I define ritual paraphernalia as objects used outside the contexts of craft, agricultural, or domestic production, including pan flutes, pyro-engraved bone tubes, and bags of various materials. Three burials at Omo M10 contained complete or partial sets of cut and hollow cane fragments used to make pan flutes, although none were found assembled (Figure 6.17). Pan flutes (zampoñas) formed part of the larger south-Andean cultural complex and were made from bone, cane or wood. Although pan flutes are not commonly included in the suite of Tiwanaku luxury goods, iconographic and archaeological evidence from Northern Chile suggests that pan flutes were associated with shamanic rituals and the consumption of psychotropic substances (Grebe 1974:44).

Another object type more commonly associated with shamanic or ritual activities is a bone tube that was found in Burial M10S-12. Made from a hollowed-out camelid humerus and pyro-engraved with the “Sacrificer” motif (Figure 6.17), the bone tube resembles similar objects found at the Misiton 1 complex at Lukurmata where these

118 Burials R-20 (11 canes), U-1 (4 canes), U-19 (1 cane), and V-2 (3 canes).
objects were likely produced and traded out to the Tiwanaku capital and secondary sites (Janusek 2003c:286, 2004:179). A small leather bag from Burial M10S-21 that consisted of a rectangular piece of leather folded over and stitched together along the sides was poorly preserved but may have been used to carry organic substances. The remains of two *chuspas*, warp-striped embroidered bags for carrying coca, were also found in burials at Omo M10.

![Figure 6.17 Ritual paraphernalia as grave offerings at Omo M10: panflute or *zampoña* (left), pyro-engraved bone tube (right).](image)

Lastly, braided strands of human hair formed a third type of object sometimes included in tombs. These long strands of human hair were either loose\(^{119}\) or braided\(^{120}\). The lack of hair roots and the perpendicular terminations suggest the hair had been cut. These hair braid inclusions were found near the deceased\(^{121}\) or under or above the capstones\(^{122}\), which means they were included during the final stages of the interment.

The cutting and offering of hair in the context of funerals and mourning has been

\(^{119}\) Burials U-3, U-18, W-19.

\(^{120}\) Burials S-9, H-11, H-14, T-20 (the last was tied with colored string). The hair in the braid did not have roots and showed clear signs of having been cut off.

\(^{121}\) Burials S-9, U-3, U-18, T-20.

\(^{122}\) Burials H-11, H-14, W-19.
documented cross-culturally (e.g., Hame 2004; Wheeler 2010). Hair cutting plays a role in Andean rites of passage (e.g., Bastien 1987:114; Dean 1995:121). Doyle reports the use of hair clippings belonging to the deceased during the venerative rituals performed for Colonial-era mallquis (Doyle 1988:201). It is therefore possible that the inclusion of hair in tombs represents an intentional act, rather than the result of taphonomic processes.

Weaving and ritual paraphernalia were rare but acceptable grave offerings across all social groups at Omo M10, but their exclusive association with adult female individuals (see Chapter 7) suggests that these objects were meaningful to the deceased’s social persona. The objects—personal possessions or insignia seen unfit to be passed on as heirlooms—were buried with the mummy bundle. This emphasis on weaving and ritual paraphernalia as personalized grave offerings for adults stands in contract with the common and widespread custom of giving serving dishes and utensils to the dead as a symbolic gesture that cemented the reciprocal relationship between the spirit or soul of the deceased and his or her mourning community.

6.3 Post-Funerary Activities in Normative Tiwanaku Burial

By the time the fardo and the offerings were placed inside the tomb and the tomb opening sealed, the physical or tangible relationship between the mourners and the deceased came to an end. With the exception of a handful of burials (see below), there is no evidence to suggest that re-opening or re-accessing the tomb were a common practice.

Evidence for post-interment Tiwanaku activities comes exclusively from the 2010-2011 excavations, because excavations in 1984 focused on the recovery of tomb contexts.
at Omo M10. This supports the argument put forth by Isbell and Korpisaari (2012:110) that Tiwanaku likely did not venerate ancestral mummy bundles, because the wet climate and below-ground burials would have accelerated decomposition. Archaeological evidence from several of the cemeteries at Omo M10 suggests, however, that cemeteries became sites of feasting and celebration, likely during and after interment but perhaps even beyond this period. This evidence includes the deposition of feasting wares and of personalized objects, as well as the performance of other ritual activities, such as burning offerings.

I want to briefly turn to the four burials at Omo M10 in which offerings had been placed on top of the capstone rather than inside the tomb. These cases appear to represent an intermediate stage between the in-tomb offerings, and those placed on the surface of the cemetery away from individual capstones. These offerings were clearly made after the initial interment had taken place. Their location indicates a direct relationship with the deceased inside the tomb. The delayed timing of the offerings, in contrast, may be the result of continued visitation soon after death, perhaps within an allotted mourning period. Likewise, it is possible that these post-interment offering deposits occurred because the objects could not be made available at the time of death. Nevertheless, capstone offerings provide the most direct evidence against the argument that funerary activity in Tiwanaku society ceased after the interment of the deceased.

6.3.1 Accessing Tiwanaku Tombs after Burial

The act of opening and accessing of tombs for the specific purpose of manipulating the contents of the burial differs from looting and other intrusive or
destructive behavior at Omo M10. Only three of the 259 excavated Tiwanaku burials presented clear evidence for the intentional removal, manipulation and subsequent re-sealing of the tombs. The individuals found in Burials U-14 and U-17 were missing crania, but their post-cranial skeletons were complete and entirely articulated. In both tombs, *batanes* (grinding stone) placed on the tomb sediments had taken the place of the cranium. It is possible that the removal of the crania (no fragments were found near the opening or surface) was the result of looting; nevertheless, the use of *batanes* to replace the crania speaks to an intentional act of head removal. Based on the advanced infilling of the tomb cavity, it can be deduced that the removal of the crania occurred some time after decomposition. The opening of Burial U-14 had been resealed with a large capstone. A third tomb with evidence of reopening was also a double burial and is discussed below (Section 6.4.1).

Based on the presence of a single secondary burial, one could argue that access and manipulation of remains could even be more intensive. The remains of a male middle-aged adult in Burial P-23 had been completely disarticulated suggesting that disinterment took place a long time after death\(^{124}\) possibly even in a different place. The bones were re-organized and re-interred in the stone cist. Overall, the evidence for the direct manipulation of burials and human remains is exceedingly rare at Omo M10 (2% of intact burials). It shows that there was no taboo against such a behavior. But together with the evidence of capstone construction, this supports Isbell and Korpisaari’s argument about the unsuitability of Tiwanaku burials for mummification. It also raises

\(^{124}\) No cut marks were found, although the brittle state of the bones makes this determination tentative. The left and right patellae and tarsals were missing.
new questions about the introduction of *chullpas* (funerary towers) following the collapse of the Tiwanaku state, as these are widely considered evidence for the access to and manipulation of funerary bundles.

6.3.2 Evidence of Surface Offerings at Provincial Tiwanaku Cemeteries

Food-related offerings inside tombs at Omo M10 signified the symbolic feeding of the dead, perhaps in the company of the living. Unlike personalized vessels given to the deceased, plates and platters disposed of on the cemetery surface attest to a more generalized communal event where mourners shared food with one another in the company of the dead. The deposition of flat circular baskets and large “sherd-bowls” indicate that feasting and foodsharing extended beyond the direct interactions with the deceased at the gravesite.

The presence of surface offerings could only be assessed for cemeteries that were far enough removed from the domestic and midden areas of the site to exclude non-mortuary materials from the analysis: Cemeteries H, M, I, T, S, and R. In Cemeteries M and R the identification of surface activities was complicated by the content of looted burials that was scattered around the tomb opening. The excavating trenches within cemeteries, I was able to exposed large areas of cemetery surface. The use surface of the cemetery was defined in correlation with the tomb openings and the resting surface of stone collars. These surfaces were often very compact compared to the upper, loose sediments.
On the use surface of Cemeteries R, S, T and M, I recovered the complete or fragmented remains of five flat baskets. Unlike most of the plates and bowls found inside tombs, most of the surface baskets were flat and large, measuring 15 cm to 42 cm in diameter (Figure 6.18).

Figure 6.18 Flat reed basket found on surface of unit 725 in Cemetery S.

Ceramic fragments scattered across the cemetery surface were predominantly non-diagnostic body sherds from utilitarian plainware vessels. In comparison to in-tomb ceramic offerings where red-slipped vessels were very frequent (75% of all vessels), on the surface red-slipped vessels only accounted for 34.9 percent of the ceramic assemblage. Compared to domestic ceramic assemblages (4–10%, Goldstein 2005:table 6.2), the frequency of red-slipped ceramic fragments found on cemetery surfaces was high (Table 6.7).  

125 M10=8417, M10=8981, M10=8992, M10=9092, M10=9234  
126 This may also be caused by the presence of fragments from tomb offerings that were looting and destroyed on the cemetery surface.
Attempts to reconstruct entire vessels from surface fragments were unsuccessful, although it was usually possible to fit between 2–4 other undecorated body sherds from the same excavation unit. Single large body sherds from storage jars or cooking pots found on use surfaces may have served as expedient serving plates or bowls to be discarded at the grave the end of a feasting. Large sherds were also used for burning offerings, as demonstrated by the carbonized surface and carbonized organic remains on sherds found in Cemeteries B and H.

Table 6.7: Numbers and frequencies of ceramic fragment ware types by excavated units in Cemeteries H, I, M, S, T, and R.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Unit</th>
<th>Ceramic Sherds (n)</th>
<th>Tiwanaku Red-slipped</th>
<th>Tiwanaku Plainware</th>
<th>Tiwanaku Blackware</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>M10H</td>
<td>707</td>
<td>19</td>
<td>1 (5.3%)</td>
<td>18 (94.7%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>708</td>
<td>55</td>
<td>4 (7.3%)</td>
<td>51 (92.7%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>709</td>
<td>103</td>
<td>25 (24.3%)</td>
<td>78 (75.7%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>M10I</td>
<td>721</td>
<td>66</td>
<td>12 (18.2%)</td>
<td>54 (81.8%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>722</td>
<td>204</td>
<td>39 (19.1%)</td>
<td>165 (80.9%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>723</td>
<td>45</td>
<td>9 (20%)</td>
<td>36 (80%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>M10M</td>
<td>716</td>
<td>35</td>
<td>8 (22.9%)</td>
<td>27 (77.1%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>717</td>
<td>10</td>
<td>5 (50%)</td>
<td>5 (50%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>M10S</td>
<td>724</td>
<td>27</td>
<td>18 (66.7%)</td>
<td>9 (33.3%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>725</td>
<td>17</td>
<td>3 (17.6%)</td>
<td>14 (82.4%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>M10T</td>
<td>726</td>
<td>170</td>
<td>86 (50.6%)</td>
<td>84 (49.4%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>727</td>
<td>123</td>
<td>52 (42.3%)</td>
<td>67 (57.5%)</td>
<td>4 (3.3%)</td>
<td>0</td>
</tr>
<tr>
<td>M10R</td>
<td>728</td>
<td>37</td>
<td>10 (27%)</td>
<td>27 (73%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>729</td>
<td>41</td>
<td>32 (78%)</td>
<td>9 (22%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>surface</td>
<td>50</td>
<td>46 (92%)</td>
<td>4 (8%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1,002</td>
<td>350 (34.9%)</td>
<td>648 (64.7%)</td>
<td>4 (.4%)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Burning at the Omo M10 cemeteries also took place in incensarios and sahumadores. Fragments of incensarios and sahumadores were found in Cemeteries H (6% of diagnostic ceramic fragments), I (3% of diagnostic ceramic fragments), and T (3% of diagnostic ceramic fragments). Significantly greater numbers of incense burners were used at Cemetery R. Here, 40 percent of the surface ceramic fragments (n=129)
were identified as belonging to *incensarios* (17%), *sahumadores* (61%), or both (22% - head, neck, tail elements). Based on the partial reconstruction of vessels, at least ten incense burners contributed to the sample (Figure 6.19). A unique zoomorphic cup in the form of a deer-head was also found, along with several fragments of *tazones* (n=9), *vasijas* (n=3), and *keros* (n=3). The disproportionate number of incense burners found at Cemetery R seems to reflect a distinct type of post-funerary activity perhaps based on community style or preference (see Chapter 8).

![Figure 6.19 Reconstructed incomplete sahumador from surface of Cemetery R.](image)

Isolated occurrences of wooden sticks (burnt or unburnt), long canes, and pieces of *esteras* deposited on the use surfaces of cemeteries could not be unequivocally linked to funerary or post-funerary activities, although that may indeed have been their purpose. Funerary procession to and from the gravesite may furthermore also have been accompanied by immaterial offerings like songs, prayers, words, and gestures.
The shallowness of the sediment deposits at Omo M10 gives little indication as to the amount of time that would have passed between interment and post-funerary activities. Surface offerings were also never found directly associated with tombs and could therefore not be linked to particular individuals, so that the custom of feasting with the dead can only be evaluated and compared at the community level (see Chapter 7). Even so, the Omo M10 cemeteries provide an unprecedented view of the popularity, nature, and extent of extra-burial offerings, which have previously only been recorded for a small number of cemeteries in the region and not at all outside the Moquegua Valley.

6.3.4 Summary: Normative Community-Organized Funerary Practices at Omo M10

Normative funerals at Omo M10 followed a series of stages that guided the actions of the mourners from the moment of death to the days, weeks, and perhaps even months during which the body and possessions of the deceased were disposed of. The preparation of the funerary bundle probably took place in the private setting of the home. The personal garments used for wrapping the deceased and the detail of a headdress added to the bundle signal the intimate physical and emotional bond between the deceased and the mourners. The subsequent funerary procession would have been a more public event, attracting community members who accompanied the fardo and family to the cemetery.

As the body was put into the tomb, it was permanently removed from the sight of the living. At the same time, the mourning community decided whether to provide the deceased with offerings, a decision that may have been made based on disposable resources, kin preferences, or the personal character of the deceased. By giving serving
wares to the dead, the most common offerings used by Tiwanaku peoples at Omo M10, the mourners created a bond of obligation and reciprocity with the dead. This gesture also invited the deceased to participate in the communal rituals of feasting that nourished communities physically and socially. With the deceased now buried, the mourners probably returned to the gravesite, perhaps after set periods of time or in conjunction with subsequent burials, leaving behind objects that attest to feasting and ritual activities.

The activities, materials and sequence of events described in this section have been reconstructed based on their overwhelmingly common occurrence at the Omo M10 cemetery, and their congruence with many of the funerary practices that have been observed at other Tiwanaku sites in Moquegua and the highlands. The goal of these normative funerals was to ensure the deceased’s benevolence toward the living, and their proper passage to the afterlife. However, not all souls were conceived of as favorably disposed toward the living in which case special care and actions had to be taken by the survivors to protect themselves and their belongings.

6.4 Non-Normative Tiwanaku Burial Practices at Omo M10

At Omo M10, there existed different types of non-normative Tiwanaku funerary treatments. Each carried different connotations about the deceased’s social identity, his or her manner of death, and the motivations or objections of the community members for deviating from the normative, communal interment pattern. Material indicators of social “deviance” at Omo M10 aligned with Andean mortuary contexts more broadly, and with known non-normative interments identified in the Tiwanaku capital; they included the
use of distinct burial location and structure, body treatment, special grave goods, or withholding of offerings.

Because excavations at Omo M10 were concentrated only on cemetery spaces, extra-cemetery burials, such as intramural burials,—if they indeed existed—would not have been identified. Previous and subsequent excavations at Omo M10 yielded no evidence of intramural interments in the residential or ceremonial sectors of the site, although isolated human remains were found both in domestic and ceremonial spaces (Goldstein 1989, 1993, 2000, 2005, 2012). This precludes the possibility of finding non-normative intramural burials like those identified at Tiwanaku’s Putuni, Akapana East 1M and 2, and Ch’iji Jawira neighborhoods and at Lukurmata. In this discussion, I focus on non-normative mortuary patterns identified within cemetery boundaries, and seek to identify the reasons for the unusual treatment of a small minority of individuals buried at Omo M10.

As I discussed in Chapter 2, non-normative funerary treatments could be motivated by a number of factors, but were most often linked to processes of social exclusion in relation to a “bad” life or death (e.g., Bloch and Parry 1982; Harris 1982; Shay 1985). Because non-normative burials were exceptional at Omo M10 and often appeared as singular cases, I proceed with caution in seeking to determine whether such non-normative treatments were the result of the deceased’s identity (Chapter 7), the communities’ preferences (Chapter 8), or generalized Tiwanaku beliefs about death and the dead. The ways in which the deceased’s status was marked as adverse to the group included a variety of funerary treatments, such as double-burial, the inversion of the body, the use of large rocks to cover the body, and the use of distinct tomb structure or
offerings. In some cases, these treatments were combined or isolated to particular cemeteries, perhaps in an effort to express the severity of the deceased’s adverse social status.

6.4.1 Double-Individual Interments

Single-individual interments were the norm for Tiwanaku funerary treatment in the highlands and in the provinces. The rare occurrence of double burials at Omo M10 warrants a closer look to determine whether this practice was the result of group-specific behavior or of the deceaseds’ individual identities. Two types of double burials were identified at Omo M10: mother-child pairs and “matching” pairs.

“Matching” pairs of individuals of age or sex were two double-burials located in Cemetery P. In stone cist P-18, two children’s fardos were stacked, the lower inverted so as provide a flat surface (the back) as support to the upper bundle (Figure 6.20). Below the fardos were long pieces of cane and a gourd ladle, and several more basket vessels, gourds, and a wooden spoon had been placed on top of the bundles before sealing the tomb. Together with the large capstone, the mourners placed a maize cob and small basket on the rim of the cist. The lack of sediments, similar condition of the remains and inversion of the lower individual to accommodate the second funerary bundle point to this burial being the result of a single interment event.
Figure 6.20 Reconstructed profile of double child burial P-18 in Cemetery P.

Located five meters to the northeast of Tomb P-18, Tomb P-21 was a stone cist that contained two adult individuals. The original occupant of the burial, M10P-21B, was a male seated in flexed position and facing east. Pieces of a coarse camelid-fiber cloth and braided plant-fiber rope surrounded the individual. His cranium, found between the knees, had several ante-mortem and perimortem sharp and blunt force traumas. This is rather unusual among the individuals buried at Omo M10, who overall showed little evidence of violence. Directly on top of individual P-21B were the remains of another older male adult (M10P-21A) who had advanced vertebral osteoarthritis, and was also buried in seated-flexed position and oriented to the east/southeast. The lateral position of the flexed knees of the primary individual P21-B suggests that the funerary bundle of this individual had time to decompose before the second individual was placed in the tomb.
During a subsequent disturbance of the tomb cover and the upper sediments, the cranium of individual M10P-21A had been removed. Several objects, including a wooden spoon and gourd, were found among the disturbed part of the context but their original position could not be determined.

One possible explanation for the use of double burials is to highlight the intimate relationship between two particular individuals in society. In the case of burial P-18, the double burial may have contained the siblings or other kin, a hypothesis that can be tested using biological distance or aDNA analysis. Likewise, the occupants of burial P-21, although buried at different moments, may have shared some affinity that connected them in death. Because double burials were only identified in Cemetery P, their classification as a non-normative funerary treatment is tentative. Instead, double-burials may have been a preferred practice among members of the M10P community. Although “matching” double burials have been theorized elsewhere in the Andes (Gaither et al. 1995), no other cases of “matching” double burials have been recorded at Tiwanaku sites in Moquegua. However, the co-interment of such “matching” pairs does correspond to ritual practices observed at the Tiwanaku capital, where human remains found in offerings contexts associated with construction events and public spaces were placed in groups of similar ages, complementary ages, or human-camelid pairings (e.g., Blom et al. 2003:436; Couture 2003:218-222; Verano 2013:180).

6.4.2 “Outsider” Burials in Moquegua Tiwanaku Community Cemeteries

A second set of unusual burials that was found only within a single cemetery may be indicative of outsiders being incorporated into a new social group, perhaps through
exogamy. Three tombs in Cemetery I (I-10, I-14, I-22), belonging to two young women and an unsexed adolescent, differed markedly from the typical Tiwanaku mortuary pattern that dominated this cemetery and the site. Each of these individuals had been placed in a shallow pit ringed by rocks. No evidence remained of the original tomb cover. The bodies were found in a reclined position on their back, with the legs flexed toward the side, either facing east, or with the head toward the southwest or northeast (Figure 6.21). Their grave assemblages, which were only partially preserved because of the exposure of the tombs to the surface, included pieces of estera\textsuperscript{127} (I-10), very fine but poor preserved textile (I-14), and a basket plate and deep bowl with a wooden spoon (I-22).\textsuperscript{128} The fundamental divergence of these burials in terms of their burial style (body preparation and position, orientation, architecture) suggests that they were of non-Tawanaku origin (see Chapter 8), an hypothesis that requires further testing through the use of bioarchaeological methods.

\textsuperscript{127} The estera was entangled with a fragment of polychrome textile with a rare coarse, bichrome weft
\textsuperscript{128} No similar burials were found in the Tiwanaku cemeteries at Omo M10, but the mortuary treatment resembles that of burials excavated at Cemetery X (see Chapter).
Figure 6.21 “Outsider” burial I-22 of young female adult in supine-flexed position in Cemetery I.

6.4.3 Sacrificial, Cautionary, or Punitive Tiwanaku Burials

Whereas the double-burials and “outsider” burials found at Omo M10 give no indication that the deceased lived or died in a way that would have been contrary to social norms or deserving of an adverse mortuary treatment, the non-normative tombs in Cemetery Q provide several lines of evidence for the exceptional status of their interred. Located on an informal terrace northeast of the upper court of the M10A temple complex, Cemetery Q breaks from the spatial pattern of peripheral communal cemeteries. Furthermore, 66.7 percent of individuals were adults (men and women) and only 33.3 percent were children in contrast to the self-reproducing populations of the normative community cemeteries. Relative dating of textile artifacts and an absolute date of 787-
1018 cal. A.D. (2-sigma) from Burial Q-7 associate the cemetery with the Tiwanaku occupation of the site.

Most distinctly, individuals interred at Cemetery Q were buried face down (Figure 6.22). Their body preparation\(^{129}\) and interment process set them apart from others buried at Omo M10. The arms and legs of the persons were tightly flexed alongside the torso. Funerary dress included different types of garments, such as loincloths (*taparrabo*) (not found in other Tiwanaku burials), tunics or *llallnas* with polychrome cross-knit loop stitch embroidery\(^{130}\) (selvage or neckplaque), and bichrome warp-striped tunics with embroidered neck plaques.\(^{131}\) The hair of the male adult M10Q-7 was arranged in 14 braids and wound through the armholes of the bichrome warp-striped tunic used covered the body. His face but was covered by a polychrome four-pointed hat that was tied to the head using un-plied thread.\(^{132}\)

Body position varied slightly among the Cemetery Q burials. Although seven of ten individuals were fully flexed and facedown, one was found lying flexed on the left side, while two children were only partially or lightly flexed, yet also facedown. In all tombs, the *fardos* had been covered with, or wrapped in, reedmats, and were not given any offerings\(^{133}\). The large pits, measuring ca. 100 cm by 80 cm to accommodate the bodies in their facedown position, were generally unlined and only the bases of burial pits

\(^{129}\) Evidence for body preparation at Cemetery Q comes from the well-preserved *fardo* Q-7.

\(^{130}\) After Feltham (1989:figure 25) and

\(^{131}\) Three more burials in Cemetery Q excavated in 1984 also contained bichrome warp-striped tunics with neckplaques or selvage embroideries.

\(^{132}\) The hair of Individual Q-3 was braided in a similar style of small braids, but was not as well preserved. In all other tombs, soft tissue preservation was poor.

\(^{133}\) With the exception of Burial Q-16 that contained a greenstone disc bead.
Q-15 and Q-19 were lined with small cobbles. Large stones and rocks were stacked on top of the bodies to fill the pits to the rim. Sometimes, a few stones were placed along the rim, but the large opening of the pit prohibited the placement of the typical capstone or cover. Despite the relatively solid rock fill, no stones were piled above the surface, effectively leaving the tombs unmarked.

Figure 6.22 Sacrificial or cautionary Burial Q-11 of adult individual in facedown flexed position in Cemetery Q adjacent to Omo M10 temple.

Preliminary osteological analysis and X-rays did not reveal evidence of potentially fatal blunt-force trauma, visual examination of the mummified remains suggests that some of the individuals’ neck or trachea may have been sliced.\textsuperscript{134} Before

\textsuperscript{134} A red substance had stained the skin of the right cheek and jaw of individual M10Q-7, possibly because of blood flowing from the base of the cranium or neck alongside the face.
interment, the head of individual Q-8 had been disarticulated from the cervical vertebras and placed between the chest and flexed knees of the deceased. The absence of cut marks on the vertebrae may indicate that decomposition was already in progress during the preparation of this *fardo*. The elaborate and abnormal preparation of human remains at Cemetery Q together with the lack of formal grave offerings points to a sacrificial, deviant, cautionary or punishing treatment.

6.4.4 Death from Unusual Illness or Childbirth

The interment style of Cemetery Q helps the interpretation of other burials at Omo M10, whose burials feature similar characteristics. It appears that individuals whose death did not associate them with the temple complex required a special funerary treatment that resembles the cautionary or punishment burials reserved for sacrificed individuals at Cemetery Q.

The first of these burials (S-9) contained the remains of a young female with fronto-occipital cranial modification. In addition to several supernumerary teeth, the posterior aspect of her cranium had two sharp-force traumas. A large oval piece of bone (24x30 mm in diameter) had been cut out of the right inferior squamous portion of the occipital. To the left of the perforation, there were several horizontal grooves on the central inferior occipital squama. The cuts had been made perimortem as evinced by the plastic appearance of the edges and may represent attempted (grooves) and complete (perforation) trephination. No other crania recovered at Omo M10 showed evidence of trephination.
The remains were found in flexed facedown position with the head to the east (Figure 6.23). A necklace of over 500 shell and 14 greenstone beads, possibly worn at the moment of interment, had broken and scattered beneath the face, neck, and chest. The body was wrapped in a tunic made from natural-colored camelid fiber, and a bichrome warp-striped iliclla with embroidered selvages. Near the feet was a loose braid of human hair, a possible offering originating from the interred or a mourner. There was no sign that the funerary bundle had been wrapped in the customary net of plant-fiber rope. The body was covered with two layers of large rocks.\(^{135}\) The opening of the pit was found unmarked.

![Figure 6.23 Burial S-9 of young female individual with trepanation interred in facedown flexed position with shellbead necklace (left).](image)

In most of its characteristics, Burial S-9 resembles the funerary treatment observed in Cemetery Q, but in the case of this burial, cause of death seems to relate to the trephination and a possible health condition. The inclusion of a bead necklace and the

\(^{135}\) The tomb had been disturbed and the upper rocks in the western half of the pit were removed. The basket, wood and maize cob found on the southwestern tomb edge 15 cm below the opening may have been intrusive.
location of the burial within a normative cemetery, associated with a particular community, indicate that whatever the reason for this young woman’s condition or death was, it did not separate her from her community.

The tomb of a young woman (R-24, age 22–24 years) excavated at Cemetery R also showed similarities to the Cemetery Q burials. Her body was wrapped, interred seated-flexed, and facing east at the bottom of a deep pit (150 cm). To her right were the remains of a fetus or neonate, and the sherd of a broken *olla* had been placed at her feet. The two bodies were covered with seven layers of large rocks and cobbles (the fifth layer consisted of two more horizontally placed capstone-like stone slabs) to the rim. A small shallow basket and burnt wood were also found on the northern edge of the pit. The only other double burial that contained the remains of a mother and (unborn) child were found in Burial Q-3. In both cases, the deceased’s status as different, unusual or deviant may have been caused by death from childbirth.

Whereas the previous two individuals had reached adulthood, a young child buried in H-11 was subject to a non-normative treatment due to unknown causes. The body had been wrapped in multiple warp-faced textiles (including a polychrome tunic or *lliclla*). After being placed in the pit head-down without offerings, the *fardo* was covered with large rocks. The last rock layer included four broken *batanes* under which a braid of human hair had been placed.

**Conclusion**

The large burial sample obtained through mortuary excavations in 1984 and 2010–2011 confirms many of the previously made assertions about Tiwanaku funerals
(e.g., Bermann 1994; Buikstra 1995; Goldstein 1989, 2005; Korpisaari 2006; Sharratt 2011), but it also adds significant insight into the individual stages of the funerary process, the breadth of materials, offerings and behaviors that constituted Tiwanaku mortuary ritual, and questions regarding the relationship between the living and the dead, and the role of the latter in Tiwanaku society.

Tiwanaku funerals were relatively standardized processes that consisted of various sequences of events performed at and away from the gravesite. Over the course of the funeral events the deceased was gradually transformed from an individual member of the community to a memory object. The early stages of the funeral required the intimate interaction of kin with the remains of the deceased, and the investment of care is observable in the different stages of preparing the fardo, from the covering of the face to the placement of a feather-crown on the finished bundle. Once the bundle was removed from the home, the deceased was no longer recognizable as the person he or she had been in life; instead, the funerary bundle now present an object distinctly associated with the death and loss of a community member, a symbols known to any member of society. When the bundle arrived at the cemetery, the deceased left behind the world of the living to join the community of the dead.

When possible, the bundle was provisioned with serving wares, objects that were emblematic of Tiwanaku canons of social interaction and beliefs about productive relationships. The serving wares allowed the deceased to symbolically engage in reciprocal drinking and serving with the community of the dead and the living, suggesting that the dead maintained a desire and need for nourishment. As the tomb was covered, the physical ties between the living and the dead were severed, and the tomb
itself came to represent the memories of the deceased. The rocks stacked over the tomb openings constituted small *apachetas*, rock piles that marked important or sacred placed using stones that represented the burden carried by the mourners. Overall, this series of activities and materials ultimately converted the remains of the deceased into a place of remembrance. Much like the offering deposits found in Tiwanaku houses and public spaces, the act of interment represented the deposition of valuable objects.

One of the questions central to the study of Tiwanaku mortuary rituals and society, and the Andes more generally, is that of ancestors, their nature and role in the community. The burials at Omo M10 contribute to this debate in several ways. There is little evidence to suggest that Tiwanaku peoples living in Moquegua engaged in the veneration or adoration of a single or a limited number of principal ancestor figure (or *mallqui*), like those of the Inca rulers. On the one hand, as the ethnohistorical descriptions of powerful Inca and Colonial Quechua *mallquis* indicate, their mummified remains were not housed with the broader populace but in separate accessible spaces for easy access and manipulation (e.g., Cieza de Leon 1959[1550]; Doyle 1988). Therefore, we would not expect to find *mallquis* at the communal cemeteries, but instead they could have been kept in niches or rooms in houses or the temple structure. Also, it has been pointed out by Isbell and Korpisaari (2012), the Tiwanaku custom of subterranean interments would have sped up decomposition and made it difficult to access the remains of the dead. With the exception of a handful of children’s burials that were re-opened, and a single secondary interment at Omo M10, it seems unlikely that direct interaction with and manipulation of human remains was a common practice.
Another possible way in which communal ancestor figures could have been marked at Omo M10 would be through the construction of more elaborate tombs within the cemetery, for example like the chamber tomb found at Omo M16D. This rectangular chamber was surrounded with a large delineating rock circle, and included an east-facing entrance to the chamber in the form of a recessed step (Goldstein 2005:253). Although differences in tomb size and architecture existed, no singularly elaborate contexts were identified during the excavations or the survey of the M10 cemeteries. Although mallqui-like ancestor figures may lie beyond the reach of mortuary archaeologists at this moment, Tiwanaku interment and post-interment activities at Omo M10 give reason to believe that the dead and their memories required interactions similar to those that bound members of society to one another, and to the places and landscapes around them.

Once the tomb was sealed and the fardo removed from sight, the deceased joined the corpus of communal ancestors. His or her identity became the subject of communal memories. Like the interment itself, post-funerary rituals at the cemetery focused on feasting and offerings practices that were widely used among members of Tiwanaku society. Broken serving wares, platters, carbonized plant remains, and incense burners found on cemetery surfaces attest to the repertoire of rituals performed at the grave. Although the time frame of these rituals cannot be reconstructed, their mere presence suggests that the mortuary landscape, a group of visible cemeteries surrounding the town and temple that commemorated the lives of since-forgotten community members, was temporarily brought to life by commemorative feasting and offering events.

In the broadest sense, Tiwanaku funerals constituted prolonged and recurring offering events that were built around the remains and memories of community members.
Inasmuch as the funerary process included the presentation of offerings to the deceased, and the general group of deceased community members, burials themselves formed offerings that seem to have been an important aspect of place and memory making in Tiwanaku society. The shared experience and memories that resulted from participating in the preparation of the body, the interment, and the subsequent celebrations reinforced the meaning of being a member of the Omo M10 community, of being Tiwanaku in diaspora. While migration, trade, and oral histories perpetuated the affiliation with the highland as homeland, the presence of nearby community ancestors in local cemeteries rooted the residents of the nearby Omo village to the place.

Tiwanaku funerary rituals were relatively standardized across the population. The understanding that all members of society were to be afforded a full burial regardless of age, sex or community affiliation made funerals into rituals of inclusion, that is performances that marked the deceased’s and mourners’ social and cultural identity. Most Tiwanaku funerals were broadly considered social events for asserting identity and belonging.

Occasionally, funerary events were used to express temporary or permanent divergence or exclusion from the community or society. The non-normative burials at Omo M10 suggest that inclusion into and exclusion from the community found expression in funerary contexts. On the one hand, inclusion or transfer into a new community meant that individual retained—at least for some time—their ethnic or kinship affinity. On the other hand, exclusion from the group was expressed by separating the deceased from the community, as was the case with the M10Q burials, or by taking additional measures throughout the funerary process to counteract the marginal
status of the deceased within the community. The treatment of such excluded or marginal figures in Tiwanaku society also demonstrates that the relationship between the living and the dead was not always based on reciprocity, and that the power associated with the dead was as much seen as a potential threat to the well-being of the community as it was a benefit. The ways in which the power of the dead shaped the relationships of semi-autonomous communities and the Tiwanaku state will be explored in Chapter 8.

Despite the overarching homogeneity and standardization of the Tiwanaku mortuary assemblage at Omo M10, funerals did, in some cases, allow for the expression of individual emotions and identities. The prescribed body preparation, interment, and use of canonical offerings also afforded room for mourners to acknowledge the accomplishments, relationships, or personal characteristics of the deceased. As the following chapter will show, age and gender—and with them, status—were the principal factors for explaining some of the variability seen in tomb architecture, funerary dress, and grave offering assemblages.

This chapter, in part, contains material as it appears in “More Than The Sum of its Parts: Dress and Social Identity in a Provincial Tiwanaku Child Burial” in Journal of Anthropological Archaeology 35:51-64 (2014) by Sarah I. Baitzel and Paul S. Goldstein. The dissertation author was the primary investigator and author of this paper.
CHAPTER 7: BECOMING TIWANAKU: AGE, GENDER, AND STATUS

IDENTITIES AT OMO M10

Introduction

Tiwanku burials and commemorative practices were rule-based meaningful sequences of events intended to facilitate the passage of the deceased’s soul to the afterlife and the proliferation of positive relationship between the living and the dead. As demonstrated in the previous chapter, burial treatment followed highly standardized normative patterns that could be manipulated to acknowledge unusual circumstances in life or death. Tiwanaku burials at Omo M10 also displayed enough variability in attributes like tomb structure, funerary dress and grave offerings to that other factors may have influences the mourners’ practices and choices throughout the funerary process.

This chapter explores how the mortuary variability of burials at Omo M10 corresponded variably to the age, sex, and status of the deceased. Being young, old, male, or female in Tiwanaku society were identity categories that entailed social roles, practices, responsibilities and emotions defined in life and death through the distinct relationships and practices. As the archaeologies of childhood (e.g., Baxter 2005a; Sofaer 2006) and gender (Diaz-Andrieu 2005; Gilchrist 1999) have shown, these two identities are fundamental to shaping life experiences. In mortuary archaeology, age and sex, together with status, have long been considered the most salient features for determining differential mortuary treatment (Binford 1971; Carr 1995; Peebles 1971; Saxe 1970). In what follows, I expand on previous observations made about the role of age and sex in
Tiwanku funerary treatment. In doing so, I confirm or reject existing arguments about the nature of age and gender identities in Tiwanaku society, and I aim to establish more clearly how these identities were connected to each other and to social relationships of inequality.

Methodologically, the following discussions approach the mortuary sample at Omo M10 uniformly, that is, without taking into consideration the spatial sectorization of burials. This is done primarily to preserve the size of the sample. Sample sizes of burials from each cemetery are too small to gain meaningful results for the comparison of age, sex and status identities between cemetery groups. In contrast, the analysis of these attributes in relation to funerary treatment across the entire cemetery population offers information about society-wide constructions of age, gender, and status.

7.1 Age Identities in Tiwanaku Society

Age at death is considered one of the most essential factors in the construction of mortuary identities (Binford 1971; Carr 1995; Parker Pearson 1999:103). Age determined the nature and extent of the deceased’s social relationships with the community and his or her physical abilities. More subjectively, age at death also impact the emotional attachments and reactions that follow death (e.g., de Lucia 2010; Murphy 2011). In the Andes, age was socially constructed in age grades defined by increasing physical and cognitive abilities that allowed the individual to mature into his or her role as a productive and contributing member of society. Although archaeologists have generally entertained the notion that higher social status in Tiwanaku society was reserved for
adults, most mortuary studies concluded that there existed no substantive differences between children and adults in their mortuary treatment (e.g., Goldstein 2005: 253–254; Korpisaari 2006:157; Sharratt 2011:172–173). At the site of Chen Chen, Sharratt observed that subadults were wrapped in similar numbers and weave types of textiles as adults, and that the use of ceramic vessels, wooden spoons, sandals, and gourd vessels crosscut age groups. Only needles, combs, spindles and pigment boxes were found exclusively with adults, *zampoñas* only with children (2011:172–173). Goldstein suggested that, “generally speaking, juveniles and adults had the same kinds of grave goods, but adults had more goods” (2005:254).

Based on the results of Andean ethnographic research and Tiwanaku archaeology, I posit two hypotheses for the interpretation of the mortuary data from Omo M10:

a. If age mattered as a social identity in death, and probably also in life the mortuary treatment of subadults and adults at Omo M10, we could expect to see differences in burial location, body preparation, tomb architecture, or grave offerings based on skeletal age. Specifically, if advanced age may bestow higher status or social recognition on members of Tiwanaku society, as the result of their wider social networks and relationships established throughout their lifetime of *cargo* and reciprocity. then adult

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136 The division of the two broader categories of “child” and “adult” uses the age of 18 as a cut-off. This distinguishes young individuals who would have remained members of their family’s households from those who were consider of age and old enough to establish and provide for their own family and household. Subdivision of the category of “children” acknowledges the developmental process of children as increasingly independent and productive contributors of the household. In the same light, the category of “adults” is divided into young adults (18–25 years), adults (25–40 years) and old adults (40+ years), where the division between adults and old adults is placed around the time of menopause. An addition category of “non-specific” adults accounts for individuals whose precise age could not be assigned based on their skeletal indicators.
burials would exceed those of children in quantity or quality of grave goods. Conversely, children’s tombs were wealthier or more elaborate than adult burials, this would reflect greater investment in children’s afterlives, their kin’s affluence, or the heightened emotional attachment of parents and their offspring.

b. If age was not a deciding factor in how the deceased was perceived by their community, then mortuary variability between adult and children’s burials at Omo M10 would be expected to be unpronounced. Identities like community affinity, status, and gender would have been established at the moment of birth and persisted until death without being significantly impacted by a person’s growing physiology, mental capacities, and social network.

The analysis of multiple lines of evidence from burials at Omo M10 indicates that age-at-death, and age, was homogenous in regard to body preparation and position, as well as tomb location (see Chapter 6). For that reason, the following discussion will focus on the nature of funerary dress, grave assemblages and tomb structures as indicative of the physical and symbolic investment in burial.

7.1.1 Cemetery Age Demographics at Omo M10

The demographic age-at-death profile of the Omo M10 cemeteries was constructed using age intervals based on the ethnographic and ethnohistorical data broadly differentiating children and adults based on their mental and physical capabilities (e.g., Buechler and Buechler 1971; Rowe 1958). The age-at-death profile of the Omo M10 cemeteries corresponds generally to the expected pre-modern distribution in terms of a high number of young children, low numbers of older children to adults, and slightly
elevated numbers of older adults (Table 7.1). At Omo M10, infants and young children (0–5 years) comprised the largest demographic sector (53.5%). The age-at-death profile drops sharply after age 5 years and stays low into young adulthood (≤25 years). Large numbers of children aged 0-5 years in pre-modern cemetery populations are the result of high infant morbidity and mortality rates, often related to the weaning process (Woods et al. 1992).

**Table 7.1** Age categories and number of individuals recovered from cemeteries at Omo M10.

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Age Range (yrs)</th>
<th>Number Tiwanaku Individuals (n)</th>
<th>Frequency Tiwanaku Individuals (%)</th>
<th>Number All Individuals (n)</th>
<th>Frequency All Individuals (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant</td>
<td>0-2</td>
<td>67</td>
<td>28.3%</td>
<td>72</td>
<td>27.7%</td>
</tr>
<tr>
<td>Young Child</td>
<td>2-5</td>
<td>58</td>
<td>24.5%</td>
<td>67</td>
<td>25.8%</td>
</tr>
<tr>
<td>Older Child</td>
<td>5-9</td>
<td>24</td>
<td>10.1%</td>
<td>30</td>
<td>11.5%</td>
</tr>
<tr>
<td>Adolescents</td>
<td>10-17</td>
<td>11</td>
<td>4.6%</td>
<td>12</td>
<td>4.6%</td>
</tr>
<tr>
<td>Young Adults</td>
<td>18-25</td>
<td>19</td>
<td>8%</td>
<td>19</td>
<td>7.3%</td>
</tr>
<tr>
<td>Middle Adults</td>
<td>25-40</td>
<td>22</td>
<td>9.3%</td>
<td>23</td>
<td>8.8%</td>
</tr>
<tr>
<td>Older Adults</td>
<td>40+</td>
<td>23</td>
<td>9.7%</td>
<td>24</td>
<td>9.2%</td>
</tr>
<tr>
<td>Non-Specific Adults</td>
<td>18+</td>
<td>13</td>
<td>5.5%</td>
<td>13</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>237</td>
<td>100%</td>
<td>260</td>
<td>100%</td>
</tr>
</tbody>
</table>

Young adults comprised 7.3% of the mortuary population, and of these, most were women of childbearing age. Middle-aged and older adults were only slightly more frequently represented than young adults (8.8 and 9.2%). They are fewer than expected for a self-reproducing population. Old adults appear to have reached a maximum age of 60 or more years, although no absolute chronological age could be determined. Many older individuals showed skeletal evidence of osteoarthritis (44% of

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137 This rules out catastrophic events, such as epidemics or warfare, as the primary cause of death at Omo M10, because such events would have affected the entire population regardless of age resulting in the equal representation of all community members in the cemetery population.
adults, 94% of old adults) in arm and leg joints, and vertebrae. Ante-mortem tooth loss and dental abscesses affected 30% (n=24) of adult individuals.

Within cemeteries, I detected no spatial differentiation of burials based on age (see Chapter 8.1). Adults and subadults were buried equidistantly from one another.

In two cases, neonates (or fetuses) were found interred with female adult individuals (Q-4 and R-24), possibly suggesting a simultaneous death of mother and child at birth. Both burials were non-normative in terms of body positions, tomb structures and locations (see Chapter 6.4). In contrast, three other neonates or infants (I-1, I-25, T-19) had been afforded their own burial space. The fact that burial rituals were extended to individuals who may have been stillborn or lived only a few hours after birth is indicative of the fact that in Tiwanaku society life— and membership in the community — was believed to commence at birth.

7.1.2 Mortuary Variability in Children’s Burials

Tiwanaku mourners invested in the burials of infants and young children through standardized and personalized grave goods. Children’s burials shared some features with adult interments, including the general disposition of the burial (i.e., individualized, below-ground, seated-flexed, east-facing). A number of idiosyncratic behaviors observed only in children’s burials appear to relate specifically to the young age of the interred. Because of the overall size and preservation of the burial sample of children from Omo

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Analyses are based on excavation data from 2010–2011 season and included only Tiwanaku Cemeteries B–M, P–W. Cemetery N was excluded as a post-Tiwanaku cemetery, and X was identified as not being associated with the Tiwanaku occupation of Omo M10 (see Chapter 9).
M10, it is possible to arrive at several new conclusions about social construction and the nature of Tiwanaku childhood.

Infants (0–2 years, n=72)

Seventy-two infants were recovered at Omo M10, of which 69 were associated with the Tiwanaku occupation; the number of infant tombs analyzed was 67. Most infants at Omo M10 were buried in simple pits (66.67%, n=42), but they were also found in lesser numbers in partial cists (1.1%, n=7), inset cists (4.8%, n=3) and various types of completely lined cists (17.4%, n=11) (Table 7.2). Compared to all other ages, infants were associated with the greatest variability in tomb structure.

Eighteen of the 67 tombs (26.9%) with infants contained grave offerings (Table 7.3). The range of offerings was zero to three objects. Infant burials included an average number of 0.43 grave offerings, the lowest average number among all age categories at Omo. Twenty-seven percent of infant burials contained offerings.

The most common burial offerings found with children were serving wares and objects, while dress and adornment items were only minimally used (Table 7.4). Fifty-five percent of the ceramic vessels found with infants were red-slipped Tiwanaku serving vessels; the remainder was unslipped serving and cooking vessels. The ceramic vessel forms included the *keros* (n=5), *tzones* (n=2), *ollas* (n=4), *vasijas* (n=2) and miniatures

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139 Because two infants were found buried in tombs with multiple individuals, the number of tombs analyzed for infants is 67.
140 The Pearson’s Correlation Coefficient \( p=0.4297 \) for the frequency of age categories at Omo compared to the frequency of offerings per age category reveals that the distribution of age-at-death does not predict well the distribution of offerings across age categories at a significance level of \( p=0.5 \).
141 Grave offerings comprise identifiable artifacts found in tombs that were not part of the funerary bundle, i.e., textile garments, braided fiber rope, and featherholders are excluded from this count.
(n=1), but also less common forms like *cuencos*, effigy vessels, and “flower pot” cups. Furthermore, infants received some non-ceramic food-related offerings, such as basket vessels (n=2), gourd ladles (n=3), and wooden spoons (n=3). Only two individuals received sandals, a hat, greenstone beads and a *zampoña*.

Of the 72 excavated infant burials, 30 contained textile remains (Table 7.5). Complete or identifiable textile garments were only found in a few burials, so that the analysis of textile remains revealed more general attributes regarding labor expenditure and quality (raw material, fineness of thread and weave, embroideries) across the whole sample. Fifty-five different fragmented textile objects were found with infants, of which 49 were woven structures (excluding threads, cords, raw fiber). The average number of woven textile structures identified was 1.6 structures per tomb.\(^{142}\) Seventy-seven percent of woven structures were classified as fine, 23 percent as coarsely woven. In all but two cases\(^{143}\), camelid fiber was used for the production of the textile. The average fabric density—i.e., the number of warps and wefts within a 1cm\(^2\) area—for textiles found with infants was 190 threads/cm\(^2\), higher than the average for the overall mortuary sample at Omo M10 (158 threads/cm\(^2\)). Only nine subspecimens were complete enough to determine the original form of the structure; they included six tunics and three tunics or *llicllas*. None of the garments were preserved enough to determine with certainty whether

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\(^{142}\) The average was calculated by dividing the number of woven textiles (n=45) by the number of infant burials that contained textile remains (n=28). This was done with the presumption that all tombs contained textiles as part of the body preparation, so that the absence of textiles was the result of poor preservation.

\(^{143}\) Subspecimen M10-7441.02 was a fragmented of a coarse cotton-fiber plainweave that may have been sewn informally to a larger camelid-fiber structure.
it had been complete at the moment of burial or whether it was fragmented, re-assembled and re-used for the infants’ interments. Ten textile fragments also had embroidery.

**Young Children (2–5 years, n=67)**

Of the 67 young children’s burials that were recovered at Omo, 58 were affiliated with the Tiwanaku occupation. Most young children were interred in simple pits (61.1%, n=33), partial cists (9.3%, n=5), inset cists (11.1%, n=6), and different types of complete cists (18.6%, n=10) (Table 7.2). Although the variability of tomb architecture associated with young children is similar to that of infants, young children were more frequently buried in more elaborate structures like partial, inset, or complete cists.

Young children were also interred with significantly higher numbers of grave offerings than infants (Table 7.3). The maximum number of offerings for young children reached 6 objects, double that of infants. The average number of offerings per tomb also increased to 1 object. Almost half of young children’s tombs (46.6%) contained offerings.

Serving wares were the most common type of grave offering for young children, constituting 60 percent of their offerings (Table 7.4). Thirty-three percent of the ceramic vessels were ollas (n=4) and miniatures (n=4). The remaining 66 percent included keros (n=4), tazones (n=7), and vasijas (n=5). Young children received the highest number of non-ceramic serving objects: basket (n=3) and gourd (n=4) bowls, basket plates (n=6), gourd ladles (n=3) and wooden spoons (n=11). Sandals (n=3) and jewelry (n=3) were more common with young children than with infants, while the number of individuals buried with zampoñas remained the same (n=1).
Twenty-nine of 66 burials containing young children had textile remains (Table 7.5). The number of woven textile fragments was 68, so that the average number of woven textiles per burials was 2.34 objects. Most of the woven structures (73.5%) were finely woven, and all the textiles found with young children were woven with camelid fibers. The average thread density for this age group was 197 threads/cm², the highest among all age groups.¹⁴⁴ Eleven textile subspecimens were complete enough to identify the original garment structure; they included four tapestry weaves (two of them were tunics, the other small fragments), eleven warp-faced or warp-striped tunics (including 4 complete or almost complete garments), two illacillas and eight tunic/illacillas (fragments), as well as two pañuelos (complete). Embroidery was observed on thirteen subspecimens.

**Older Children (5–9 years, n=30)**

Thirty burials of children between the ages of 5 to 9 years were recovered at Omo; of these, 24 were affiliated with Tiwanaku cemeteries. As mentioned previously, older children were less frequently represented than infants and young children in the Omo M10 mortuary sample, because they had survived critical transitions in early childhood during which child mortality is highest. The frequencies of tomb architecture types for older children at Omo M10 closely resembled those of young children. Many older children were interred in simple pits (47.8%, n=11), while others were buried in

¹⁴⁴ The high average thread density is the result of four tapestry garments found with young children, the highest number in any age group. When the tapestry structures are removed from the sample of young children’s textiles, the thread density drops to 147 threads/cm². This pattern was also observed by Plunger at the Tiwanaku cemetery at Rio Muerto, Moquegua, where the mean thread count decreased from 183 threads/cm² with tapestries to 159 threads/cm² without tapestries (2009:50).
completely lined cists (34.7%, n=8). A few individuals were also found in partial (13%, n=5) and inset cists (4.3%, n=1) (Table 7.2).

Sixty-seven percent of older children received offerings, a significantly higher percentage than that of young children with offerings (Table 7.3). Although the maximum number of offerings remained similar to young children (6), the average number of objects found with older children increased slightly from 1 to 1.2 objects per tombs. The type and proportions of grave offerings found with older children resembled those of young children (Table 7.4). Ceramic vessels (keros: 5; tazones: 4; vasijas: 2; ollas: 2; and miniatures: 2) were notably more common than non-ceramic vessels, which included wooden spoons (n=8), a basket plate, a gourd ladle, and a wooden kero. Sandals (n=1), a four-pointed hat, greenstone beads (n=1) and zampoñas (n=2) were also included with older children.

Ten of the older children were found with the remains of 30 textile objects in their tombs (Table 7.5). Twenty-seven of these were woven structures, resulting in an average of 2.7 woven textiles per older children’s burials. Finely woven textiles constituted 71% of the fragments; the other 29% were coarse textiles. All but one were woven from camelid fiber\textsuperscript{145}. The average fabric density for textiles placed with older children was 163 threads/cm\textsuperscript{2}, close to the average for the whole textile assemblage. Based on several diagnostic elements, it was possible to identify a tapestry tunic, two warp-faced tunics, two tunic/llallas, and a polychrome hat. The fragments of the tapestry, a warp-striped

\textsuperscript{145} Subspecimen M10=7387.01 from Burial U-1 was tapestry woven with cotton warps and polychrome camelid fiber wefts.
tunic, a polychrome tunic//liclla and the hat were found in a heavily disturbed context, Burial U-1. Four of the recovered textile fragments also had embroidery.

Adolescents (10–18 years, n=12)

Eleven\textsuperscript{146} burials containing adolescent individuals between 10 and 18 years of age were recovered at Omo M10. Because they represent such a low proportion of the mortuary sample, some of the results of this analysis must be considered preliminary and require further testing. Adolescents were predominantly interred either in simple pits (54.5%, n=6) or completely lined cist tombs (45.5%, n=5) (Table 7.2).

Grave assemblages of adolescents were visibly smaller than those of younger individuals (Table 7.3). The number of burials found with offerings was 36.4 percent, half of that of older children. The maximum number of offerings dropped to 2 objects, and the average number of offerings per tomb decreased from 1.2 objects found with older children to 0.5 objects found with adolescents.

The two ceramic offerings found with adolescent individuals were red-slipped serving wares, including a banded kero and a cup (Table 7.4). In addition, two wooden spoons and greenstone beads were recovered. Although their low numbers preclude more detailed conclusions, these objects suggest that offerings for adolescents did not substantively differ from those found with younger subadults.

Only six adolescents’ burials were found with textile remains (Table 7.5). They contained thirty camelid fiber textiles, ten of them woven structures, resulting in a low

\textsuperscript{146} Although 12 adolescent individuals were identified, two of them were found in a looted context (B-12a and 12b). Because it was not possible to determine whether this burial constituted a double interment or a principal and intrusive individual, it was treated as a single adolescent burial for the purpose of analysis.
average number of woven textiles per tomb (1.25 textiles/tomb). Seven of the fragments were fine cloth, and three were coarser weaves. The average fabric density was below the mean (132 threads/cm²), in part due to the small sample size and advanced state of disintegration of some of the fragments. The fragments were too small and did not have diagnostic elements to determine their original garment type.

7.1.3 Mortuary Variability in Adult Burials (18+ years)

Adult burials constituted a significant proportion of the mortuary sample at Omo M10 (30.6%, n=79). Overall, distinctions between adults and children in terms of mortuary treatment were subtle, but appear to correlate with the development of the deceased’s social persona and the ensuing position the deceased held at the end of their lifetime as well as in death. In comparison to children, adult burials displayed less variability in tomb structure and grave offerings. Their grave offerings included the same serving vessels as those found with children and showed a similarly unequal distribution of grave wealth across the populations. At the same time, adult burials set themselves apart through the distinctively high maximum numbers of offerings and the use of craft tools and certain ritually associated objects.

Young Adults (18–25 years, n=19)

Nineteen Tiwanaku tombs containing young adults were recovered at Omo. Young adults were buried predominantly in pit tombs (72.2%, n=13), and to a lesser extent in cists (22%, n=4) and inset cists (5.5%, n=1) (Table 7.2). This distribution is most similar to the adolescent population at Omo. Young adults were found with as many
as five grave offerings. Less than half of young adults (42.1%) received offerings, and the average number of offerings per tomb increased to .9 objects (Table 7.3).

Of the eighteen grave offerings found with young adults, fourteen were serving objects (Table 7.4). The five ceramic vessels were all Chen Chen-style Tiwanaku vessels, and included two keros, two tazones and a bridge-spout vasija. Two basket containers and five basket plates, as well as four wooden spoons completed the serving assemblage found with young adults. Adornments and tools were limited to greenstone beads in one tomb, and a comb in another.

Only six young adults were found with textile remains (Table 7.5). The fragments originated from 14 distinct woven textile objects, resulting in an average of 2.3 woven textiles per tomb. Ten of the textiles were finely woven, and all were made from camelid fiber. The average thread density for textiles buried with young adults was 121 threads/cm². Based on the diagnostic elements, the fragments originated from four tunics, one licilla and two mantas. Three of the garments were decorated with embroidery.

Middle-aged Adults (25-40 years, n=23)

Of the 23 excavated tombs containing the remains of middle-aged adults at Omo M10, 22 were Tiwanaku-affiliated. This represents a slight increase in the number of middle-aged adults compared to young adults. Similar to young adults and adolescents, most middle-aged adults were interred in pit tombs (75%, n=15), while the rest were found in complete (20%, n=4) and partial stone cists (5%, n=1) (Table 7.2).

Tiwanaku middle-aged adults were clearly distinguished from younger members of society through their relative grave wealth (Table 7.3). The maximum number of objects found with middle-aged adults rose to ten objects. Moreover, the four tombs with
the highest quantity of offerings all belonged to middle-aged adults. The increase in grave wealth is also reflected in a higher average number of objects per tomb (1.5 objects), and a slightly elevated frequency of tombs found with offerings (59.1%), compared to young adults.

The ceramic assemblage found with middle-aged adults consisted of equal numbers of *keros* and *tazones* (n=3) and two *vasijas*. With the exception of a single polished blackware vasija (M10=7312) from Burial P-23 and an unslipped pair of vessels (*kero* and *tazon*) found in Burial S-21, the vessels were red-slipped manufactured in the Tiwanaku Chen-Chen style. Non-ceramic serving containers were numerous and variable in form and material, including two wooden keros (n=2), basket containers (n=1) and plates (n=3), gourd vessels (n=1) and ladles (n=1), and wooden spoons (n=4). Middle-aged adults were associated with the highest number of non-serving artifacts. These included objects used for adornment, i.e., sandals (n=1) and jewelry (n=2), and tools, such as a comb, two spindles, other weaving implements, and a pyroengraved bone tube.

Thirteen of the 24 middle-aged adults at Omo M10 had been buried with textiles from 26 different cloths, for an average of 2 woven textiles per burial (Table 7.5). Seventy-seven percent of the textiles were finely woven, and all of them were made from camelid fiber. The average fabric density of textiles found with middle-aged adults was 143 threads/cm². Nine of the woven textiles had diagnostic elements: three tunics, one *lliclla*, one tunic/lliclla, one manta, one knotted four-pointed hat, a *pañuelo* and a polychrome loincloth. Embroidery was present on six of the garments.
Older Adults (40+ years, n=24)

Twenty-three excavated individuals at Omo Older were adults above the age of 40 years. They resemble the middle-aged adult population at Omo M10 in terms of tomb architecture, grave wealth, offerings types, and funerary dress. Most older adults were buried in simple pits (47.8%, n=11), although significant numbers were also found in complete cists (43.5%; n=10), and some in partial cists (8.7%, n=2) (Table 7.2). The maximum number of grave offerings for older adults was ten objects (Table 7.3). The number of tombs to contain offerings increased to 65.2 percent, while the average number of objects found per tomb increased to 2.4 objects. As a result, older adults were the wealthiest age group among the Omo M10 populations.

Compared to younger members of society, older adults were not only distinguished through greater quantities of offerings, but also through the quality and nature of their offerings. The ceramic serving vessels found with older adults were almost all of the red-slipped Tiwanaku Chen Chen-style, with the exception of two Tiwanaku plainware ollas and a miniature vessel, a vessel type typically only found with children. Furthermore, older adults received wooden keros (n=3), basket containers (n=3) and plates (n=8), gourd vessels (n=2) and ladles (n=1), and wooden spoons (n=9). The non-serving offerings for older adults consisted of jewelry (n=2) and sandals (n=1), as well as combs (n=1), spindles (n=4), weaving tools (n=2), bags and hats (n=4) (Table 7.4).

Sixteen of the older adults were found with textiles (Table 7.5). Tombs contained an average of 2.2 textiles—72 percent fine and 28 percent coarse—comparable to the number of textile objects found with young adults. Ninety-three percent of the textiles were made from camelid fiber; only subspecimen M10=7556.04 in Burial U-18 was a
piece of plainweave cotton cloth that had been sewn into a makeshift bag. The average fabric density of textiles found with older adults was 168 threads/cm$^2$, slightly higher than the average for the entire textile assemblage. Four of the identified structures had been embroidered, and eleven were well enough preserved to determine the original garment type: tapestry (1), tunic (3), lliclla (1), tunic/lliclla (3), manta (2), and a chuspa (coca bag).

**Table 7.2** Age categories by tomb structure (not including Cemeteries N, X, empty tombs, and tombs with partial information from the 1984 excavations).

<table>
<thead>
<tr>
<th>Age</th>
<th>Pit</th>
<th>Partial Cist</th>
<th>Inset Cist</th>
<th>Stone-lined Cist</th>
<th>Slab-lined Cist</th>
<th>Chambe r Cist</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant</td>
<td>42 (66.7%)</td>
<td>7 (11.1%)</td>
<td>3 (4.8%)</td>
<td>5 (7.9%)</td>
<td>4 (6.3%)</td>
<td>2 (3.2%)</td>
<td>63 (100%)</td>
</tr>
<tr>
<td>Young Child</td>
<td>33 (61.1%)</td>
<td>5 (9.3%)</td>
<td>6 (11.1%)</td>
<td>5 (9.3%)</td>
<td>4 (7.4%)</td>
<td>1 (1.9%)</td>
<td>54 (100%)</td>
</tr>
<tr>
<td>Older Child</td>
<td>11 (47.8%)</td>
<td>3 (13%)</td>
<td>1 (4.3%)</td>
<td>3 (13%)</td>
<td>5 (21.7%)</td>
<td>0</td>
<td>23 (100%)</td>
</tr>
<tr>
<td>Adolescent</td>
<td>6 (54.5%)</td>
<td>0</td>
<td>0</td>
<td>2 (18.2%)</td>
<td>3 (27.3%)</td>
<td>0</td>
<td>11 (100%)</td>
</tr>
<tr>
<td>Young Adult</td>
<td>13 (72.2%)</td>
<td>0</td>
<td>1 (5.5%)</td>
<td>2 (11%)</td>
<td>2 (11%)</td>
<td>0</td>
<td>18 (100%)</td>
</tr>
<tr>
<td>Mid-Adult</td>
<td>15 (75%)</td>
<td>1 (5%)</td>
<td>0</td>
<td>1 (5%)</td>
<td>3 (15%)</td>
<td>0</td>
<td>20 (100%)</td>
</tr>
<tr>
<td>Older Adult</td>
<td>11 (47.8%)</td>
<td>2 (8.7%)</td>
<td>0</td>
<td>4 (17.4%)</td>
<td>6 (26.1%)</td>
<td>0</td>
<td>24 (100%)</td>
</tr>
<tr>
<td>Non-spec. Adult</td>
<td>4 (30.8%)</td>
<td>0</td>
<td>1 (6.7%)</td>
<td>4 (30.8%)</td>
<td>4 (30.3%)</td>
<td>0</td>
<td>13 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>134 (59.6%)</td>
<td>18 (8%)</td>
<td>12 (5.3%)</td>
<td>26 (11.5%)</td>
<td>30 (13.3%)</td>
<td>3 (1.3%)</td>
<td>225 (100%)</td>
</tr>
</tbody>
</table>
Table 7.3 Distribution of grave offerings by age group in Tiwanaku cemeteries at Omo M10 (not including 15 tombs without skeletal remains but with 7 offerings).

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of Tombs</th>
<th>Number of Offerings</th>
<th>Offerings per Tomb</th>
<th>Tombs with Offerings</th>
<th>Tombs without Offerings</th>
<th>Max. Number Offerings per Tomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant</td>
<td>67</td>
<td>29</td>
<td>0.4</td>
<td>18 (26.8%)</td>
<td>49 (73.13%)</td>
<td>3</td>
</tr>
<tr>
<td>Young Child</td>
<td>58</td>
<td>58</td>
<td>1</td>
<td>27 (46.6%)</td>
<td>31 (53.4%)</td>
<td>6</td>
</tr>
<tr>
<td>Older Child</td>
<td>24</td>
<td>29</td>
<td>1.2</td>
<td>16 (66.7%)</td>
<td>8 (33.3%)</td>
<td>6</td>
</tr>
<tr>
<td>Adolescent</td>
<td>11</td>
<td>5</td>
<td>0.5</td>
<td>4 (36.4%)</td>
<td>7 (63.6%)</td>
<td>2</td>
</tr>
<tr>
<td>Young Adult</td>
<td>19</td>
<td>18</td>
<td>0.9</td>
<td>8 (42.1%)</td>
<td>11 (57.9%)</td>
<td>5</td>
</tr>
<tr>
<td>Mid Adult</td>
<td>22</td>
<td>33</td>
<td>1.5</td>
<td>13 (59.1%)</td>
<td>9 (40.9%)</td>
<td>10</td>
</tr>
<tr>
<td>Older Adult</td>
<td>23</td>
<td>55</td>
<td>2.4</td>
<td>15 (65.2%)</td>
<td>8 (34.8%)</td>
<td>10</td>
</tr>
<tr>
<td>Adult (general)</td>
<td>13</td>
<td>16</td>
<td>1.1</td>
<td>5 (38.5%)</td>
<td>8 (61.5%)</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>237</td>
<td>236</td>
<td>1</td>
<td>106 (44.7%)</td>
<td>131 (55.3%)</td>
<td>5.4</td>
</tr>
</tbody>
</table>
Table 7.4 Types of Tiwanaku grave offerings by age group (not including Cemeteries N and X).

<table>
<thead>
<tr>
<th>AGE</th>
<th>CERAMIC VESSELS</th>
<th>NON-CERAMIC VESSELS AND SERVING OBJECTS</th>
<th>ADORNMENTS</th>
<th>TOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kero</td>
<td>Tazon</td>
<td>Olla</td>
<td>Vasija</td>
</tr>
<tr>
<td>Infant</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Young Child</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Older Child</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Adolescent</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Young Adult</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Mid-Adult</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Older Adult</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>A-Nonspec</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>28</td>
<td>11</td>
<td>15</td>
</tr>
</tbody>
</table>
Table 7.5 Attributes of mortuary textiles by age of the interred (not including Cemeteries N and X).

<table>
<thead>
<tr>
<th>Age</th>
<th>Tombs (n)</th>
<th>Woven Specimen (n)</th>
<th>Average Number of Textiles per Tomb</th>
<th>Fine[147] Textiles</th>
<th>Coarse Textiles</th>
<th>Camelid Fiber</th>
<th>Cotton Fiber</th>
<th>Average thread density (threads/cm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants</td>
<td>30</td>
<td>49</td>
<td>1.6</td>
<td>38 (77%)</td>
<td>11 (23%)</td>
<td>98%</td>
<td>2%</td>
<td>190</td>
</tr>
<tr>
<td>Young Child</td>
<td>29</td>
<td>63</td>
<td>2.1</td>
<td>46 (73%)</td>
<td>17 (27%)</td>
<td>100%</td>
<td>0%</td>
<td>198</td>
</tr>
<tr>
<td>Older Child</td>
<td>10</td>
<td>27</td>
<td>2.7</td>
<td>20 (71%)</td>
<td>7 (29%)</td>
<td>96%</td>
<td>4%</td>
<td>163</td>
</tr>
<tr>
<td>Adolescent</td>
<td>7</td>
<td>10</td>
<td>1.25</td>
<td>7 (70%)</td>
<td>3 (30%)</td>
<td>100%</td>
<td>0%</td>
<td>132</td>
</tr>
<tr>
<td>Young Adult</td>
<td>6</td>
<td>14</td>
<td>2.3</td>
<td>10 (71%)</td>
<td>4 (29%)</td>
<td>100%</td>
<td>0%</td>
<td>121</td>
</tr>
<tr>
<td>Mid-Aged Adult</td>
<td>13</td>
<td>26</td>
<td>2</td>
<td>20 (77%)</td>
<td>6 (23%)</td>
<td>100%</td>
<td>0%</td>
<td>143</td>
</tr>
<tr>
<td>Older Adult</td>
<td>16</td>
<td>35</td>
<td>2.2</td>
<td>26 (72%)</td>
<td>9 (28%)</td>
<td>97%</td>
<td>3%</td>
<td>168</td>
</tr>
<tr>
<td>Adult non-spec.</td>
<td>9</td>
<td>15</td>
<td>1.7</td>
<td>13 (87%)</td>
<td>2 (13%)</td>
<td>100%</td>
<td>0%</td>
<td>154</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>239</td>
<td>2</td>
<td>180 (75%)</td>
<td>59 (25%)</td>
<td>99%</td>
<td>1%</td>
<td>158</td>
</tr>
</tbody>
</table>

[147] Textiles were categorized as “fine” if their thread count per cm² was greater than 120, base on the bimodal distribution of thread densities in the sample.
7.1.4 Being Young, Being Old: Childhood and Adulthood in Tiwanaku Society

The new mortuary evidence from Omo M10 provides support for previous observations that have been made about Tiwanaku age identity, but it also offer some unprecedented insight into the ways in which age created particular biological and social realities for different members of Tiwanaku society throughout their lives. First, I will consider the variability between children and adults, followed by a more detailed assessment of subadult and adult lifeways in Tiwanaku community.

Tiwanaku adult and subadult burials shared a broad suite of characteristics in terms of normative mortuary treatment (Chapter 7). Regardless of age, deceased members of the Omo M10 communities were afforded individual, below-ground burials. Their bodies were folded into a seated-flexed position, wrapped in garments, and placed into the tomb facing toward the east. After the deposition of the offerings the tomb was closed. Differences between children and adult burials, although subtle, communicate cultural constructions of identity based on familial sense of value and potential, of interpersonal emotional bonds, and definitions of personhood and status through personal attainments and public recognition.

Without doubt, adults had the richest burials in Tiwanaku society in terms of architecture and absolute grave wealth, affirming that status was, at least in part, acquired with age over time.\(^{148}\) This grave wealth is measurable in the investment in tomb construction and grave offerings. Although a very small number of children were buried

\(^{148}\) To test whether greater years in age correlated positively with grave good numbers, I used a Pearson Correlation test for the 235 burials for which age and burial information was available (2010 and 1984). The resulting Correlation Coefficient was \(r=0.3066\), confirmed that age was moderately positively correlated with grave good numbers.
with grave wealth that clearly set them apart from their age peers, they present unusual cases.

Although children were interred in a greater variety of tomb structures, the investment in adult tombs as measured by the stone architecture was greater for adults. Children’s burial offerings never exceeded six objects in contrast to the ten objects found with some adults. Likewise, the average number of offerings for adults was higher than for children.

The answer to the question of qualitative differences between adults and children is most clearly found in the fact that only adults were buried with tools, e.g., combs, spindles and other weaving implements, and ritual paraphernalia. A similar observation was also made at the nearby Tiwanaku settlement of Chen Chen (Sharratt 2011:173). Tools had been used before interment. They appear to have been personal possessions (with very few exceptions, no individual had more than one of the same object), and point to the economically productive capabilities of the deceased. They constitute objects related to ritual activities (bone tubes, pigment boxes), high-quality craftsmanship (wooden spindles, combs), or luxury objects (silver jewelry). In contrast, Tiwanaku adults appear to have been precluded from receiving objects that bore particular associations with children, specifically pan flutes (*zampoñas*) and miniature ceramic and basketry vessels, whose significance is further explored below.

The distinctive status of adults and their specialized access or right to particular resources is also reflected in their funerary dress. Remains of *mantas* were only found in adult burials and may have formed part of age-specific dress. Furthermore, 32% of adult garments (compared to 20% of children’s funerary textiles) had been embroidered,
perhaps because investment in personal dress was higher among adults who sought to display their textile art and skills. Because of the fragmentary state of textile remains found with all the age groups at Omo M10, it would be premature to draw conclusions about the conditions of the textiles at the time of burial, i.e., whether textiles were fully functional or salvaged from partial remains of former garments. The unwrapping of two children’s fardos (Burials M10P-18B and M10S-16), however, suggests that children possessed garments woven to fit their smaller stature.

The fact that such clear distinctions based on age-at-death exist in Tiwanaku burial treatment confirms that age played a role in the construction of social identity. Not every member was considered privy to a funeral in which mourners acknowledged and displayed the deceased’s abilities, accomplishments, or affinities, as many of the tombs at Omo M10 contained few or no grave goods at all. Moreover, an examination of the mortuary variability that existed within the subadult and adult population at Omo M10 reveals further patterns of social differentiation that appear to correlate with the social relationships and personal circumstances of each age group.

7.1.5 Childhood, Coming-of-Age and Socialization in Tiwanaku Society

The differences manifest in the burial treatment of children from infancy to adolescence reveal important information about the coming-of-age and socialization of children in Tiwanaku society. The growing investment in children’s burials over time reflects at once their increasing participation in the kinship community, their physiological, mental and social progressive development, and their diversification of social relationships. The social age grades of childhood mentioned in ethnographic and
Colonial-era accounts appear to provide a useful and meaningful framework for analyzing and interpreting age-related mortuary data from Omo M10. The change in mortuary treatment associated with increasing age-at-death presents an average, as many children of all ages were buried without offerings.

Tiwanaku children acquired social importance and value as they grew older, especially following high-risk health periods like weaning. This is reflected in the comparison of infant and young children at Omo. Children who died after weaning (approximately age 2 years) were more likely to be interred in stone-lined tombs, had higher frequencies of tombs with offerings, double the maximum number of grave offerings, and a higher average number of objects and textiles per tombs. On average, families responsible for the preparation and interment of the child’s body at Omo M10 invested more into the burials of children who died after the weaning period, an observation supported also by ethnographic descriptions that emphasize the first haircutting ceremony as a crucial step in the development of a child’s social persona.

Around 6-10 years of age, Tiwanaku children began to assume household responsibilities and participate in the family economy through food processing and herding, spinning, and basic weaving. As a result, their burials became better equipped. Almost three quarters of older children were interred with offerings, and with more offerings and textiles on average than any other category of children.

One of the defining differences between adult and children’s tombs was the placement of tools with adults. As children matured, the mean quantity of offerings afforded to them in death would increase, yet the objects consisted almost exclusively of

149 Unwrapping of two young children’s fardos (S-16 and P-18B) revealed that the children’s hair was cropped short to a length of 4–6 cm.
the quintessential normative serving wares typical of Tiwanaku interments. Smaller sizes of serving vessels found with children could indicate that the objects, though normative, were personal possessions. On the contrary, if there exists no correlation between the size of the offerings and that of the deceased, the objects were more likely gifts or general family use items.

Ceramic vessels and wooden spoons were numerous enough to conduct a regression analysis to test whether the deceased’s size (and therefore age) correlated with the size of grave offerings. A Pearson’s chi-square test for absolute heights of keros (n=25) (significance level of $p=0.2373$) suggests that age-at-death predicted with some accuracy the size of keros chosen as offerings. On the contrary, spoons and tazones did not show a goodness-of-fit between object size and age-at-death ($p=0.0591$)\textsuperscript{150}. Furthermore, two of the six tunics removed from children’s fardos (S-16 and P-18B) had been woven in small dimensions to fit children,\textsuperscript{151} and several small leather sandals were also used as offering.

In some cases, children’s offerings were personal possessions that also served as grave offerings. It is possible that some of the serving vessels and dress objects were manufactured by or for younger individuals for their personal use in life. Except for their reduced size, these objects did not differ in form or style from those found with adults. The inclusion of adult-sized sandals and garments, as well as full-sized vessels in children’s tombs, suggest that many cases children’s burials were supplemented with gifts made by the mourning community.

\textsuperscript{150} Keros and spoons presented the largest sample sizes. To increase sample size, objects from the 1984 were added where age at death was known.
\textsuperscript{151} Because complete textile garments are rare at the Omo M10 site, it is not possible to say how common these smaller tunics were.
A child’s death affected parents and immediate relatives differently than the passing away of an adult community member who would have completed their expected life course. The feelings of loss and grief associated with a child’s death could cause parents to express their emotions of bereavement in private or idiosyncratic ways (e.g., Meskell 1999; Murphy 2011). The personal, even intimate relationship between mourning family members and children of any age, even the youngest, is reflected in the attention invested in the construction of tombs, the use of personal items of adornment and possible toys. Children’s tombs were more variable in construction than adults’ tombs. Beyond the simple pit, children’s tombs included partial cists, inset cists, stone and slab cists, as well as rectangular chamber tombs. It is possible that the smaller fardos of children allowed for more creative funerary constructions.

Toys or objects used by children in their daily lives were rarely included in burials at Omo M10. Necklaces and adornments made from plant materials and found with children, such as a seedpod necklaces (Burial T-10) or a tasseled gourd (Burial W-14), may have been made in imitation of adult jewelry objects. Their inclusion in the preparation of the funerary bundle could reflect an attempt on behalf of the mourners to include personal possessions or meaningful objects with the deceased child.

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152 This variability may result from different sample sizes or from changing fashions in burial architecture.
Another group of objects that may represent potential toys or items of play were small, modified *olla*. Four of seven partially soot-covered *ollas* found with children under the age of 10 years had one broken handle (or nub). The breakage site had been ground down and smoothed, converting these *ollas* into rudimentary, one-handled *vasijas* (Figure 7.1). Because women are the only other population sector associated with *ollas*, the placement of *ollas* in children’s tombs (whose remains cannot be sexed) may reflect evidence of gendered play. An alternative explanation for the presence of modified *ollas* in children’s burials may be that mourning women, probably mothers, converted their personal possessions, i.e., cooking wares, into serving objects. Children found with such *ollas* in their tombs did not receive any of the other desirable serving wares, like *keros*, *tazones*, or *vasijas*, nor any other red-slipped serving wares. Whether of not these *ollas* represent evidence of gendered play or maternal efforts to provide deceased children with
symbolic feasting items, *ollas* and playfully fashioned adornments seem to reflect children’s emotional and social bonds, and nascent craft skills.

Similar to the aforementioned toys, miniature vessels and *zampoñas* were also consistently associated with children. Eight miniature vessels were found in the Omo M10 cemeteries.\(^{153}\) All but one (T-3) were interred with children. Their crude manufacture and appearance correlates with the abilities of a nascent potter. In ancient and modern Andean ritual (e.g., Allen 2002; Tschopik 1950:208), as well as in Tiwanaku ceremonial spaces (Alconini 1995; Sitek and Goldstein 2015), miniature objects were used in ritual activities. Some scholars (e.g., Sillar 1994) have tentatively argued for miniature vessels as markers of incipient craftsmanship and ritual based on a special relationship between Andean deities and children. Arguing against Rydén (1959:69) that miniatures were crude replacements for standard-sized vessels, I speculate that the presence of miniature vessels in children’s tombs reflected the deceased’s once-promising future as a craft-specialist imbued with divine powers.

Four pan flutes or *zampoñas* found at Omo M10 were buried exclusively with children, and in particular with children who had wealthy grave assemblages. Although the flutes were no longer strung together, the presence of multiple cane fragments cut to various lengths is indicative of pan flutes used as burial offerings. At the nearby Tiwanaku cemeteries of Chen Chen *zampoñas* were found only with males (Blom 1999:82), and at Rio Muerto M43A, a *zampoña* was found in a large looted tomb without any associated human remains. Musical instruments may have been associated with the individual’s (or his or her family’s high status) and special role, perhaps as musicians.

\(^{153}\) Miniature vessels were usually found with other offerings. Only U-17 contained only one miniature tazon.
7.1.6 Being of Age in Tiwanaku Society

Similar trends of increasing grave wealth with older age can also be observed among the adult population at Omo M10. Young adults, who would have been recently married and starting to establish their household and its economy, received the lowest average number of offerings among adults, even lower than the average number of offerings found with children. Their common interment in simple pits also reflects low funerary investment. On the one hand, death among young adults would have been unexpected, due to illness or complications in childbirth. On the other hand, young adults, no longer dependents of their parents’ household, had to establish and expand social relationships and communal responsibilities, such as hosting ceremonies and engaging in reciprocal acts of labor.

As family, household, and economic capital grew, so did the personal esteem and social capital of adults in their community. This is reflected in grave wealth and personalized burial objects found with middle-aged and older adults. These individuals, having reached the natural end of their lifespan, had fulfilled their cargo responsibilities and established themselves through reciprocity and compadrazgo relationships within and between Tiwanaku subcommunities. Their greater grave wealth in terms of objects and—to some extent textiles—correlates directly with the personalized nature of their offerings. Frequently, the weaving tools that were found with mature adults formed sets that augmented the quintessential normative offerings of serving wares. Because tools and certain ritual paraphernalia, such as bone tubes and pigment boxes, were found exclusively associated with mature adults, there remains little doubt that such objects
would have constituted important aspects of the deceased’s activities and recognition in life.

However, it must be remembered that such privileged interments were afforded to only a few older members of society. Three and four individuals of middle and older adult age, respectively, were found in wealthy tombs equipped with five or more offerings, while the others received only 1–2 serving objects. Between 35 and 40 percent of mature adults, in contrast, were found without offerings.

At the beginning of this section, I proposed two hypotheses about the potential existence and relevance of age for social identity in Tiwanaku society. As the analysis of the burial contexts in regard to different age categories has shown, age played a role in the mortuary treatment as a reflection of the deceased’s personal history and social integration. Nevertheless, age did not determine membership within the community, or affect the deceased’s right and access to a proper normative funerary program that ensured his or her passage to the afterlife and positive disposition toward the living. In what follows, I consider the importance of biological sex as another possible factor for differentiating burial treatment, and its implications for forming social identities and relationships.

7.2 Mortuary Practice and the Construction of Gender in Tiwanaku Society

As discussed in Chapter 1, gender is constructed through cultural practices and beliefs that assign individuals to one of several mutually exclusive identity groups based on their biological sex. In the Andes, gender identities are ascribed and enacted through
particular dress, diet, and activities, all of which serve to materialize and conceptualize gender identity as dualistic, hierarchical, oppositional, but also complementary.

To date, our understanding of gender in Tiwanaku society has been informed by a number of iconographic, mortuary, and biogeochemical studies that hint at the complex, inter-connected nature of gender roles in Middle Horizon society. Monolithic stone sculptures found at the Tiwanaku capital have traditionally been interpreted to portray male figures, because they lack defining female markers, such as breasts. Similarly, portrait-head *keros*, some of which have mustaches, have been categorically identified as male. As a result, males have been generally linked to *keros*, *chicha* consumption, and ritual participation,\(^\text{154}\) and with status indicators like turbans, ear spools, and coca quids (Goldstein 2005:259).

Tiwanaku effigy vessels (n=17) displaying male and female figures provide another line of evidence for studying gender concepts and roles in Tiwanaku society. In a rare set of effigy vessels found in the Terminal-Tiwanaku period ceramic offering on the Island of Parity, Korpisaari and Pärsinnen observe that male effigy and portrait-head vessels were characterized by a number of features including sideburns and mustaches, lip plugs and ear spools, turbans and coca quids (2011:119–122, 129–130). An anthropomorphic effigy vessel from Chen Chen in Moquegua also displays a man wearing a polychrome warp-striped tunic (Sharratt 2011:figure 180). Female effigy vessels found at Pariti, on the contrary, depict individuals whose gender markings consist

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\(^{154}\) Carbon stable isotope analysis of male and female individuals from Rio Muerto and Omo showed that women consumed less C4 plant foods compared to men (Somerville et al. 2015); whether this reflects gender-based distinctions in ritual consumption only or more general dietary patterns, however, is difficult to determine at this point.
of hair parted in the middle and worn in two braids, striped shawls pinned in the front
worn over tunics, veils or headbands, and face paint (Korpisaari et al. 2011:133).

Vessels depicting males often were open-rimmed drinking vessels, in contrast to
the female-shaped vasijas. The complementary action of pouring from a “female” vessel
into an open-rimmed “male” container suggests ritual gestures related to fertility and
procreation. This complements and literally “puts into action” the ethnohistorical and
ethnographic evidence from the Andes, which emphasizes the role of women as
providing and the men as receiving chicha (Cobo 1963[1653]:174). If this was also the
case in Tiwanaku rituals, women may have used male effigy vessels to serve and pour,
whereas men would have held female effigy vessels in the act of receiving liquids, further
underscoring the complementary and situational nature of gender roles. Korpisaari and
colleagues also tentatively identified a third-gender individual based on unusual hair and
dress elements (2011:122, plate 46C).

The distinct manner of dress and adornment of male and female figures on effigy
vessels furthermore offers a comparative sample for the interpretation of archaeological
textile samples. Women are depicted wearing simple tunics and striped embroidered
llicllas, or shawls, held together in the front by pins or tupus. Their hair is worn in two
braids. Males are shown wearing polychrome warp-striped tunics. Plunger and Goldstein
(2012) have found textile evidence in support of gendered dress in female burials among
mortuary garments at Rio Muerto (Moquegua) and the 1984 mortuary data from Omo
M10. Specifically, the use of asymmetrically striped, embroidered llicllas can be linked
to a group of female adult individuals who were often interred with pigment boxes.
Plunger and Goldstein interpret these individuals as women occupying a special, possibly high, social status or position in Tiwanaku society.

Excavations of Tiwanaku burials in the altiplano did not find significant differences in the mortuary treatment of women and men in Tiwanaku settlements (Korpisaari 2006:156). In the Moquegua Valley, Sharratt found that textiles and most ceramic vessel forms (except for an anthropomorphic and a provincial Wari-style vessel) were found across both sexes (2011:169-170). Needles, weaving implements and gourd vessels at Chen Chen were found only with females (Sharratt 2011:171). Based on the 1984 mortuary excavation at Omo M10, Goldstein has argued that “gender had no absolute association with the quantity of offerings, although the tombs with the most numerous offerings were burials of adult males” (2005:254). Goldstein did observe qualitative differences in grave goods between male and female interments. Ollas and spindles were reserved for women, whereas keros and panpipes were only found with males, associating women with craft production and males with rituals and feasting (Goldstein 2005:254). As a tentative conclusion, one can say that gender was not strongly emphasized in Tiwanaku mortuary contexts, but may have been an important social identity in the context of daily social life.

Based on our knowledge of Andean gender dynamics, and preliminary investigations into Tiwanaku gender roles using iconographic, mortuary, and biogeochemical data, I propose the following hypotheses:

a. If mortuary variability correlates with skeletal indicators of sex, then gender was likely constructed on the basis of two biological sexes. Furthermore, if individuals of either sex
were consistently associated with greater grave wealth or special funerary treatment or
offerings, then Tiwanaku gender relations may have been unequal or even hierarchical.
b. In contrast, if there are no discernible correlations between mortuary variability and
skeletal sex, then gender—as the social expression of biological sex—may not have been
constructed on the bases of biological sex. This scenario seems rather unlikely given the
prevailing dualistic gender systems of Inca, Colonial and modern Andean societies.
Alternatively, funerals may not have been deemed appropriate or relevant contexts for the
acknowledgement or expression of Tiwanaku gender identities.

7.2.1 Cemetery Sex Demographics at Omo M10

Seventy-eight adult individuals recovered from Omo M10 in 1984 and 2010–2011
were complete enough to determine biological sex. Males and females were
represented in more or less equal proportions: males accounted for 39.7 percent (n=31)
and female for 43.6 percent (n=34) of adults (Table 7.6). This supports previously
made observations that Tiwanaku colonial settlements consisted of fully self-reproducing
populations (Blom 1999). Because the sample sizes for each cemetery were too small to

<table>
<thead>
<tr>
<th>Collection</th>
<th>Male</th>
<th>Female</th>
<th>Unknown/Ambiguous</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010–2011</td>
<td>18 (38.3%)</td>
<td>24 (51.1%)</td>
<td>5 (10.6%)</td>
<td>47 (100%)</td>
</tr>
<tr>
<td>1984/7</td>
<td>13 (41.9%)</td>
<td>10 (32.3%)</td>
<td>8 (25.8%)</td>
<td>31 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>31 (39.7%)</td>
<td>34 (43.6%)</td>
<td>13 (16.7%)</td>
<td>78 (100%)</td>
</tr>
</tbody>
</table>

155 The assignment of biological sex based on skeletal markers of the pelvis and cranium
was used as a correlate for identifying gender categories.
156 An additional 15.5% (n=12) of individuals was of ambiguous or unidentifiable sex.
investigate group-internal gender dynamics, the following section analyzes site-wide patterns of mortuary practice related to biological sex to investigate Tiwanaku engendered practices and ideologies.

A chi-square test used to determine whether the slightly different frequencies of males and females between the 2010 and 1984 samples showed that they were not significant (p=0.2915 at p < 0.05) (Table 5.12). The slightly higher frequency of female individuals in the sample is caused by an unbalanced distribution among the young adult population, for whom female (57.9%) individuals outnumbered males (31.6% males) (Table 7.7). This could be caused by the susceptibility of young adult females to premature death in childbirth. Among the more mature adults at Omo M10, the sex distribution was almost equal, with males accounting for 52 percent of the population and females 43 percent.

Table 7.7 Sex distribution by adult age groups at Omo M10 (not including Cemeteries N and X).

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
<th>Ambiguous/Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young Adult (&lt;25 years)</td>
<td>6 (31.6%)</td>
<td>11 (57.9%)</td>
<td>2 (10.5%)</td>
<td>19 (100%)</td>
</tr>
<tr>
<td>Mid Adult (25-39 years)</td>
<td>12 (52.2%)</td>
<td>10 (43.5%)</td>
<td>1 (4.4%)</td>
<td>23 (100%)</td>
</tr>
<tr>
<td>Old Adult (40+ years)</td>
<td>12 (52.2%)</td>
<td>10 (43.5%)</td>
<td>1 (4.4%)</td>
<td>23 (100%)</td>
</tr>
<tr>
<td>Adult non-specific</td>
<td>1 (7.7%)</td>
<td>3 (23.1%)</td>
<td>9 (69.2%)</td>
<td>13 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>31 (39.7%)</td>
<td>34 (43.6%)</td>
<td>13 (16.7%)</td>
<td>78 (100%)</td>
</tr>
</tbody>
</table>

157 Three young female adults also showed reactive bone growth on the auricular surface of the ilium, a possible result of traumatic injury, although the cause of such could not be determined at this time. Osteophytes on the lower vertebral column (Thoracic 10–Lumbar 5) affected male (67%) and female (56%) adults similarly. These data correspond with Becker’s study which argues that higher rates of osteoarthritis in the Moquegua colonies generally and Omo M10 specifically point to the performance of repetitive tasks likely related to agricultural and food processing activities (2013). Specifically, she links the significant frequencies of osteoarthritis in the sacroiliac joint to load-bearing activities, e.g., the carrying on the back of young children and goods wrapped in awayus, or carrying cloths (2013:175).
7.2.2 Mortuary Variability in Body Preparation and Position Related to Sex

Comparison of male and female individuals in terms of body preparation and in-tomb position revealed no significant gendered patterns among these highly normative aspects of the Tiwanaku funerary program. Women and men were mostly positioned seated-flexed prior to the wrapping of the fardo. Likewise, each fardo was given its own burial pit within the communal cemetery. The fardo was positioned toward the east, with deviations to the northeast or southeast.

Some of the non-normative burial patterns discussed in the previous chapter could have been influenced by the deceased’s sex. For example, the two young women buried with the remains of neonates—one of which was found in the non-community cemetery near the temple (Q-2) while the other (R-24) was interred within a community cemetery but covered by multiple layers of rocks—had likely been subjected to these deviant funerary treatments because of deaths associated with pregnancy and motherhood related to their female sex. The two young female individuals found buried in divergent body positions and tomb structures in Cemetery I (M10I-14, M10I-22) may have recently married into the M10I community (see Chapter 9). Their role as outsiders in the group would have related to their biological sex, as well.

7.2.3 Tomb Structure Variability and Sex

Pit tombs were the most common tomb structure type among all adult burials (Table 7.8). Females were interred predominantly in simple pits (65.7%), in contrast to males of whom only 43.3 percent were buried in pits. More elaborate tomb architecture
was used in association with male interments (30%), compared to only 11.5 percent of women found in such structures. Surface stone collars were placed on female and male tombs alike, but double collars were limited to tombs of males (n=4) and children (n=4).

If we consider tomb architecture and the use of carefully built stone- and slab-stone cists as indicative of social status, males were afforded more resources in the context of burial than females. The correlation of tomb structure and sex is not absolute. The use of stone-lined interment spaces at Omo M10 also correlated with age (see section 6.2) and with kin group affiliation (see Chapter 8). There is no correlation between the deceased’s sex and the use of *batanes* in the construction of tombs or tomb covers.

**Table 7.8** Tomb structure variability by biological sex (not including Cemeteries N and X).

<table>
<thead>
<tr>
<th>Sex</th>
<th>Pit</th>
<th>Partial Cist</th>
<th>Inset Cist</th>
<th>Stone Cist</th>
<th>Slab Cist</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>13 (43.3%)</td>
<td>2 (6.7%)</td>
<td>1 (3.3%)</td>
<td>2 (6.7%)</td>
<td>7 (23.3%)</td>
<td>5 (16.7%)</td>
<td>30 (100%)</td>
</tr>
<tr>
<td>Female</td>
<td>23 (65.7%)</td>
<td>2 (5.7%)</td>
<td>0</td>
<td>1 (2.9%)</td>
<td>3 (8.6%)</td>
<td>6 (17.2%)</td>
<td>35 (100%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>2 (20%)</td>
<td>0</td>
<td>0</td>
<td>2 (20%)</td>
<td>3 (30%)</td>
<td>3 (30%)</td>
<td>10 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>38 (50.7%)</td>
<td>4 (5.3%)</td>
<td>1 (1.3%)</td>
<td>5 (6.7%)</td>
<td>13 (17.3%)</td>
<td>14 (18.7%)</td>
<td>75 (100%)</td>
</tr>
</tbody>
</table>

7.2.4 Gendered Dress in Tiwanaku Burials

The systematic comparison of funerary dress is made difficult by the small and disparate sample sizes of men (n=14) and women (n=22) found with textiles (Table 7.9). Based on ethnographic and ethnohistorical lines of evidence, as well as body position, I assume here that all individuals were originally interred wrapped in one or several
textiles. The quantitative and qualitative comparison of funerary textiles across male and female burials is thus limited to those burials found with textile remains.

To establish sex-based differences in the use of funerary textiles, it is important to consider the construction of the funerary bundle. The unwrapping of two children’s fardos excavated at Omo M10 suggested that the lower layer of funerary clothing, i.e., the garment worn or placed directly unto the body of the deceased, was a personal clothing item worn by the deceased in life. External fardo layers, however, were not necessarily personal dress items and appear to have been chosen based on availability or their symbolic meaning to the deceased’s kin. In conducting my analysis of funerary textiles, I have taken into consideration the qualitative, quantitative and formal characteristics of the burial garments, as well as their position in the bundle.

Overall, male and female interments share many features in their use of textiles and observed differences were subtle. For example, men and women received similar average numbers of woven or knotted textiles per tomb (2 and 2.3 textile objects, respectively) (Table 7.9). Women’s a higher numbers of textiles per tomb reflect a greater range; for example, Burial T-2 contained six garments and a chuspa, or coca bag. In contrast, the number of textiles found with men ranged between 0 and 3. In terms of the quality of the weave, textiles found with females had an average thread density of 151 threads/cm², higher than textiles found with males (104 threads/cm²). Seventy percent of textiles with females can be considered finely woven, with thread densities above 120 threads/cm², whereas only 39 percent of males had such textiles placed in their tombs.

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158 These data only include burials in which textile objects were found (n=14 for males, n=2 for females) and also excludes nine individuals of unassigned sex whose maximum number of textile objects was 5.
Table 7.9 Funerary textile attributes by sex of interred (normalized for burials found with textiles, not including Cemeteries N and X).

<table>
<thead>
<tr>
<th>Individuals with textiles</th>
<th>Average Number of Textiles per Tomb</th>
<th>Max. Number of Items</th>
<th>Fine/Coarse Weave</th>
<th>Plain Warp-faced</th>
<th>Warp-striped</th>
<th>Tapestry</th>
<th>Average thread density (threads/cm²)</th>
<th>Embroidery</th>
<th>Garment types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males (14)</td>
<td>2</td>
<td>3</td>
<td>39/57%</td>
<td>54%</td>
<td>46%</td>
<td>0%</td>
<td>104 threads/cm²</td>
<td>32%</td>
<td>tunic (9) tunic/lliclla (1) manta (1) hat (1) loincloth (1)</td>
</tr>
<tr>
<td>Females (22)</td>
<td>2.3</td>
<td>6</td>
<td>70/30%</td>
<td>76%</td>
<td>20%</td>
<td>4%</td>
<td>151 threads/cm²</td>
<td>28%</td>
<td>tunic (11) lliclla (3) tunic/lliclla (1) manta (3)</td>
</tr>
<tr>
<td>Unknown (9)</td>
<td>1.6</td>
<td>5</td>
<td>64/36%</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
<td>136 threads/cm²</td>
<td>28%</td>
<td>tunic/lliclla (5)</td>
</tr>
<tr>
<td>Total (45)</td>
<td>2</td>
<td>-</td>
<td>60/40%</td>
<td>66%</td>
<td>32%</td>
<td>2%</td>
<td>130 threads/cm²</td>
<td>28%</td>
<td></td>
</tr>
</tbody>
</table>
Textile design and form appear to play a more important role in the gendering of funerary Tiwanaku textiles, as we may expect based on the iconographic analyses of male and female dress. Males were interred with significantly higher numbers of warp-striped bichrome or polychrome garments than females (46% and 20%, respectively). Especially polychrome striped tunics appear to have been predominantly associated with males (n=8), compared to only one woman found with a similar garment. Contrary to Plunger’s findings at Rio Muerto M43 that embroidery was associated primarily with textiles in female burials (2009:51), cross-knit loop stitching on selvedges of tunics, illacillas, mantas and chuspas did not show any correlation with the biological sex of the deceased. Embroidery, on warp and selvages and as neck plaques, was equally as common on female- as on male-associated textiles at Omo M10.

Although the decorative design of tunics appears to have been different for men and women, tunics in general made up most of the identifiable garments (n=25) and probably constituted the basic form of dress worn by all members of Tiwanaku society. Other garment forms may have been gendered in their use. Hats and loincloths, although singular finds, occurred only with men\textsuperscript{159}, while women’s funerary dress often included illacillas (plain or striped warp-face), thick plain or striped mantas, bags (one of them an embroidered chuspa), and pañuelos.

At this point, it is important to remember that not all textiles used in the construction of the funerary bundle would have been personal garments of the deceased. Based on the documented position of the textile in the tomb, and its overall condition at the moment of excavation, it was possible to determine the approximate position of the

\textsuperscript{159} Hat fragments were also found with three children at Omo M10
garment in the bundle. For five of the male individuals it was possible to determine the innermost garment in the bundle, but only three had diagnostic elements: a polychrome tunic (M10=8391.01 in Burial V-20), a plain-colored tunic (M10M-1=10.02 in Burial M-1), and a polychrome loincloth (M10=7357.03 in Burial Q-7). Four of the ten textiles identified as “interior” to the funerary bundle of female individuals were monochrome tunics. Thus, it may indeed be possible to associated males with polychrome striped tunics, loincloths and four-pointed hats, and women with the use of plain tunics embellished with other garments like llicllas or mantas. Overall, mourners used fewer garments in the construction of male funerary bundles, but the garments appear to have been more visually striking, such as polychrome tunics and hats. Fardos of female individuals include greater numbers of textiles and more diverse forms that were less ostentatious in their color and design.

Iconographic depictions of men and women on ceramic vessels often show the former with open, flowing hair or gathered in a net, while the latter typically had their hair parted in the middle and gathered on the sides in two braids. Examples of hairstyles and headdresses are rarely preserved in burials at Omo M10. Three tombs contained loose braids of hair, two of which were tied with colored string at the ends. The male buried in tomb Q-7 had an elaborate hairstyle of 14 tight braids. Because this individual constituted a possible sacrifice victim (see Chapter 6.4), the hairstyle cannot be assumed to represent a normative gendered pattern.

The braids in Burials M10S-9 and M10T-20 were cut off close to the head and no hair was found on the cranium. This made it difficult to confirm that the braids belonged to the interred individual. The braids may have belonged to the deceased or they constituted additional offerings given by mourning female members of the community. The latter scenario is supported by the findings of braids and strands of hair as potential offerings in association with the construction of stone tomb covers in cemetery M10H.
The use of jewelry and sandals was not based on gender. Greenstone and shell beads were found with 12.5% of interred adults and distributed among men and women in equal proportions (n=2, respectively). The adult male in Burial R-23 had been buried wearing a bracelet of greenstone disk beads and star-shaped silver sheets. In the deviant burial S-9, over 500 greenstone and shell disk beads of a broken necklace were scattered under the body of the young woman. The only metal ring (silver-copper alloy) found in the Tiwanaku cemeteries at Omo M10 was found in the tomb of an adolescent female (Burial I-3). The sample size for leather sandals (n=2) was too small to assign gendered patterns but it is likely that both women and men used them.

Reconstructing the gendered use of textiles in Tiwanaku society from mortuary assemblages is complicated by the intersection of the cultural meanings of textiles as dress, the ritual symbolism of burial and death, and the functional and possibly expedient nature of cloth for wrapping the remains of the dead. At Omo M10, correlations between garment type, design and quantity and the biological sex of the interred confirm previous arguments about the engendering of Tiwanaku dress. It appears that at least some garments used in the making of funerary fardos had been worn by the deceased in life. Though few in number, these cases seem to confirm patterns observed elsewhere in Tiwanaku burials and on iconography, in which men are associated with polychrome tunics and hats and women with monochrome and bichrome tunics complemented by shawls and mantles. Elaborations and adornments like embroidery and jewelry, however, were used by men and women alike and may have served as individual expressions of wealth or craft skills.
7.2.4 Reconstructing Male and Female Identity through Gendered Uses of Grave Offerings

Grave offerings may offer another perspective on how the use of certain objects and materials may have been subject to perceptions or ideologies of gender in Tiwanaku society. This section explores correlations between normative mortuary offerings (food-related objects, adornments, and tools) and sexed bodies, and their possible meaning and significance in the context of gender construction and relations.

**Table 7.10** Distribution of ceramic vessels by sex of the interred (not including Cemeteries N and X).

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number of Individuals</th>
<th>Total Number of Ceramic Vessels</th>
<th>Average Number of Ceramic Vessels per Tomb</th>
<th>Tombs with Two or More Ceramic Vessels</th>
<th>Maximum Number of Vessels per Tomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>31</td>
<td>14</td>
<td>0.5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>13</td>
<td>0.4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Unknown</td>
<td>13</td>
<td>8</td>
<td>0.5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>35</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ceramic vessels accounted for the largest percentage of offerings found with adults and were found with 25 adults, including nine females, eleven males, and five unsexed adults. The distribution of ceramic vessels across male and female burials was relatively balanced. Females received on average .4 ceramic vessels compared to an average .5 vessels found with males (Table 7.10). More females had multiple vessels in their tombs, but the number of ceramics found with women did not exceed two. Only one male received a total of four ceramic vessels (Burial M-1). This confirms the normative use of serving vessels in Tiwanaku burials regardless of the age and sex of the deceased.
Ceramic ware types and decorative motifs and elements showed no correlation with the sex of the interred (Table 7.11).\footnote{161}

Vessel forms correlated significantly with biological sex and may indicate gendered behavior related to food preparation and consumption. Males were buried with a higher frequency of ceramic \textit{keros} than females; 43 percent of their ceramic offerings were \textit{keros} while only 8 percent of ceramic vessels found with women were \textit{keros} (Table 7.11). This means that 60 percent of \textit{keros} were found with adults were placed with males, but only 10 percent were placed with females (30 percent were found in burials of unsexed adults). If portrait-head \textit{keros} are included in this category, they would raise the frequency of \textit{keros} found with females (to 22%), but the majority of \textit{keros} (50%) would still be found with males. This supports previous assertions that males receive \textit{keros} as grave offerings more frequently. It also shows that the association of males and \textit{keros} was not absolute and women received not only \textit{keros}, but also portrait head vessels, the more elaborate type of drinking cups.

\footnote{161} Females and males both receive 85 percent of Tiwanaku red-slipped serving wares (Table 6.12). The only Tiwanaku complete blackware vessel was found with a male (M10P-23).
Table 7.11 Ceramic vessel attributes by sex of the interred (not including cemeteries N and X).

<table>
<thead>
<tr>
<th>Ware Type</th>
<th>Form Type</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Geometric</td>
</tr>
<tr>
<td>Tiwanaku Plain</td>
<td>Kero</td>
<td>Total</td>
</tr>
<tr>
<td>Male</td>
<td>1/7%</td>
<td>12/85%</td>
</tr>
<tr>
<td>Female</td>
<td>2/15%</td>
<td>11/85%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2/25%</td>
<td>5/62.5%</td>
</tr>
<tr>
<td>Total</td>
<td>5/14%</td>
<td>28/80%</td>
</tr>
</tbody>
</table>
In addition to *keros*, *tazones* and *vasijas* were the most frequent vessel forms found with adults and were present in almost equal proportions with males and females. The sample size of *ollas* (n=2) found with female adults was small, but at least the association of females and *ollas* had been noted previously. At Omo M10, *ollas* showed traces of burning and soot on the exterior surface, evidence for their use prior to interment. As discussed earlier, miniature vessels were usually associated with children’s burials, so that the object found in the burial of an adult male (T-3) appear to be an exception.\(^{162}\)

The prevalent association of males with *keros* and of women with small *ollas* confirms observations made at other Tiwanaku cemeteries in Moquegua and the Tiwanaku highlands (Bermann 1994; Korpisaari 2006). In addition, the Omo M10 grave goods also include a large corpus of food-related objects made from plant materials. Women received significantly greater quantities of non-ceramic serving vessels in their burials (n=30) than men (n=12), particularly bowls and plates (Table 7.12). Taking into account non-ceramic vessels, females received a significantly higher number of food-related offerings (48%) in their burials than males (29%). Even though non-ceramic vessels are more susceptible to differing preservation conditions, I would speculate that, given the comparable population size of males and females at Omo M10, women were more likely to receive serving objects as grave offerings than men. However, these

\(^{162}\) The 1984 excavation notes specified that the tomb had been disturbed, but that the vessel was found near the feet of the interred in the undisturbed portion of the tomb.
objects were principally associated with storing and serving food, not with the ceremonial feasting implied by *keros*, *tazones*, and *vasijas*.

**Table 7.12** Distribution of ceramic and non-ceramic food-related grave offerings by sex of the interred (not including Cemeteries N and X).

<table>
<thead>
<tr>
<th>Sex</th>
<th>Kero/ Cups</th>
<th>Tazon/ Bowl</th>
<th>Vasiya</th>
<th>Plates</th>
<th>Spoon/ Ladle</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male - ceramic</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>Male - nonceramic</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td><strong>Male - total</strong></td>
<td><strong>8</strong></td>
<td><strong>5</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>7</strong></td>
<td><strong>25 (29%)</strong></td>
</tr>
<tr>
<td>Female - ceramic</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Female - nonceramic</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>12</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td><strong>Female - total</strong></td>
<td><strong>5</strong></td>
<td><strong>11</strong></td>
<td><strong>4</strong></td>
<td><strong>12</strong></td>
<td><strong>9</strong></td>
<td><strong>41 (48%)</strong></td>
</tr>
<tr>
<td>Unknown - ceramic</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>Unknown - nonceramic</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td><strong>Unknown total</strong></td>
<td><strong>3</strong></td>
<td><strong>7</strong></td>
<td>-</td>
<td><strong>2</strong></td>
<td><strong>7</strong></td>
<td><strong>19 (22%)</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>23</strong></td>
<td><strong>6</strong></td>
<td><strong>17</strong></td>
<td><strong>23</strong></td>
<td><strong>85</strong></td>
</tr>
</tbody>
</table>

Non-food related offerings included with adult burials textile tools (combs, spindles, needles, etc.\(^{163}\)) and ritual paraphernalia. These objects (n=22) formed sets of grave offering distributed across nine burials in different cemeteries. Of the nine burials, six contained females of different ages, two were adult males, and one an unsexed adult (Table 7.12). Overall, females were more likely to receive textile tools and ritual paraphernalia (Table 7.13), especially considering that eight of the nine textile tools

\(^{163}\) A set of four wooden objects of unknown purpose found in Burial R-23 (adult male) were tentatively assigned a weaving-related function; they included two objects that could have functioned as “tensors” for tapestry weaving, a small pointed animal (possibly fish) tooth, and a thin trapezoidal wooden board.
found with males originated from a single context, Burial R-23. The association of
Tiwanaku women with textile production at Omo M10 coincides with the findings from
Chen Chen, and suggests that women may have been the dominant textile producers in
Tiwanaku communities, and that textile and ritual tools presented personal possessions so
intimately connected with the character of the deceased that they were included as
offerings. In addition, as not all women (and men) received such objects, it may also have
distinguished them in life and death as possessing publicly recognized skills and
community status.

Table 7.13 Distribution of textile tools and ritual paraphernalia by sex of the interred (not
including Cemeteries N and X).

<table>
<thead>
<tr>
<th>Sex</th>
<th>Textile Tools</th>
<th>Ritual</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Combs</td>
<td>Spindle</td>
<td>Other Textile Tools</td>
</tr>
<tr>
<td>M</td>
<td>0</td>
<td>2&lt;sup&gt;164&lt;/sup&gt;</td>
<td>7&lt;sup&gt;165&lt;/sup&gt;</td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

The adult male burial in tomb R-23 poses an intriguing exception to the portrayal
of Tiwanaku women as craft persons. Because another female buried in Cemetery R was
also found with a spindle (R-8), it appears unlikely that textile production was associated
with males rather than females among the M10R community. Andean ethnographic
descriptions have emphasized the fluidity of gender performances across gender groups,
pointing out that—although certain tasks (like weaving or planting) will be considered
male or female in essence—they may be performed by members of either sex (e.g., Allen

<sup>164</sup> Textile tools originate from a single assemblage found in Burial M10R-23, belonging
to an adult male.

<sup>165</sup> Cactus pin found with adult male in Burial M10M-1 did not have perforation and
could therefore also be classified as pin rather than sewing needle.
2002:64; Dean 2001). The male individual interred in Burial R-23 may thus have performed, and perhaps even excelled at, weaving, a task considered commonly considered female, while his male gender identity continued to be expressed in the performance of other public activities and tasks.

7.2.5 Being Woman, Being Man: Embodying and Performing Gender in Tiwanaku Society

The mortuary evidence from Omo M10 suggests that Tiwanaku society recognized two gender identities that were generally based on biological sex. Tiwanaku gender identities were expressed among adults through physical appearance (i.e., dress, hairstyle) and distinct activities and social roles. Differences between the sexes were a matter of degree, especially in terms of grave wealth; that is, men and women generally received similar types of grave goods, but in differing quantities. Nevertheless, certain objects or treatments reserved for one gender. Although it is not possible to determine at this point when gender began to play a role in the life of Tiwanaku persons, the mortuary data indicate that gender constituted an important aspect of personal identity and social relationships from early adulthood until death.

As mentioned in Chapter 1, ethnographic and historical descriptions of Andean gender categories and roles strongly emphasize dualism and complementarity as the principal dynamics. The opposition of genders entails dualistic as well as hierarchical structuring of relationships associating men with dominance, public spaces and roles, and farming and trading, whereas women are broadly conceived of as supporting their husbands’ public roles, with their main responsibility being the upkeep of the house, and
providing food and dress to family. Despite the apparent power inequalities, gender relations are infused with the understanding of mutual necessity expressed in the term *yanantin*, meaning completeness based on the coming together of two opposing halves (e.g., Platt 1986). Is this understanding of gender identity in the Andes reflected in the mortuary evidence from Omo M10?

Tiwanaku men and women were considered full members of society as reflected in similar burial locations, body treatment, and even grave goods. Canonical mortuary offerings, meaning objects symbolic of the deceased’s reciprocal obligations toward the living, were generally included with men and women. However, men were twice as likely as women to receive *keros*, signs of feasting, *chicha* consumption, and public rituals. In contrast, women’s grave goods more often included objects numbers of food preparation (*ollas*), storage and serving of food and drink (e.g., basket plates, *vasijas*). It seems probable that these preferences in the forms of serving wares correlated with gendered subsistence and feasting activities, where women were principally involved in the food production and distribution, while men’s roles focused on consumption and display.

Although cloth-wrapped *fardos* were the customary form for interring the deceased of either gender in Tiwanaku society, the materials used for making *fardos* indicate the use of gendered dress among the dead, as well as the living. This is supported if we accept the use of personal garments for some of the *fardo* preparation, and an association of garment types with male or female bodies. Although tunics were the standard Tiwanaku garments for men and women, men’s tunic were more often woven in brilliantly colored stripes. Women’s plainer, naturally colored tunics, on the contrary, were supplemented with decorated shawls and mantles, and their higher number of
funerary garments overall may suggest that women had a greater access to cloth and textiles than men. This, in turn, would also be substantiated by women’s almost exclusive association with weaving tools that perhaps signaled the deceased’s craft skills. Moreover, two women received objects of possible ritual function (the excavation’s only bone tube and pigment box) that suggest their potential role as shamans or ritual specialists, a source of social recognition and power, much like craft skills and public performances of drinking and feasting.

Overall, the mortuary data from Omo M10 supports previously made assertions about the gendering of deceased bodies, regarding the association of males with keros, earspools, and colorful garments and women with cooking and weaving utensils, and dress of simpler design. However, it also calls attention to the fluidity of gender roles (e.g., the adult male buried with textile tools) and the ethos of complementary rather than absolute power hierarchy that seems to underlie the material expressions of Tiwanaku gender differences. Representations of women and men in death as providers and consumers, respectively, of food and dress had their basis in gendered life experiences.

These conclusions strongly resonate with descriptions of indigenous Andean gender roles today, in which case we must then also consider how gender and age were related to social status in the community. As the previous sections have shown, members of Tiwanaku colonial society were not treated equal in death, and tomb structure, funerary dress, and grave offerings could vary substantially due to a variety of factors. As I have shown, age and gender played some role in determining differential funerary treatment; yet, as a third important identity category in Tiwanaku society, social status both crosscut and reinforced social divisions based on age and gender.
7.3 Individual Social Status at Omo M10

Above, I highlighted a number of individuals whose exceptional number or nature of grave offerings provided evidence for reconstructing age and gender identities in Tiwanaku. Nevertheless, many, if not most, of the individuals of any given age or sex had received few or no offerings. This allows me to speculate that objects traditionally associated with men or women, children or adults, were not necessary material markers of such identities. In this section, I examine more closely how burial space and grave offerings, the most variable of Tiwanaku mortuary attributes, were used to signify status differentiation in Tiwanaku. Based on the Omo sample, I consider what the basis of social inequality in Tiwanaku may have been, and how it related to age and gender.

The preceding analyses of age and gender as social identity categories have demonstrated that biological age and sex shaped the perceptions and experiences of individual members of Tiwanaku society. They also showed that burials provided appropriate contexts for the expression of individual differences, for example through the presence or absence of canonical or personalized grave offerings. In large parts, the differences that existed across age and gender groups were materialized through the distinct levels of investment that mourners made in the form of grave goods, tomb architecture, and funerary dress. Assuming based on available evidence from mortuary and non-mortuary Tiwanaku contexts that higher social rank or status was, at least, partly expressed through wealth difference, I propose that an individual’s potential of acquiring high status increased with age. Although children were not precluded from higher social
status, they were less likely to attain important social positions at their age. The correlation between status and gender in Tiwanaku society, on the contrary, was based less on absolute measures between men and women; instead, being male or female provided different pathways to power that appear to have been paired in a complementary rather than strictly hierarchical manner. What do the archaeological expressions of status observable among the burials at Omo M10 in correlation with age and gender tell us about the basis of individual social status in Tiwanaku society? Overall, the degree to which wealth and prestige objects correlated with certain age or gender groups would also reveal how closely such identities were linked to social inequality.

7.3.1 Identifying Status and Inequality in Tiwanaku Burials

In the case of Tiwanaku and the Andes more generally, the more commonly used indicators for assessing status, here referring the power or influence that an individual possessed over people or resources, in burials are the number and quality of wealth objects used as offerings, funerary dress and adornment, scale of tomb architecture, and burial location (e.g., Goldstein 2005:258–263; Korpisaari 2006:156). Many of these material indicators are also used to measure inequality in Tiwanaku non-mortuary contexts, as reflections of different access to wealth objects or the labor investment (see Smith 1987). By these standards, the Omo M10 cemeteries show a relative paucity of status differentiation as well as a low proportion of what may be considered high-status community members, in comparison with the generalized Tiwanaku mortuary sample and in contrast with other pre-Hispanic Andean state societies like Wari, for example (Isbell 2004). Most individuals buried at Omo M10 were found without grave offerings (i.e., in
addition to the funerary bundle) \(n=134, 54.7\%\) (Table 7.14).\(^{166}\) Twenty-one percent of burials contained one offering, but grave good assemblages of two or more objects in the same tomb occurred less frequently. Only 6.2 percent of individuals at Omo M10 were found with more than four objects. Of the 247 objects included in the Omo M10 tombs as offerings, 25 percent were included in the eight “richest” burials (3 percent of total number of tombs), including the two wealthiest children’s burials and the six wealthiest adult burials. This suggests that elaborate grave assemblages were restricted to a very limited number of community members and were not a common feature of provincial Tiwanaku funerals.

**Table 7.14** Distribution of grave offerings per tomb (not including Cemeteries N and X).

<table>
<thead>
<tr>
<th>Number of Offerings per Tomb</th>
<th>Number of Tombs</th>
<th>Frequency of Tombs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>133</td>
<td>54.73%</td>
</tr>
<tr>
<td>1</td>
<td>52</td>
<td>21.40%</td>
</tr>
<tr>
<td>2</td>
<td>28</td>
<td>11.52%</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>6.17%</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>1.23%</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>1.65%</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>0.82%</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>1.23%</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>0.41%</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>0.82%</td>
</tr>
<tr>
<td>Total</td>
<td>243(^{167})</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

The number also correlated with the type of grave offerings at Omo M10. Serving wares and utensils, which were common across age and gender groups, and which made up the vast majority of burial offerings at Omo M10, were found as alone, as pairs, or in groups of up to 4 items. Wealthier offerings assemblages of five or more objects would

\(^{166}\) This frequency includes intact, looted, and poorly preserved burials, so that the number of burials with offerings may have been higher originally.

\(^{167}\) Double-burials were counted as one tomb.
often include such serving wares in addition to several personal objects, or consist only of personal affects. This supports the distinction made in the previous chapter of separating serving objects as generalized and widely accessible offerings, and highlights the importance of non-serving objects for distinguishing a small number of community members in death.

In addition to offering quantity, tomb architecture presented another measure for quantifying investment in tomb construction. In contrast to simple pits, cist tombs required more time and labor for excavation and the subsequent installation of (locally available) stones and rocks to line the walls and sometimes the floor of the pit. Simple pits constituted the most common type of burial space and were used in 65 percent of excavated tombs at Omo M10. Partial cists and inset cists were least common (10.8%), even compared to complete cists lined with cobbles, angular rocks or flat stone slabs (24.3%). This suggests that cist tombs, while more labor intensive, were still widely used and generally more accessible than large grave offerings.

Although cist tombs were more common than large offering assemblages, they showed some correlation with the number of objects the deceased received (Table 7.15). Among burials with no or few offerings, pits were the more common tomb type (65-53% of tombs with 0-3 objects, respectively). As the number of offerings per tomb increased, tomb structures became more elaborate, even though pits continued to be used even for individuals of apparent higher social status.\(^\text{168}\)

\(^{168}\) To test whether there was a direct relationship between the number of grave offerings and the type of tomb structure, I used Pearson’s Correlation Coefficient. Grave offering numbers were used in their absolute quantity. Tomb structures were scored according to labor investment (pits = “0”, partial cists and inset cists = “1”, complete cists = “2”). This
Most of the objects that have traditionally been considered status or “wealth” indicators, based on their economic value in Tiwanaku contexts, were also consistently found in the largest offering assemblages at Omo M10. These included polychrome ceramic vessels (e.g., portrait-head vessels), dress and adornments (jewelry and textile garments). I found that tools made up a significant proportion of the largest offering sets and were consistently found in association with wealth objects. For example, the largest offerings set found with a female (T-12) consisted of a combination of serving vessels (vasija and portrait-head vessel) and weaving tools. The portrait-head vessels found with individuals I-24 and I-27 formed parts of larger assemblages supplemented with spindles, combs, and food-related objects, whereas the silver earspool found in Burial M-1 was found with multiple ceramic vessels. Similarly, elaborate children’s burial offerings, such

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test was applied to the 238 burials (2010 and 1984) for which both tomb structure and total number of grave goods had been recorded. The resulting correlation coefficient r=0.1931 suggests there is a only very small direct positive correlation between number of grave offerings and investment in tomb structure.

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Table 7.15 Tomb structure in relation to number of grave offerings (not including Cemeteries N and X, and burials without tomb structure description)

<table>
<thead>
<tr>
<th>Number of Offerings per Tomb</th>
<th>Simple Pit</th>
<th>Partial Cist</th>
<th>Inset Cist</th>
<th>Complete Cist</th>
<th>Total Number of Tombs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>87 (65.2%)</td>
<td>12 (9.1%)</td>
<td>6 (4.6%)</td>
<td>28 (21.2%)</td>
<td>132 (100.00%)</td>
</tr>
<tr>
<td>1</td>
<td>28 (57.1%)</td>
<td>5 (10.2%)</td>
<td>5 (10.2%)</td>
<td>11 (22.5%)</td>
<td>52 (100%)</td>
</tr>
<tr>
<td>2</td>
<td>16 (57.1%)</td>
<td>1 (3.6%)</td>
<td>1 (3.6%)</td>
<td>10 (35.7%)</td>
<td>28 (100%)</td>
</tr>
<tr>
<td>3</td>
<td>8 (53.3%)</td>
<td>1 (6.7%)</td>
<td>0</td>
<td>6 (40%)</td>
<td>15 (100%)</td>
</tr>
<tr>
<td>4</td>
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<tr>
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</tr>
<tr>
<td>7</td>
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<td>3 (100%)</td>
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<tr>
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<td>0</td>
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<td>0</td>
<td>0</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>143</strong></td>
<td><strong>19</strong></td>
<td><strong>13</strong></td>
<td><strong>63</strong></td>
<td><strong>243</strong></td>
</tr>
</tbody>
</table>
as Tomb U-1 and S-16, included combinations of fine serving wares, fine garments, and, occasionally, ritual objects (pan flutes).

Metal objects, among the most pronounced wealth markers of high-status burials at Tiwanaku highland sites, were rare at Omo M10. Because metals were subject to intense looting activity during the pre- and post-Colonial era, the original number of metal grave offerings at Omo M10 may have been higher. Nevertheless, metal artifacts were exceedingly rare at Omo M10 and only four objects were in the entire assemblage. These included a silver banded ring and earspoon, circular silver sheeted ornament and parts of a bracelet, which were found with male adults, an adolescent and a young child (Figure 7.2).

Tiwanaku iconography suggests that tapestry tunics, mantles, and four-pointed hats constituted elite regalia. Based on labor and resource investment, it can also be argued that finely woven polychrome warp-faced cloth were wealth objects that would also have been a prized possession and not accessible to every members of Tiwanaku society. Tapestry textiles were indeed rare at Omo M10 and made up a very small percentage (2%, n=6) of the total textile assemblage. Children with multiple grave offerings buried in stone-lined spaced (Burials P-20, S-16, R-20, U-1) received the majority of tapestry objects (n=5), and only one was found with an adult female, who lacked other offerings (Burial U-2). Two four-pointed hats were recovered in very fragmented condition from the tombs of young children (U-1 and P-15), while the third hat was complete and form part of the fardo of the adult male in Burial Q-7.
Figure 7.2 Bracelet made from greenstone disc beads (left) and silver laminate sheets in the form of 5-pointed stars (right) from Burial R-23.

Unfortunately, many of the tombs with the most elaborate offerings had little or no preserved textiles. The textile evidence from the adult burials M-1, S-12, and T-2 did, however, contain numerous finely woven, polychrome and monochrome warp-striped garments (tunics, llicllas) per burial, and single a chuspa. Yet, none of the common textile insignia of Tiwanaku high status – four-pointed hats or tapestry textiles – were found with these individuals, although they were present in other, less wealthy burials at Omo M10.

Even though food-related objects constituted the most common type of burial offering at Omo M10, individuals of higher social status (as defined by the number of offerings) often also had access to more elaborately shaped or decorated ceramic and non-ceramic vessels. For example, portrait-head vessels made from ceramics or wood seems to have been an unequivocal marker of status at Omo M10; they were consistently found in association with high numbers of grave objects. Basket vessels follow a similar pattern in which the baskets found with wealthier individuals were more likely to include decorative designs woven into the vessel (e.g., Burials S-16, P-20) (Figure 7.3).
Surprisingly, not all elite individuals were found with ceramic vessels (Burials I-24, S-16, and P-20), or even any other type of food-related offerings (e.g., Burial R-23). Especially *keros*, which played such a central role in the performance of Tiwanaku rituals, appear not to have been a requisite component of wealthier burials at Omo M10. Of the fifteen burials with four or more offerings, only ten (66.6%) contained ceramic or wooden *keros* or portrait-head vessels. This suggests that the ability to participate in and host feasting rituals was widespread in Tiwanaku society but not exclusively limited to distinguished members of society.

While metals and fine textiles can be recognized archaeologically as wealth objects by their scarcity and labor-intensive manufacturing processes, objects like tools and certain ritual paraphernalia were made of more accessible, expedient materials (wood, leather). Their value may have consisted in their function and meaning, rather
than in their raw materials, which is why I would term them prestige, rather than wealth, objects (see Chapter 3, Pygyn 1999).

Snuff paraphernalia used in the context of ritual were uncommon in burials at Omo M10, although they have been found at other Tiwanaku cemeteries in Moquegua (Goldstein 2013) and at the temple complex at Omo 10. Evidence for the consumption of psychotropic substances at Omo M10 is limited to a single decorated bone tube with the engraved motif of the “Sacrificer” that was found in Burial S-12, belonging to an adult female.

Multi-chambered wooden boxes containing pigments have been found elsewhere in Moquegua Tiwanaku burials in association with adult female individuals (Goldstein and Palacios 2008), although their function is not well understood. Based on the use of pigments in other Andean offerings contexts (e.g., Prieto et al. 2016), I would tentatively propose the association of pigment-boxes with non-quotidian, possibly ritual activities. Only one wooden pigment box, found among the numerous objects interred with an older woman in Burial T-2 was found at Omo M10, which also contained a spindle and several ceramic and basket vessels.

The recurring association of larger grave assemblages with textile production tools made from locally available materials (spindles, combs, etc.) suggests that such objects, although perhaps they held no intrinsic material value, symbolized their owner’s distinguished position in the community based on their craft skills. Because weaving tools were predominantly found with women (and one adult male in possession of a silver bracelet), the production and display of fine garments may have provided women with the means for attaining recognition and status in their communities. The presence of pan
flutes (*zampoñas*) in wealthy children’s burial assemblages (U-1, R-20, and V-2) could represent another way of acquiring status in Tiwanaku society.

7.3.2 Rising in the Ranks of Tiwanaku Society

Although neither weaving tools nor musical instruments have not been considered markers of higher individual status in Tiwanaku society until now based on their material value, I would argue that the association of these objects with other markers of status indicates that social power and authority resulted from a combination of economic and social capital and were constrained and directed by the individual’s age and gender.

Compared to the variability in grave wealth in Tiwanaku burials at the capital site and secondary centers, the differentiation of the mortuary population at Omo M10 is less pronounced, but still clearly visible. Most of the burials at Omo M10 were not fashioned ostentatiously, and those individuals who were distinguished in death, were modest compared to the high elites buried in the Putuni at Tiwanaku (Couture 2003). Nevertheless, a few members of provincial Tiwanaku society acquired such social status in life that their community found it appropriate or necessary to modify the standard funerary treatment in recognition of the deceased’s role in life. Access to resources and labor, as expressed in the possession of high-quality textiles, fully lined stone tombs, and rare wealth objects (metals, portrait-head vessels), certainly contributed to a person’s prestige and standing within the community. Since the accumulation of such resources took place over a lifetime – and would have been linked to the expansion of an individual’s social network – adult members would have been able to attain higher social standing than children by the time they died. Conversely, the presence of wealthier
children’s tombs suggests that status may also have derived, at least partly from kin affinities (see Chapter 8). Whereas the correlation of status and age was based largely on quantitative differences, gender-based status distinctions derived from substantive differences, meaning that women and men had access to power, wealth, and higher social standing but reached these positions in distinct ways.

**Conclusion**

The mortuary treatment extended to members of Tiwanaku society, regardless of their age, gender, or status, was strikingly homogeneous in terms of body preparation, tomb location, structure, and even grave offerings. Despite this high level of standardization, variability in the quality – and sometimes quantity – of certain features, such as funerary dress, burial architecture, and offerings, created opportunities for mourners to materialize personal characteristics of, or relationships with, the deceased. Mourners provided the deceased not only with the food-related objects deemed necessary for participating in post-mortem feasting, but also with the items most illustrative of the deceased’s accomplishments in life. The positive correlation of the deceased’s age-at-death and biological sex with certain mortuary variables implies that age and gender were important, socially recognized identity categories. They also were interwoven with the construction of social status in the community. Based on the evidence presented here, age, gender, and status identities were rooted in—and expressed through—social relationships (affinity) and practice.
Variability in mortuary treatment according to distinct age-at-death categories revealed that adults and children—though subject to the same normative funerary treatment—differed in mourners’ choices for grave goods, specifically tools and miniatures, their overall grave wealth, and tomb architecture. In some cases, these differences seem to be linked to status, but on average they reflected a social attitude toward certain age cohorts. Children received offering objects also found with adults, such as food-related objects and adornments, but their grave wealth was less extensive compared to adults. The greater average grave wealth of adults resulted from including personal possessions, mainly tools, with older individuals. This indicates that the status of older members of society was associated with the skill and craftsmanship as the foundation of the deceased’s social standing, and his or her ability to form and maintain relationships of reciprocity. Similarly, the association of miniature vessels and ritual instruments with wealthier children’s burials could be considered the mourners’ recognition of the child’s actual or potential role and ability.

Gender was also expressed through distinctions in funerary treatment. Choices in funerary dress and offering objects support previous observations that women and men used garments of different design (i.e., polychrome tunics for men, plain tunics and ionic for women) and objects to materialize their gender. It is striking that objects associated with a particular gender group (e.g., men and keros, women and weaving tools) were not exclusively associated with individuals of male or female sex, respectively. Instead, these associations were strong tendencies, and may be evidence for the fact that gender, like age, was based on fluid gendered practices, which—while conceptually embedded in ideologies of duality and complementarity—could be
performed by individuals of either gender. While men were buried exclusively with serving wares, referencing their consumptive role in society, women were considered both consumers and producers.

Although the material expressions of gender, age, and status observed at Omo M10 were consistent and visible enough to draw these conclusions about the existence and interconnectedness of social identities across provincial Tiwanaku society, the fact remains that many individuals buried at Omo M10 were not distinguished in their dress, tomb architecture, or grave offerings (or the materials have not preserved). I would therefore argue that Tiwanaku mortuary identity did not presuppose the acknowledgement of the deceased’s personal identity.

Another possible explanation for the differential distribution of offerings beyond age, gender, and status may have been preferences or customs based on kinship or community. This chapter established the existence and defined the nature of age, gender and status identities across Tiwanaku provincial community. The following chapter will examine how kinship or community identities, as reflected in the sectorization of the mortuary landscape, contributed to the formation of social and mortuary identities in Tiwanaku society.

This chapter, in part, contains material as it appears in “More Than The Sum of its Parts: Dress and Social Identity in a Provincial Tiwanaku Child Burial” in Journal of Anthropological Archaeology 35:51-64 (2014) by Sarah I. Baitzel and Paul S. Goldstein. The dissertation author was the primary investigator and author of this paper.
CHAPTER 8: DEATH, MOURNING, AND THE POLITICS OF IDENTITIES IN A TIWANAKU TOWN

Introduction

As the preceding chapters have shown, Tiwanaku funerary rituals formed a standardized ritual tradition that enacted and materialized widespread ideologies regarding death and the afterlife, but also afforded mourners the opportunity to acknowledge the identities of the deceased through their choices in body treatment, interment and offerings. In some ways, however, the subtle differences in provincial Tiwanaku funerary practice indicate that bodies and burials were the subject of manipulation and community politics (e.g., in regard to status and other social identities as well as normative and non-normative burial practices). Does there exist evidence at the Omo M10 cemeteries that suggests that funerary practices expressed differences at the level of sub-communities within Tiwanaku society, and beyond the ethnic boundaries of highland enclaves in Moquegua? Were death-related rituals involved in the reproduction of power and inequality at the community or state-level?

In Tiwanaku society, shared quotidian and ritual practices performed in discrete spaces created the experience of community (Goldstein 2000b, 2005; Janusek 1994, 2003, 2004; Kolata 2003b). Non-members were excluded from these spaces and practices through spatial boundaries, like compound walls or uninhabited spaces, and through the reproduction of material styles and resources that were procured through community-based modes of production and trade networks. The discrete boundaries and dispersal of
cemeteries along the periphery of the Omo M10 site suggests that similar modes of community identity production may have existed in the context of Tiwanaku funerary practice. Following the analysis of demographic age and sex profiles from 11 Tiwanaku-style cemeteries at Omo M10 (B, H, I, M, P, R, S, T, U, W), I argued in Chapter 5 that these cemeteries had been used by kin communities that were self-reproducing (with the possible exception of Cemetery P) and therefore, at least reproductively autonomous. In this chapter, I change the scale of my analysis to focus on kin groups as social units, and on their mortuary practices as a form of social expression and power.

Despite the overwhelming sense of cultural homogeneity that emerges when examining the Tiwanaku funerary process at Omo M10 from a site-wide perspective (Chapter 6), I argue that community identities, like personal identities (Chapter 7), were manifested in the form of subtle variations in mortuary style. Tiwanaku mourners used objects, practices, and symbols from quotidian life, ritual and ceremony to materialize their grief, and to forge bonds of reciprocity with the dead. In non-mortuary contexts, these same objects, activities, and symbols varied in style and quantity to express ranked and unranked differences. It is therefore probable that their use in mortuary contexts would reflect and reproduce similar social dynamics, offering an alternative approach to household or monumental excavations for investigating the importance of status in creating community identity and position in society.

This chapter investigates how the different attributes of Tiwanaku mortuary practice (body preparation and funerary dress, interment space, grave offerings and post-funerary activities) correlated with the discrete cemetery spaces at Omo M10. Mortuary variability between cemeteries at Omo M10 may reflect the importance of ranked and
unranked social distinction in several ways. On the one hand, different funerary styles could be defined by the differential access to wealth or prestige objects (as defined in Chapters 1, 3, and 6) indicating that communities within the Moquegua Tiwanaku provinces were differentiated on the basis of rank and power inequalities linked to kinship and lineage affiliation. On the other hand, if cemetery mortuary styles varied based on criteria or materials that were not wealth or prestige related, provincial Tiwanaku society may have been organized according to different principles of association or affinity, for example nested kinship structures, craft specialists, subsistence strategies. Alternately, if cemetery space does not correlate positively with the use of different mortuary materials and practice styles, it is possible that funerary practices may not have been an appropriate or relevant context for the performance of community identities in Tiwanaku, or that the stylistic differences took forms that may not have left traces on the contexts discussed here.

8.1 Inter-Community Variability in Tiwanaku Funerary Practices

Archaeologists have argued for the co-existence of multiple sub-communities at Omo M10 and in Moquegua based on the contemporaneous use of spatially discrete residential groups and cemeteries with self-reproducing populations (e.g., Blom 1998, 1999; Buikstra 1995; Goldstein 1989, 1993b, 2000b, 2005). The most recent mortuary excavations at Omo M10 have expanded the available sample and confirmed these observations (see Chapters 5 and 7). Distances between cemeteries and close clustering of tombs within cemetery boundaries create discrete sample populations that can be
compared to investigate questions of inter-community variability within provincial Tiwanaku society. Whereas Chapter 7 examined variability in the Tiwanaku funerary process against the biological and social identities of the deceased across cemetery boundaries, here I investigate how the same variables correlate with cemetery space to understand how funerary practices materialized and enacted community-based identities and represented social organization at the group level.

Based on the demographic age-at-death profiles (Chapter 5), eleven cemeteries are defined as community cemeteries, containing adults and subadults of both biological sexes: Cemeteries B, H, I, M, P, R, S, T, U, V, and W (see Figure 5.1 for map). Cemetery Q—a non-normative cemetery with an atypical demographic profile, location and interment style—will be discussed separately (Section 8.4).

8.1.1 Variability in Communal Interment Styles

The reconstruction of Tiwanaku mortuary processes in Chapter 6 distinguished between a normative or communal style of funeral and several non-normative burial styles. Four interment types (referring to number of individuals per burial and body position) differed significantly from the normative seated-flexed, single-individual interments: double-individual cist burials, secondary burials, facedown burials, and supine-flexed burials. Because these variants were relatively rare, it could not be determined with certainty whether they reflected the burial style of a particular group, or whether they were connected with the special identity or social role of the interred. Because the two mother-infant interments were found in different cemeteries, we can assume they do not represent a community-specific practice. In contrast, the two double
burials of “matching pairs” in cemetery M10P were found in the same group, and – aside from the interment of two individuals within the same formal context – they showed no indication of other non-normative characteristics. The only confirmed secondary burial at Omo M10 was also found in cemetery M10P (Table 8.1). Facedown-flexed interments were found in cemeteries M10Q and M10S (see Chapter 6), but supine-flexed interments were, again, only found in cemetery M10I (Table 8.2). It would therefore seem that communities considered seated-flexed body positions as a necessary aspect of communal normative burial that was altered only in relation to individual rather than communal preferences.

Table 8.1 Interment type by communal cemetery sector at M10 (unknown includes burials with missing records excavated in 1984 as well as partially or completely disturbed burials in which position could not be reconstructed).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Single-Primary</th>
<th>Single-Secondary</th>
<th>Double</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
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<td>H</td>
<td>20</td>
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<td>0</td>
</tr>
<tr>
<td>I</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>M</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>P</td>
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<td>3</td>
</tr>
<tr>
<td>Q</td>
<td>14</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>R</td>
<td>18</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
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<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>U</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>4</td>
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<tr>
<td>V</td>
<td>17</td>
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<td>0</td>
<td>2</td>
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<tr>
<td>W</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Only the M10P community made use of double-individual interments (n=2) more frequently any of the other cemeteries, a possible indication that double burials were a group-specific interment practice. However, even in the case of M10P, the frequency of double burials is very low (8 percent).
Table 8.2 Body position by communal cemetery sector at M10 (unknown includes burials with missing records excavated in 1984 as well as partially or completely disturbed burials in which position could not be reconstructed).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Seated- Flexed</th>
<th>Reclined- Flexed</th>
<th>Supine- Flexed</th>
<th>Facedown- Flexed</th>
<th>Seated-flexed Inverted</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>H</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>15</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
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<tr>
<td>M</td>
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</tr>
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</tr>
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<td>0</td>
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<td>3</td>
</tr>
<tr>
<td>V</td>
<td>16</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<td>W</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

* includes seated-flexed inverted funerary bundle in Burial M10H-11.

8.1.2 Tomb Architecture Variability

Tomb architecture at Omo M10 included six different types (Chapter 5), which showed a minimal positive correlation with age, biological sex, or status (Chapter 7). Another possible explanation for the use of different tomb constructions may be community-based style or preference. Simple pits were ubiquitous at all cemeteries at Omo M10, but clearly more frequent in some of the communal Tiwanaku sectors (M10H, M10I, M10U, M10V, and M10W) where they made up more than 75 percent of the sample (Graph 8.1, Table 8.3). The other sectors had greater variability of architectural forms (four or more types).

Complete used batanes (large grinding stones used for push-pull grinding) were occasionally used in tomb construction at Omo M10 both in cists and pits (as capstones) (Table 8.4). In cist tombs, batanes were used as “back rests;” placed against the western
**Graph 8.1** Frequencies of tomb structure types by cemetery sector at Omo M10.

**Table 8.3** Distribution of tomb structure types by cemetery sector at Omo M10.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Pit</th>
<th>Partial Cist</th>
<th>Inset Cist</th>
<th>Stone Cist</th>
<th>Slab Cist</th>
<th>Chamber Cist</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
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<td>0</td>
<td>3</td>
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<td>12*</td>
</tr>
<tr>
<td>H</td>
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<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
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<tr>
<td>I</td>
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<td>15</td>
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</tr>
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<td><strong>20</strong></td>
<td><strong>12</strong></td>
<td><strong>31</strong></td>
<td><strong>35</strong></td>
<td><strong>3</strong></td>
<td><strong>251</strong></td>
</tr>
</tbody>
</table>

* Two burials from the 1984 sample had no records of tomb structure.

Tomb wall, they supported the back of the funerary bundle. Given the abundance of natural fieldstones and boulders at the site, *batanes* in tombs may have been used to signify the deceased's (or kin's) preference in culinary practices, specifically the processing of maize. Furthermore, *batanes* were only found in cemeteries located along the western and northern periphery of the site, close to the agricultural fields.
H, M, U, V, and W). Use of *batanes* was not correlated with the age or sex of the deceased (Chapter 7).

**Table 8.4** Frequency of *batanes* used in tomb construction at Omo M10.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Tombs constructed with <em>batanes</em> (n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>1</td>
<td>10.00%</td>
</tr>
<tr>
<td>H</td>
<td>3</td>
<td>30.00%</td>
</tr>
<tr>
<td>I</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>M</td>
<td>1</td>
<td>10.00%</td>
</tr>
<tr>
<td>P</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>R</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>S</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>T</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>U</td>
<td>2*</td>
<td>20.00%</td>
</tr>
<tr>
<td>V</td>
<td>2</td>
<td>20.00%</td>
</tr>
<tr>
<td>W</td>
<td>1</td>
<td>10.00%</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

* The two *batanes* were used to replace removed crania and did not actually form part of the tomb architecture (see Chapter 6).

The inclusion of *batanes* in tombs, either as part of the stone lining, capstone, or in ritual replacement of crania, points to a possible difference in subsistence strategies and food production between communities at Omo M10. It is possible that *batanes* were used to substitute unmodified fieldstones out of convenience. Nevertheless, I think their overall scarcity and involvement in secondary manipulation of burials implies a perhaps symbolic emphasis on food production, or, at least, a community’s disposition toward the preferred use of these tools for burials. The proximity of the northern and western cemeteries to the agricultural terrains of the river plain lends additional support to a symbolic association between agriculture, food production, death, and these communities.
8.1.3 *Inter-Cemetery Variability in Funerary Dress and Offerings*

Funerary dress and offerings have been shown to be determined both by broader ideologies related to death and the afterlife and by the individual identities of the deceased (Chapter 6 and 7; Buikstra 1995; Goldstein 2005; Korpisaari 2006; Sharratt 2011). Oakland (1986, 1992) has argued for the use of tunic design as an indicator of group or corporate identity in provincial Tiwanaku society. At the Tiwanaku sites of Rio Muerto in Moquegua, Plunger (2009) did not observe any absolute differences in textile design, use of embroidery, or garment forms between Tiwanaku cemetery sectors. Here, I examine garment design variants and the use of embroidery as visible technological features of textiles that may have been used to distinguish members of different communities.

At Omo M10, a comparison of tunic (including possible lliclla) designs revealed few absolute differences among communal cemeteries (Table 8.6). Plain-colored garments, frequently used by women, were present in all but one Tiwanaku cemetery (the one cemetery containing no preserved funerary garments). Garments with bichrome warp-stripe design were found in eight of the eleven Tiwanaku cemeteries, and polychrome warp-striped tunics were only found in seven cemeteries. Because of the strong correlation between sex and textile type and design (see Chapter 7) and different preservation conditions we would have to account for the possibility that differential representations of sexed adults skewed the cemetery wide assemblage. Unfortunately, at this point the sample of aged adults with identifiable textile designs is too small to reach any definitive conclusions. In most cemeteries, either males or females are presented in
each design type. Because of this, I include individuals of all ages and sexes in the inter-
cemetery comparison (Graph 8.2).

**Graph 8.2** Frequency distribution of tunic/lliclla design by cemetery at Omo M10.

Cemeteries V and Q have the highest frequency of warp-striped textiles (for
discussion of Cemetery Q, see Chapter 9). The high frequencies polychrome warp-striped
textiles in Cemeteries S, T and V are not caused by an overrepresentation of adult males.

Cemeteries B, P, R and W contained mostly plain monochrome textiles, although in
Cemeteries P and R these data appear to result from small sample sizes.

Embroidery can be an additional, highly visible way of marking textiles to show
group affiliation. Embroidery in the form of decorated garment edges or neck plaques
ranged from zero to seventy percent across the different cemeteries at Omo M10,
depending on sample size. Unless embroidery took different form or designs (which
could not be determined because of small sample sizes), it was likely not a means for
marking community identity. Sandals were a quotidian dress item in Tiwanaku society,
but were found in only three cemeteries, often in more than one tomb (Table 8.5). The
decision of include sandals in the tombs may therefore well have been based on community style.

**Table 8.5** Numbers of adornments and miscellaneous clothing objects by cemetery sector at Omo M10.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Embroidery</th>
<th>Sandals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Garments With</td>
<td>Garments Without</td>
</tr>
<tr>
<td>B</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>H</td>
<td>2 (22%)</td>
<td>7 (78%)</td>
</tr>
<tr>
<td>I*</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>M</td>
<td>8 (67%)</td>
<td>4 (33%)</td>
</tr>
<tr>
<td>P</td>
<td>4 (50%)</td>
<td>4 (50%)</td>
</tr>
<tr>
<td>Q</td>
<td>3 (75%)</td>
<td>1 (25%)</td>
</tr>
<tr>
<td>R</td>
<td>1 (25%)</td>
<td>3 (75%)</td>
</tr>
<tr>
<td>S</td>
<td>13 (57%)</td>
<td>10 (43%)</td>
</tr>
<tr>
<td>T</td>
<td>11 (69%)</td>
<td>5 (31%)</td>
</tr>
<tr>
<td>U</td>
<td>6 (55%)</td>
<td>5 (45%)</td>
</tr>
<tr>
<td>V</td>
<td>3 (63%)</td>
<td>5 (37%)</td>
</tr>
<tr>
<td>W</td>
<td>4 (46%)</td>
<td>5 (54%)</td>
</tr>
<tr>
<td>Total</td>
<td>52 (53%)</td>
<td>47 (47%)</td>
</tr>
</tbody>
</table>

* Because of poor preservation no funerary garments were recovered from any of the burials.

---

169 Embroideries were only assessed for sub-specimens with preserved diagnostic elements (selvages).
Table 8.6  Distribution of tunic/lliclla designs by cemetery sector at Omo M10, taking into account age and sex.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Plain Design</th>
<th>Bichrome Warp-Stripe Design</th>
<th>Polychrome Warp-Stripe Design</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M  F  Child</td>
<td>Total</td>
<td>M  F  Child</td>
<td>Total</td>
</tr>
<tr>
<td>B</td>
<td>0  1  3</td>
<td>4</td>
<td>0  0  0</td>
<td>0</td>
</tr>
<tr>
<td>H</td>
<td>0  0  3**</td>
<td>3</td>
<td>1**  0  0</td>
<td>1**</td>
</tr>
<tr>
<td>I*</td>
<td>0  0  0</td>
<td>0</td>
<td>0  0  0</td>
<td>0</td>
</tr>
<tr>
<td>M</td>
<td>1  1  3</td>
<td>5</td>
<td>2**  0  0</td>
<td>2</td>
</tr>
<tr>
<td>P</td>
<td>0  0  5**</td>
<td>5</td>
<td>0  0  0</td>
<td>0</td>
</tr>
<tr>
<td>Q*</td>
<td>0  1  0</td>
<td>1</td>
<td>1  0  3</td>
<td>4</td>
</tr>
<tr>
<td>R*</td>
<td>0  0  1</td>
<td>1</td>
<td>0  0  0</td>
<td>0</td>
</tr>
<tr>
<td>S</td>
<td>1  4  2**</td>
<td>7</td>
<td>0  3  1</td>
<td>4</td>
</tr>
<tr>
<td>T</td>
<td>2  2** 3**</td>
<td>8</td>
<td>0  0  1</td>
<td>1</td>
</tr>
<tr>
<td>U</td>
<td>0  3** 2</td>
<td>5</td>
<td>1  0  1</td>
<td>1</td>
</tr>
<tr>
<td>V*</td>
<td>0  0  1</td>
<td>1</td>
<td>2**  0  0</td>
<td>2</td>
</tr>
<tr>
<td>W</td>
<td>0  1  5</td>
<td>6</td>
<td>0  1  1</td>
<td>2</td>
</tr>
</tbody>
</table>

* Because of poor preservation few or no funerary garments were recovered from any of the burials.
** Includes garments recovered from same burial contexts.
Pending future analysis of textile technologies and a larger sample of burial textiles, I would argue that tunic and *lliclla* design may have been subject to community-emblemic taste and sense of fashion for some groups. Access to colored yarn or dye stuff probably influenced weaver’s choices in design patterns, especially of polychrome warp-striped cloth. Bichrome warp-striped garments made from naturally dark and light camelid fibers, however, could have been produced with locally available resources. It is noteworthy that some cemeteries (V, W, M and S) contained higher frequencies of bichrome tunics. These tunics form a connection with the cemetery with the highest frequency of bichrome warp-striped tunics, Cemetery Q, a non-community burial ground (see Chapter 9). Future research is needed to assess whether bichrome warp-striped garments, although they were less ostentatious, had a special social meaning.

8.1.4 Inter-Cemetery Variability in Ceramic Offerings

Ceramic style is a widely recognized indicator of Tiwanaku group identity in residential contexts (e.g., Goldstein 1985, 1989, 2005; Janusek 2002, 2003, 2005; Rivera Casanovas 2003). In Tiwanaku Moquegua, Goldstein (1985, 1989, 2005) has argued that community identity was reflected in the differential frequencies of red-slipped and black-slipped serving wares in ceramic assemblages, in the use of distinct iconographic styles and elements, as well as ceramic forms (see Chapter 3). Inter-cemetery comparisons of ceramic offerings at Chen Chen (Sharratt 2011) did not reveal any stylistic differences in ceramic grave offerings.

In the Omo M10 burial assemblages excavated in 1984 and 2010–2011, 95 intact and reconstructed vessels placed as personal offerings in tombs and on top of capstones
reveal a differential distribution of ceramic ware types across communal cemeteries. Average number of ceramic vessels per tomb ranged between 0 and 0.81 across the cemeteries (Table 8.8). The cemeteries with the highest average number of ceramic vessels per tomb were Cemetery W, H, S, and B. Cemeteries Q, P, I, and T had the lowest averages. Because ceramic vessels are not subject to differential preservation conditions, this measure is a relatively unbiased indicator for comparing inter-cemetery variability. Although the range of variability is limited, there are some inter-cemetery differences in the preference for (or access to) ceramic vessels as tomb offerings. The communities that used the two adjacent cemeteries W and H shared the propinquity for ceramic vessel offerings in contrast to Cemeteries P and I.

As expected for a Chen Chen-style site like Omo M10, red-slippered serving wares dominated the funerary offering assemblages overall (75 percent), but undecorated ceramic vessels were also common and included tazones, keros, miniature vessels, and small two-handed ollas (22 percent) (Graph 8.3, Table 8.7). Burials in Cemetery R contained only red-slippered ceramic vessels, followed by Cemeteries V, T and U, which also included a few unslipped vessels. In contrast, Cemeteries B, S, I, and W had the highest frequencies of unslipped plainware ceramic vessels. Sector M10M had the highest variability of ware types. The outlier frequency of blackware polished ceramics at Sector M10P cemetery is the product of a small sample from that cemetery (n=1).^{170}

^{170} Fragments of blackware ceramic vessels were also found in the heavily disturbed and silted-in burials M-27 and R-2. However, because the provenience of these fragments cannot be securely established, they are not included in the analysis of whole vessel offerings.
Graph 8.3 Frequencies of ceramic ware types from whole vessel offerings by cemeteries at Omo M10.

Table 8.7 Numbers of ceramic ware types from whole vessel offerings by cemeteries at Omo M10.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Tiwanaku Red</th>
<th>Tiwanaku Plain</th>
<th>Tiwanaku Black</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>3 (50%)</td>
<td>3 (50%)</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>H</td>
<td>11 (79%)</td>
<td>3 (21%)</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>I</td>
<td>2 (67%)</td>
<td>1 (33%)</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>M</td>
<td>14 (82%)</td>
<td>1</td>
<td>1 (6%)</td>
<td>1 (6%)</td>
<td>17</td>
</tr>
<tr>
<td>P</td>
<td>0</td>
<td>0</td>
<td>1 (100%)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>R</td>
<td>7 (100%)</td>
<td>0</td>
<td>0²</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>S</td>
<td>7 (63%)</td>
<td>4 (37%)</td>
<td>0</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>T</td>
<td>5 (83%)</td>
<td>1 (17%)</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>U</td>
<td>5 (83%)</td>
<td>1 (17%)</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>V</td>
<td>6 (86%)</td>
<td>1 (13%)</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>W</td>
<td>11 (65%)</td>
<td>6 (35%)</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>71 (75%)</td>
<td>21 (22%)</td>
<td>2 (2%)</td>
<td>1 (1%)</td>
<td>95</td>
</tr>
</tbody>
</table>

These frequencies are comparable to ceramic vessel assemblages found at other Tiwanaku cemeteries in Moquegua (Sharratt 2011) and the highlands (Korpisaari).

Because the vessel numbers per cemetery are small, it is not possible to draw comparisons to ware-type frequencies from domestic assemblages in Moquegua, where red-slipped and polished blackware vessels represent a relatively low frequency (less than
10 percent. Cemetery-based preferences for redwares or plainware vessels do not coincide with location. Burial contexts at Omo M10 had higher frequencies of redware vessels than domestic contexts, pointing to the important of feasting and serving functions in mortuary rituals. Because of the high frequency of redware vessels in burials at Omo M10 and other Tiwanaku sites, I speculate that redware vessels were the preferred variant of ceramic grave offerings. This means that certain groups (e.g., the occupants of Cemetery R, V and T had greater access to red-slipped serving wares). In contrast, preference for other ware types (plainware and blackware) may have been the result of limited access to distinct ceramic production choices.

It must be kept in mind that ceramic ware types did not always correlate directly with form types. For example, one kero and several tazones did not have red-slipped surfaces. I therefore conducted a separate analysis of inter-cemetery form type variability. As demonstrated in Chapter 6, ceramic vessels found in Tiwanaku burials usually consisted of the most common vessel types: keros, tazones, vasijas and plainware ollas, with other forms accounting for a small percentage of the sample. Most cemeteries contained between three and four different vessel forms (Graph 8.4, Table 8.8). Keros and tazones were found in all sectors except for Cemetery P. The keros were of the characteristic Chen Chen-style form, with a base:rim diameter ratio of 2:1, rather than 1.5:1 as seen in the broader, often banded Omo-style keros. The use of ollas as offerings was mostly limited to cemeteries on the western edge of the site (B, H, I, M, W), and contrasts with the preference for redware vasijas found mainly in burials in the southern and eastern cemeteries. Communities that favored ollas as grave offerings were also more likely to use batanes in tomb construction (see above). I rule out the possibility that this
concentration of *ollas* was caused by an overrepresentation of female individuals, because the sex profiles of these cemeteries do not show an unusual high number of females compared to males (see Table 5.13). The greatest variability of form types was found in the cemeteries with the largest samples of ceramic vessels. This leads me to speculate that the reduced variability observed in the other cemeteries is the result of small sample sizes. Overall, *keros, tazones* and *vasijas* were the most widely accepted, normative serving vessels, but they could—and would—be substituted with other vessel forms.

**Graph 8.4** Frequency of ceramic vessel forms from whole vessel offerings by cemeteries at Omo M10.

Ceramic iconography, when present on vessels at Omo M10, was very diverse. Approximately one-third of whole vessel grave offerings were undecorated, including utilitarian wares, unpainted red-slipped wares, and polished blackware (Graph 8.5, Table 8.9). In cemeteries where undecorated vessels appear to be common (Cemeteries I and P),
the low frequency of decorated vessels may be caused by small sample sizes (n=3 and n=1, respectively).

Among the vessels with painted designs, geometric motifs (Figure 8.2), including “step-stair”, “chevron”, and “vertical-S” motifs, were slightly more common (41 percent) than figurative designs (29 percent, Figure 8.1) which consisted of feline, avian, or anthropomorphic motifs. The ability to compare and interpret individual design motifs shown in Figures 8.1 and 8.2 between cemeteries is somewhat affected and limited by the small number of vessels per cemetery (ranging from 6 to 17). Table 8.10 lists the most common and recognizable motifs by occurrence and frequency across cemeteries.
Table 8.8 Numbers and frequencies of ceramic vessel forms from whole vessel offerings by cemeteries at Omo M10.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Kero</th>
<th>Tazon</th>
<th>Vasiya</th>
<th>Olla</th>
<th>Miniature</th>
<th>Cuenco</th>
<th>Vaso</th>
<th>Effigy</th>
<th>Total</th>
<th>Average n vessel/tomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0.5</td>
</tr>
<tr>
<td>H</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>0.7</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0.14</td>
</tr>
<tr>
<td>M</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>0.47</td>
</tr>
<tr>
<td>P</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.04</td>
</tr>
<tr>
<td>R</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0.29</td>
</tr>
<tr>
<td>S</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>0.52</td>
</tr>
<tr>
<td>T</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0.3</td>
</tr>
<tr>
<td>U</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0.4</td>
</tr>
<tr>
<td>V</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0.37</td>
</tr>
<tr>
<td>W</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>17</td>
<td>0.81</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>29</td>
<td>15</td>
<td>10</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>95</td>
<td>0.41</td>
</tr>
</tbody>
</table>
Figure 8.1: Roll-out drawings with figurative motifs: “FELINE-EAGLE” (top left, M10=7731), “FLAMINGO” (top right, M10=7800), “FELINE HEAD” (bottom left, M10=7742), “PROFILE HEAD” (bottom right, M10=9157).

Figure 8.2: Roll-out drawing with geometric motifs: “STEP-STAIR” (top left, M10=7813), “VERTICAL-S” (top right, M10=8954), “GREEK FRIEZE” (bottom light, M10=9442), unidentified other (bottom right, M10=7573).
The most common motif found on ceramic vessels at Omo M10 was the “STEP-STAIR” motif, which occurred on 25 percent (n=17) of the decorated vessels. Vessels (keros, tazones, and vasijas) with “STEP-STAIR” motif were found in eight cemeteries, but the highest concentration of this motif occurred in Cemeteries U and S, where it made up over 40 percent of the decorated vessel motifs. Ceramics with “FELINE” motifs clustered in Cemeteries H and W. The “FLAMINGO” motif was found only in Cemeteries R, V and W, where it accounted for at least 30 percent of decorated vessels. Another popular motif, the “PROFILE HEAD,” was spread out across several cemeteries in comparatively low frequencies. The “VERTICAL-S” motif made up between 20 and 30 percent of ceramic motifs in Cemeteries M, S, T and U.

These data suggest that there was no restricted access to particular ceramic motifs at the site of Omo M10. Because many of the motifs were spread out among the different cemeteries, I would argue most of them did not serve as emblems or symbols of group membership. It is noteworthy that the “flamingo” motif, which occurred as frequently as the “profile head” motif, was limited to three community cemeteries (R, V and W). The “flamingo” and the “vertical-S” motif are the only two motifs that are both relatively frequent and that are limited in their distribution, which may indicate restricted access or community-based preference for ceramics that displayed these motifs.
**Table 8.9** Numbers of ceramic decorative designs on whole vessel grave offerings by cemetery sector at Omo M10 (1984 and 2010 sample).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Decorated</th>
<th>Undecorated</th>
<th>Unidentifiable</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>M10B</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>M10H</td>
<td>9</td>
<td>5</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>M10I</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>M10M</td>
<td>14</td>
<td>3</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>M10P</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>M10R</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>14.3%</td>
</tr>
<tr>
<td>M10S</td>
<td>7</td>
<td>4</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>M10T</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>M10U</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>M10V</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>M10W</td>
<td>10</td>
<td>7</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>27</td>
<td>1</td>
<td>95</td>
</tr>
</tbody>
</table>
Table 8.10 Distribution of ceramic iconographic motifs by number and frequency across cemeteries at Omo M10 (2010 and 1984 sample).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Feline</th>
<th>Flamingo</th>
<th>Feline-Eagle</th>
<th>Profile Head</th>
<th>Step-Stair</th>
<th>Greek</th>
<th>“SSS”</th>
<th>Chevron</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>0</td>
<td>0</td>
<td>1 (25%)</td>
<td>0</td>
<td>1 (25%)</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>H</td>
<td>2 (22%)</td>
<td>0</td>
<td>1 (11.1%)</td>
<td>2 (22.2%)</td>
<td>0</td>
<td>0</td>
<td>1 (11.1%)</td>
<td>2 (22.2%)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1 (100%)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3 (21.4%)</td>
<td>2 (14.2%)</td>
<td>3</td>
<td>1</td>
<td>2 (14.2%)</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Q</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>1 (16.7%)</td>
<td>2 (33.3%)</td>
<td>0</td>
<td>1 (16.7%)</td>
<td>1 (16.7%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1 (16.7%)</td>
<td>6</td>
</tr>
<tr>
<td>S</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1 (14.3%)</td>
<td>3 (42.9%)</td>
<td>0</td>
<td>2 (28.6%)</td>
<td>0</td>
<td>1 (14.3%)</td>
<td>7</td>
</tr>
<tr>
<td>T</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2 (40%)</td>
<td>0</td>
<td>1 (20%)</td>
<td>0</td>
<td>2 (40%)</td>
<td>5</td>
</tr>
<tr>
<td>U</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4 (80%)</td>
<td>0</td>
<td>1 (20%)</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>2 (33.3%)</td>
<td>0</td>
<td>1 (16.7%)</td>
<td>0</td>
<td>0</td>
<td>1 (33.3%)</td>
<td>2 (33.3%)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>2 (20%)</td>
<td>3 (30%)</td>
<td>0</td>
<td>1 (10%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4 (40%)</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>7</td>
<td>2</td>
<td>7</td>
<td>17</td>
<td>3</td>
<td>7</td>
<td>3</td>
<td>16</td>
<td>67</td>
</tr>
<tr>
<td>Total %</td>
<td>7.5%</td>
<td>10.4%</td>
<td>3%</td>
<td>10.4%</td>
<td>25.4%</td>
<td>4.5%</td>
<td>10.4%</td>
<td>4.5%</td>
<td>23.8%</td>
<td>100%</td>
</tr>
</tbody>
</table>
8.1.5 Inter-cemetery Variability of Wooden, Basket and Gourd Vessels

In the same way that different frequencies of red-slipped or unslipped ceramic vessels and their motifs may have been indicative of distinct group-based material culture assemblages, serving or storage vessels made from organic materials like basketry, wood, or gourds may also reflect group-based preferences or practices. Wooden spoons, for example, were ubiquitous, as part of the canonical funerary serving assemblage (Graph 8.6, Table 8.11). Only in cemetery W were gourd ladles present in numbers comparable to spoons. Most cemetery groups made use of at least three or four serving objects made from plant-based materials, typically wooden spoons, baskets, and gourd containers. Wooden vessels were rare and only found in three cemeteries. The groups that used Cemeteries P, S, and T showed the greatest variability in plant-based raw materials (reeds, wood, gourds). They also had the largest assemblages of non-ceramic containers and serving spoons, so that the diversity seen in the sample may be caused by the size of the sample.

When comparing the average number of ceramic vessels per tomb in each cemetery with the average number of non-ceramic vessels per tomb, Cemeteries H, P, and W stand out for showing the greatest differences (Table 8.12). Cemeteries H and W both preferred ceramic vessels to non-ceramic vessels. In contrast, Cemetery P, which lacked ceramic vessels (0.04/tomb), showed a very high average number of baskets and gourds (0.35/tomb). Cemetery S had high average number of both vessel types; this group was seemingly indifferent to the material of the vessel to increase grave good assemblages.
Only in the case of Cemetery P can this diversity be considered potentially meaningful. Cemetery P had a very low number of ceramic vessels, suggesting that basket and gourd vessels were used instead of ceramic containers, reflecting limited access to ceramics or a preference for lighter, more flexible and more easily transportable containers. In contrast, the scarcity of baskets and gourds in Cemetery W may also be considered relevant, seeing how the presence of wooden spoons and gourd ladles confirms adequate preservation conditions in this sector. Cemetery W had one of the highest average numbers of ceramic vessels per tomb (0.8 vessels/tomb) at Omo M10, indicating that serving vessels were abundantly used as grave offerings, with a clear preference for ceramic over non-ceramic objects.

**Graph 8.6**: Frequencies of non-ceramic offerings per cemetery sector at Omo M10.
Table 8.11 Numbers of non-ceramic offerings per cemetery sector at Omo M10.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Basket Plate</th>
<th>Basket Vessel</th>
<th>Wood Vessel</th>
<th>Gourd Vessel</th>
<th>Gourd Ladle</th>
<th>Wood Spoon</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>H</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>M</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>R</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>S</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>T</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>U</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>V</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>W</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>12</td>
<td>3</td>
<td>11</td>
<td>8</td>
<td>46</td>
<td>111</td>
</tr>
</tbody>
</table>

Table 8.12 Average numbers of ceramic and non-ceramic (basket, wood, gourd) vessels per tomb at Omo M10 (2010 and 1984 sample).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Tombs (n)</th>
<th>Ceramic vessels (n)</th>
<th>Ceramic vessels/tomb</th>
<th>Non-ceramic vessels (n)</th>
<th>Non-ceramic vessels/tomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>12</td>
<td>6</td>
<td>0.5</td>
<td>2</td>
<td>0.17</td>
</tr>
<tr>
<td>H</td>
<td>20</td>
<td>14</td>
<td>0.7</td>
<td>1</td>
<td>0.05</td>
</tr>
<tr>
<td>I</td>
<td>21</td>
<td>3</td>
<td>0.14</td>
<td>9</td>
<td>0.43</td>
</tr>
<tr>
<td>M</td>
<td>36</td>
<td>17</td>
<td>0.47</td>
<td>5</td>
<td>0.15</td>
</tr>
<tr>
<td>P</td>
<td>26</td>
<td>1</td>
<td>0.04</td>
<td>9</td>
<td>0.35</td>
</tr>
<tr>
<td>Q</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>R</td>
<td>24</td>
<td>7</td>
<td>0.29</td>
<td>2</td>
<td>0.08</td>
</tr>
<tr>
<td>S</td>
<td>21</td>
<td>11</td>
<td>0.52</td>
<td>15</td>
<td>0.71</td>
</tr>
<tr>
<td>T</td>
<td>20</td>
<td>6</td>
<td>0.3</td>
<td>10</td>
<td>0.6</td>
</tr>
<tr>
<td>U</td>
<td>15</td>
<td>6</td>
<td>0.4</td>
<td>1</td>
<td>0.07</td>
</tr>
<tr>
<td>V</td>
<td>19</td>
<td>7</td>
<td>0.37</td>
<td>3</td>
<td>0.16</td>
</tr>
<tr>
<td>W</td>
<td>21</td>
<td>17</td>
<td>0.81</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>95</td>
<td>0.41</td>
<td>57</td>
<td>0</td>
<td>0.26</td>
</tr>
</tbody>
</table>

Overall, the inter-cemetery variability of tomb structure, funerary dress and ceramic offerings, which formed the most common and ubiquitously observable characteristics of the Tiwanaku funerary program at Omo M10, showed no absolute
differences of stylistic attributes between the sub-communities. The ceramic assemblage shows the characteristic features of the local Chen Chen-style, but stylistic differences between groups are subtle, taking the form of slight preferences for—or restricted access to—decorated or undecorated, serving or utilitarian vessels, pits or cist tombs, or sandals as grave offerings. Some of these differences (e.g., tunic design) appear to relate to other factors, such as the personal identities of the deceased or the size of the present sample, and can only be considered preliminary pending larger sample sizes.

One reason for the lack of more absolute inter-community burial styles may be that tomb structure, bundle preparation, and in-tomb offerings had a restricted audience and would have been known mainly to members of the community. Within the community, mourners would have emphasized different funerary attributes (e.g., the status of the deceased in the community) that became materialized in the context of the deceased and the individual burial. To assert corporate identities through different funerary styles vis-à-vis neighboring groups, communities might have been more likely to change and manipulate space (i.e. separate communal cemeteries), immaterial aspects of funerary ritual (e.g., pathways of procession, liturgies, speech and gestures), and post-interment celebrations at the cemetery that would have been visible to the other groups.

8.1.6 Inter-Cemetery Variability of Communal Post-Interment Activities

In cemeteries with intact primary surface deposits, there exist significant difference in the use of material assemblages indicative of group-specific ritual practices. Because of the preservation differences between cemeteries at Omo M10, it was not
possible to compare all the cemetery sectors in terms of post-interment ritual activities that left material evidence on the use surface of the cemetery, however.

The presence of reconstructible complete and partial ceramic vessels on cemetery use surfaces indicates that all communities used serving and utilitarian wares during post-interment rituals likely in the context of feasting, serving and consuming food and drink (Table 8.13) (see also Chapter 5). Concentrations of ceramic fragments per square meter in excavated cemetery areas show that in nine of the 11 Tiwanaku-style communal cemeteries utilitarian ceramic fragments were more abundant than serving wares. Only in cemeteries R and T were the densities reversed. Cemeteries I, R, and T had the highest densities of serving wares, well above the site-wide average. This suggests that feasting may have been more intensified among these communities in comparison to other groups. In Cemetery I, this is further supported by a high density of utilitarian wares, which were not the result of intrusive midden deposits but rather of more frequent or intensive ceremonial activities.\textsuperscript{171} Cemeteries M and V had unusually low densities of ceramic fragments on use-surfaces, a possible indicator that post-interment ceremonies either were less intensive, less frequent, or not situated at the cemetery of these communities.

Baskets offered an additional line for investigating different funerary feasting behaviors at Omo M10. As suggested in Chapter 6.4, because of their open form and large size tray-shaped baskets appear to have been used for presenting and sharing food between participants rather than to enable individual acts of consumption, like \textit{keros} or \textit{tazones}. Baskets were only found in surface contexts in Cemeteries M, R, S, and T (Table \textsuperscript{171} See Chapter 5 for comparisons of surface ceramic densities. Cemetery I had a particularly high frequency of red-slipped ceramic sherds compared to other cemeteries with surface midden deposits. Also, Cemetery I is not located near the domestic sector.
8.13.  Cemeteries V, H, I, and P did not include baskets in their surface assemblages. Surface baskets are more frequent in cemeteries with low surface ceramic concentrations (Cemeteries M, S, and V), which may point to more profound inter-group differences in material serving assemblages. It is noteworthy that communities that preferred basket vessels as in-tomb offerings (i.e., Cemetery P) did not show evidence of basket use outside of tombs. Cemeteries S, M, and V, where most baskets were found, all regularly used ceramic vessels rather than basket vessels in tombs. Perhaps baskets presented an alternative object type for serving food to mourners in some communities, whereas other communities preferred instead to use more informal platters made from the re-used body sherds of large cooking and storage vessels (Chapter 6). Because of the differential surface preservation, other indicators of commensal consumption, e.g., maize and animal bones, could not be systematically compared across cemetery sectors.

Although feasting was the most common type of post-interment ritual practice, other rituals included the burning of organic materials, e.g., wood, food, etc., on the cemetery surface. Evidence of burning rituals at the Omo M10 cemeteries occurs in the form of broken incense burners, carbonized plant remains and sediment patches on use surfaces discolored by intense heating (Table 8.13). In Cemetery P, several patches of reddish-black sediment were registered on the cemetery surface some 40–70 cm away from tomb openings. Two large utilitarian ceramic fragments with carbon residue containing carbonized organic materials were found on the surfaces of Cemeteries B and

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172 Because basket preservation may have differed across the site, we cannot exclude basket use by the other communities.
Because of the ephemeral nature of these types of evidence, similar burning rituals may have taken place at other cemeteries but have not been preserved.

**Table 8.13** Density of Cemetery Use-Surface Materials by Cemetery Sector at Omo M10.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Serving Vessel fragments/m²</th>
<th>Utilitarian Vessel fragments/m²</th>
<th>Incense Burner fragments/m²</th>
<th>Baskets /m²</th>
<th>Burnt soil concentrations</th>
</tr>
</thead>
<tbody>
<tr>
<td>B (88m²)</td>
<td>0.08</td>
<td>1.43*</td>
<td>0</td>
<td>0</td>
<td>0.01</td>
</tr>
<tr>
<td>H (60m²)</td>
<td>0.01</td>
<td>0.87</td>
<td>0.02</td>
<td>0</td>
<td>0.02</td>
</tr>
<tr>
<td>I (48m²)</td>
<td>0.62</td>
<td>2.42</td>
<td>0.04</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>M (43m²)</td>
<td>0.07</td>
<td>0.42</td>
<td>0</td>
<td>0.02</td>
<td>0</td>
</tr>
<tr>
<td>P (33m²)</td>
<td>0.09</td>
<td>0.61</td>
<td>0</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>R (32m²)</td>
<td>0.25</td>
<td>0.06</td>
<td>0.81</td>
<td>0.03</td>
<td>0</td>
</tr>
<tr>
<td>S (33m³)</td>
<td>0.09</td>
<td>0.67</td>
<td>0</td>
<td>0.06</td>
<td>0</td>
</tr>
<tr>
<td>T (32m²)</td>
<td>0.72</td>
<td>0.53</td>
<td>0.06</td>
<td>0.03</td>
<td>0</td>
</tr>
<tr>
<td>U (53m²)</td>
<td>0.07</td>
<td>0.96</td>
<td>0</td>
<td>0.04</td>
<td>0</td>
</tr>
<tr>
<td>V (48m³)</td>
<td>0</td>
<td>0.27*</td>
<td>0</td>
<td>0.04</td>
<td>0</td>
</tr>
<tr>
<td>W (49m²)</td>
<td>0.57</td>
<td>10.41*</td>
<td>0.02*</td>
<td>0.02</td>
<td>0</td>
</tr>
<tr>
<td>Site Aver.</td>
<td>0.23</td>
<td>1.69*</td>
<td>0.08</td>
<td>0.02</td>
<td>0.01</td>
</tr>
</tbody>
</table>

* High density of utilitarian vessels is caused by domestic midden deposits superimposed on surface areas.

Similar to the burning of organic materials on the ground or in ceramic sherds, post-funerary rituals included the burning of llama fat or other combustible substances in incense burners (*incensarios* and *sahumadores*). Ceramic fragments from incense burners were found at only three of the eleven Tiwanaku-style cemeteries at Omo M10: H, I, R,
Smoke offerings were highly visible rituals that could be seen over large distances, communicating the performance of ritual ceremonies at the communal cemetery of one or several communities at Omo M10. Although the densities of incensario fragments are very low in three of the cemeteries, the density of .81 sherds/m$^2$ at Cemetery R clearly lies above the site-wide average of .08 sherds/m$^2$, suggesting that smoke offerings were more popular among this community than any others at the site.

The high density of incense burner fragments on the surface of Cemetery R was further substantiated by the abundance of broken incensarios and sahumadores found scattered on the surface of Cemetery R outside the excavated units, (no similar “pot busts” were found at other cemeteries). Forty-one more fragments from at least eight vessels were collected. The fragments showed no visible residue from burning along the base or vessel interior, and future analysis is needed to clarify their contents, which will shed more light on the specific nature of rituals involving these vessels.

8.1.7 Summary of Inter-Cemetery Variability in Tiwanaku Funerary Practices

The use of distinct funerary space, different types of serving ware assemblages and selective use of burning rituals among the communal cemeteries at Omo M10 suggests that the more public and visible components of funerary practices may have suited mourners better for creating and expressing community based identities. Whereas the choices for tomb construction, in-tomb offerings and funerary dress offered limited opportunity for displaying community or kinship identity during funerals, each group

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$^{173}$ Two incensario fragments found at Cemetery W probably formed part of the midden deposit.
made different uses of burning rituals, smoke offerings, serving plates and the food presented on these plates.

Even though the more private aspects of funerary ritual may not have been important in the conscious signaling of community boundaries, the preferential use of utilitarian or decorated serving wares, stone-lined or plain tombs contributed to the internal reproduction of group identity, as *habitus* or a “practical making sense” of social life was perpetuated through the use of everyday objects and practices. Within the limits of normative Tiwanaku mortuary practices, mourners and communities made choices throughout the extended funerary process, from the preparation of the body to the post-interment commemorative activities, that reproduced their kingroup’s identity consciously, through the use of discrete cemetery space and selective feasting and burning practices, as well as unconsciously, through the use of material assemblages shaped by the conditions of daily life.

8.2 Community Identities and Status at Omo M10

As the analysis of mortuary practices in relation to personal identities of age and gender demonstrated, social status in Tiwanaku was in part conditioned by these individual characteristics, some of which changed throughout an individual’s life, while other remained constant (Chapter 7). But it has also been argued that, as inequality became institutionalized during the Tiwanaku V period, kinship and descent may have played an important factor in determining social rank, resources to wealth, status and power (e.g., Kolata 2003c; Janusek 2004, 2008). At the Tiwanaku capital, the emerging
differences in access to wealth and status objects appears to have occurred in correlation with increasing separation and isolation of residential spaces, especially near the monumental core of the city. In Moquegua, Goldstein (2005:208) has argued based on the differential distribution of status objects, e.g., portrait-head vessels, that status was linked to community membership.

The distribution of wealth and prestige objects across different cemetery spaces can elucidate whether access to such objects was mitigated by membership in a specific community, or whether access was evenly distributed across the different social groups that coresided in the Tiwanaku provinces. At this level of analysis it is less important what the factors were that led to the inclusion of the object in a particular tomb (see individual status in Chapter 7). Instead, here the point of interest is the fact that the mourners had access to wealth or prestige objects. The finding of this analysis inform our understanding of social organization and the reproduction of inequality in Tiwanaku Moquegua, but may ultimately elucidate similar processes taking place in other parts of the Tiwanaku sphere of influence.

8.2.1 Inter-Cemetery Wealth Distribution at Omo M10

Material indicators of higher social status could take a number of forms in the context of Tiwanaku funerary practices, including greater investment in tomb architecture, wealth objects of economic value, such as fine or imported textiles like tapestry cloth and four-pointed hats, portrait head *keros*, metal and stone jewelry, as well as prestige objects (bone tubes, *zampoñas*, *chuspas* and pigment boxes, weaving tools) of social rather than economic value (see Chapters 3, 4, and 7).
A ranking of cemeteries according to the total number of grave offerings and the average number of offerings per tomb shows that average grave wealth per cemetery did not differ significantly between cemeteries. Average tomb assemblages ranged from 0.62 to 1.76 objects (site average: 1 object/tomb), meaning that the overall difference in average cemetery grave wealth consisted of less than one object, a negligible number given the large sample size (Graph 8.7, Table 8.14). The lack of a clear bimodal distribution of grave offering quantities challenges Goldstein’s observation (based on the 1984 burial sample) that one group (Cemetery M) was of higher rank than other cemeteries at Omo M10 based on their greater access to prestige and wealth objects (e.g., silver earspools). The low standard deviation of average number of offerings per tomb ($\sigma=0.362$) confirms the tight clustering of values around the mean of 1.01 vessel/tomb.

**Table 8.14** Distribution of grave offerings by cemetery sector at Omo M10 (offerings include all objects found outside the funerary bundle, but do not include funerary textiles used for wrapping bodies).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of Offerings</th>
<th>Number of Tombs</th>
<th>Average Number of Offering per Tomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>37</td>
<td>21</td>
<td>1.76</td>
</tr>
<tr>
<td>T</td>
<td>29</td>
<td>20</td>
<td>1.45</td>
</tr>
<tr>
<td>W</td>
<td>27</td>
<td>21</td>
<td>1.29</td>
</tr>
<tr>
<td>R</td>
<td>27</td>
<td>23</td>
<td>1.17</td>
</tr>
<tr>
<td>H</td>
<td>20</td>
<td>20</td>
<td>1.00</td>
</tr>
<tr>
<td>U</td>
<td>15</td>
<td>16</td>
<td>0.94</td>
</tr>
<tr>
<td>M</td>
<td>30</td>
<td>36</td>
<td>0.83</td>
</tr>
<tr>
<td>I</td>
<td>17</td>
<td>21</td>
<td>0.81</td>
</tr>
<tr>
<td>V</td>
<td>13</td>
<td>19</td>
<td>0.68</td>
</tr>
<tr>
<td>B</td>
<td>12</td>
<td>18</td>
<td>0.67</td>
</tr>
<tr>
<td>P174</td>
<td>16</td>
<td>26</td>
<td>0.62</td>
</tr>
<tr>
<td>Total</td>
<td>243</td>
<td>241</td>
<td>1.01</td>
</tr>
</tbody>
</table>

174 The unusually low average number of objects found in Cemetery P may be the result of excavation recording protocols in 1984, for which notes and drawings for this sector were incomplete. The average number of offerings per tomb from excavations at Cemetery P in 2010 was 1.06 offerings/tomb, close to the site-wide average.
**Graph 8.7**: Ranking of Cemetery Sectors by Average Number of Offerings per Tomb at Omo M10 (Red line indicates site-wide average).

<table>
<thead>
<tr>
<th>Sector</th>
<th>0 off.</th>
<th>1 off.</th>
<th>2 off.</th>
<th>3 off.</th>
<th>4 off.</th>
<th>5 off.</th>
<th>6 off.</th>
<th>7 off.</th>
<th>9 off.</th>
<th>10 off.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>18</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>9</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>H</td>
<td>7</td>
<td>8</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>15</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>M</td>
<td>10</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>R</td>
<td>10</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>S</td>
<td>12</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>T</td>
<td>12</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>U</td>
<td>9</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>V</td>
<td>12</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>W</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td>50</td>
<td>28</td>
<td>15</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Within each community, grave wealth was variably distributed. For example, Cemeteries H and W had comparatively high average numbers of tomb offerings. Nevertheless, their range of offerings per tomb was low (zero to three objects) and the grave offerings were
more equally distributed across the sector’s burial sample. In comparison, in Cemeteries R and U, which had comparable average numbers of offerings per tomb (Graph 8.7), grave wealth was unevenly distributed across the population, with greater absolute differences (zero to ten or five objects, respectively) and greater numbers of tombs without offerings (Table 8.15, Graph 8.8).

**Graph 8.8:** Distribution of tombs by grave offering assemblages by cemetery at Omo M10.

Wealth objects, which included offerings as well as fine textiles used in the funerary bundle, were found with individuals interred in Cemeteries U, S, I, R, P, and M. Of these, the first four had the highest average number of wealth objects per tomb (Table 8.16).\(^{175}\) The overall scarcity of wealth objects suggests that provincial Tiwanaku communities had limited access to these types of materials, and that they may present

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\(^{175}\) Looting of metal objects probably exacerbates the scarcity of these offerings at Omo M10. However, the majority of the metals were found near the bottom of looted tombs, suggesting that some objects remained in the tomb because of their small size. Overall, there is no indication that metal objects were abundant in Tiwanaku burials at Omo (see Chapter 5).
rare imports rather than locally produced objects, for which workshops may have been found. In particular, provincial Tiwanaku groups likely did not have access to the knowledge and resources needed to produce metal jewelry, tapestry textiles and bone tubes. Their presence in burials can therefore be considered indicative of the group’s participation in regional trade networks.

Table 8.16 Distribution of wealth objects by cemetery at Omo M10.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Tombs (n)</th>
<th>Tombs with wealth objects</th>
<th>Tapestry (n)</th>
<th>4-Pointed Hat (n)</th>
<th>Metals (n)</th>
<th>Portrait-Head Kero (n)</th>
<th>Bone Tube (n)</th>
<th>Total/Tomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>U</td>
<td>16</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.19</td>
</tr>
<tr>
<td>S</td>
<td>21</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.14</td>
</tr>
<tr>
<td>I</td>
<td>21</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0.14</td>
</tr>
<tr>
<td>R</td>
<td>23</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0.13</td>
</tr>
<tr>
<td>P</td>
<td>26</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.08</td>
</tr>
<tr>
<td>M</td>
<td>36</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.06</td>
</tr>
<tr>
<td>T</td>
<td>20</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.05</td>
</tr>
<tr>
<td>V</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>W</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>H</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>241</td>
<td>11</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0.07</td>
</tr>
</tbody>
</table>

The concentration of wealth objects in a limited number of cemeteries at Omo M10 also suggests that access to these objects was not equal within the Tiwanaku provinces. Groups like those which used Cemeteries U, S, I, and R enjoyed greater access to probable imports like tapestry and metal, enabling them to include these objects as grave offerings, thereby taking them out of circulation and away from public display. Members of groups without access to wealth objects, including Cemeteries V and W, did have access to prestige objects, like zamponas, that would have provided individualized opportunities to gain higher social status in the community. Only Cemetery H did not
express distinctions on the individual and group level in their burials, even though they regularly included other types of grave offerings.

Based on the observed distribution of wealth object, there was no single group at the site that controlled access to luxury or other status objects. In sum, this supports models in which wealth and status objects were produced, distributed and acquired through community-based social networks, in which the provincial populations living in Moquegua participated. However, their participation in these regional exchange systems appears to have been very limited. It is more likely, therefore, that social status would have been acquired through alternative means through the performance of tasks or practices, such as weaving or rituals, allowing the individual specialists to gain recognition and status through in the immediate social environment, in which association with highland elites was perhaps more of an ephemeral or imagined than a real source of power.

8.2.2 Summary Descriptions of Community Cemeteries at Omo M10

Before proceeding with the discussion of how these cemeteries may have been affiliated with one another, I will briefly summarize the most distinct characteristics of each sector with regard to style and status differences. This will help the reader in following the subsequent discussion of social affiliation between cemeteries and social groups at Omo M10.

Cemetery B is a Tiwanaku-style community cemetery with a self-reproducing population. In use during the final phase the site’s Middle Horizon occupancy, Cemetery B is the least wealth and noteworthy for the lack of distinguishing features. It has equal
proportions of cist and pit tombs (which included the use a of batán), relatively high frequencies of plainware vessels (in particular ollas), and a preference for monochrome funerary textiles. Cemetery B contains no wealth or prestige items and is the poorest of the cemeteries in terms of average number of grave offerings per tomb. Only two ceramic vessels with evidence of repair were found in Cemetery B, pointing to the restricted access to these objects during the time of Tiwanaku’s sociopolitical collapse.

Cemetery H is a Tiwanaku-style community cemetery characterized by a high frequency of pit tombs and the inclusion of batanes in capstones. Most of the burials follow the normative burial style, except for one inverted seated-flexed individual. Cemetery H has a high average number of ceramic vessels per tomb, a preference for feline motifs on ceramic iconography, and a low frequency of non-ceramic offerings as well as a lack of wealth and prestige objects.

Cemetery I is a Tiwanaku-style community cemetery characterized by a high frequency of pit tombs. Three individuals interred in this cemetery do not conform to the normative Tiwanaku burial style. Cemetery I is noteworthy for its scarcity of ceramic vessel offerings, which include a rare portrait-head kero. This scarcity contrasts with the high average number of non-ceramic vessels, wealth and prestige objects. The differences in grave offering numbers in Cemetery I are more pronounced than in many other cemeteries. Post-interment activities were also common at Cemetery I.

Cemetery M is a Tiwanaku-style community cemetery characterized by a high frequency of cist tombs. There are pronounced differences in offering assemblage sizes, and the number of wealth objects is above the site-wide average. Cemetery M stands out
for its high average number of decorated ceramic offerings, which causes a greater
diversity of vessel forms. Funerary textile designs include plain and colored garments.

Cemetery P is a Tiwanaku-style community cemetery with an unusual variability
in burial style and tomb structure type. Cemetery P includes double burials and a
secondary burial. Funerary textiles are mainly monochrome. Ceramic offerings are rare
and include blackware, a rare ceramic ware type. Cemetery P has one of the highest
frequencies of non-ceramic offerings. Only a few wealth objects were found at Cemetery
P, and the group does not stand out for pronounced unequal grave good distribution.

Cemetery Q is probably not a community cemetery because of its unusual
demographic profile (see Chapter 5). It differs from the other cemeteries in burial style,
funerary textile design, and in the lack of grave offerings. Cemetery Q is discussed in
detail in Chapter 9.

Cemetery R is a Tiwanaku-style community cemetery. It stands out for its high
frequency of cist tombs and for its surface materials, which include a large number of
incense burners. All the ceramic vessels are redware serving vessels and ceramic
iconography shows a preference for the “flamingo” motif. Cemetery R displays greater
differences in terms of the grave good assemblages sizes than many other cemeteries, and
it ranks high in terms of average number of offerings as well as number of wealth objects.

Cemetery S is a Tiwanaku-style community cemetery characterized by high
frequencies in polychrome funerary textiles, plainware ceramic offerings and basket,
gourd and wood vessels. The preference for serving wares decorated with “step-stair”
motifs is noteworthy. There is some evidence for surface activities. Most distinctly,
Cemetery S has the highest average number of grave offerings per tomb, ranks second in
wealth objects per tomb, and shows a high level of inequality of offerings within the cemetery sample.

Cemetery T is a Tiwanaku-style community cemetery with an elevated frequency of pit tombs and a few individuals buried in reclining-flexed position. Funerary garments include many polychrome textiles. Grave goods consist mainly of redware ceramic vessels with high rates of “step-stair” motif. Broken serving wares on the cemetery attest to the occurrence of extra-burial ceremonies at Cemetery T. Cemetery T has the second-highest average number of grave offerings at the site, and the size differences of grave good assemblages are very pronounced.

Cemetery U is a Tiwanaku-style community cemetery with a high frequency of pit tombs. The replacement of crania with *batanes* appears to have been a behavior specific to this group. Redware ceramic vessels with “step-stair” motif were popular at Cemetery U, in contrast to non-ceramic vessels which were rarely included in tombs. There is some evidence for surface activities. Although Cemetery U ranks first in number of wealth objects per tomb, its burials have a mean average number of offerings per tomb.

Cemetery V is a Tiwanaku-style community cemetery. It is characterized by a high frequency of pit tombs and capstones that included *batanes*. The funerary textiles include high numbers of polychrome and bichrome designs. Redware serving vessels with “flamingo” motif are a distinguishing feature of Cemetery V. The Cemetery V burials include no wealth objects, and rank very low in terms of average number of grave offerings.
Cemetery W is a Tiwanaku-style community cemetery. It is characterized by a high frequency of pit tombs and capstones that included batanes. The funerary textiles are mainly monochrome garments and the ceramic wares include high frequencies of plainware ceramic vessels. Several redware vessels are painted with the “flamingo” motif. Although burials at Cemetery W do not include any wealth objects, the average number of offerings was very high, and consisted mainly of ceramic offerings.

### 8.3 Social Affiliation of Communities at Omo M10

Subtle differences in style and wealth between the different cemeteries at Omo M10 provide an opportunity to test models of Tiwanaku social organization regarding the existing of supra-community integration and nested hierarchies. In particular, the historical Andean ayllu system has been the most influential for modeling Tiwanaku society as a nested system of kingroups that became increasingly more integrated during the emergence and expansion of the state (e.g., Albarracín-Jordan 1997; Janusek 2004). In Moquegua, Goldstein (2005, 2015) has argued that the two stylistic groups that co-resided in the four settlement clusters in the valley represented two moieties or maximal ayllus that colonized the region simultaneously but semi-autonomously. Provided that ancestors, ancestral spaces, and descent played an important role in the construction of community identities in the Andes, cemeteries would present particularly potent places for the display and recreation of ideologies related to descent and social affiliation.

The cemeteries at Omo M10 mainly align with the stylistic characteristics of the Chen Chen-style populations in terms of tomb structure and ceramic styles (Goldstein
In order to test whether the communities using the cemeteries maintained differential affiliations within the site, it is necessary to examine the site-wide spatial distribution and clustering of particular cemetery burial styles and wealth objects. In turn, this may provide evidence for the existence of a supra-communal social system of nested kin groups and the basis for how affinities would have become expressed throughout the system.

8.3.1 Spatial and Social Clusters at Omo M10

The communal cemeteries were dispersed along the site periphery. Because cemeteries were differentially placed on bluff tops and *quebrada* slopes, they were not equally visible from any location at the site. Furthermore, the temple, natural hill, and residential structures present at Omo M10 would have superimposed a social landscape that would have obstructed inter-visibility between the cemeteries and restricted their overall visibility. Depending on their location, the cemeteries not only have differential access and visibility in regard to the domestic site itself, but also to the surrounding landscape. For example, the cemeteries located on the western edge of the Omo M10 site bluff faced the river valley and site-adjacent agricultural fields, while the cemeteries on the eastern and southern site edge were closer to the caravan route that connected Omo M10 to other Tiwanaku settlements in the valley to the north and south.

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176 Nearest Neighbor Analysis of the cemeteries conducted in ArcGIS 10.2 (using the Euclidean distance method) indicated that the dispersal of Tiwanaku-style cemeteries at Omo M10 was non-random. The Nearest Neighbor Ratio was 1.499968 and the z-score 3.448616 with a p-value of 0.000562 (significant at p<0.01). Given the z-score, there is a less than 1% likelihood that this dispersed pattern could be the result of random chance.
Taking into consideration the natural topography of bluff tops and *quebradas*, I categorize Cemeteries M10I, M10J, M10M, M10P, and M10U as spatially isolated, because they are at least 100 meters apart from one another and are located on the same bluff section or in the same *quebrada*. In contrast, six communal cemeteries were located in or around single *quebradas* in the west (a “western cluster” including M10H, M10V, M10W) and south (a southern cluster including M10S, M10R, M10T) of the site, so that they shared access routes and maintained visual contact. The average distance between cemeteries in the western cluster was 78 m, less than the observed mean distance of 110 m. This spatial distribution would suggest that the social groups using the clustered cemeteries were more closely affiliated with one another than with others at the site.

The southern cemetery cluster (M10S, M10R, M10T) contained most of the wealthiest burials found at Omo M10. The three wealthiest burials (S-12, T-12, and R-23) were all located in the southern cluster, as well as six of the eight high-status burials with six or more grave offerings. The southern cemeteries also had the highest average number of offerings per burial (Table 8.12, Graph 8.6). This suggests that these three communities shared access to wealth objects like tapestry (and perhaps also polychrome) textiles, ritual paraphernalia, and standardized funerary serving assemblages (*keros, tazones, vasijas*) and *incensarios*. The southern cemeteries did, however, also differ from one another in the variable use of non-status indicators like tomb structure and non-decorated serving wares.

In contrast, the western cluster of cemeteries (M10H, M10V, M10W) was characterized by the distinctive lack of higher-status indicators, similar only to the terminal-Tiwanaku cemetery M10B. The three cemeteries contained none of the wealth
objects found at Omo M10 (Table 8.14). Their funerary assemblages ranged between zero and 3 objects, with a single “wealthier” burial in Cemetery V. Ceramic vessels (especially with figurative designs of flamingos and felines) were the preferred grave offerings used by communities in the western cemetery cluster, as was the custom to use batanes in tomb construction. This last characteristic seems particularly meaningful given the proximity of the western cemetery cluster to the agricultural fields near the river.

Cemeteries P and R display some characteristics that make them different from the typical Chen Chen-style cemeteries at Omo M10. Their location away from the valley bottom and river, and along the caravan route and geoglyphs is a characteristic attribute of the Omo-style cemeteries at Rio Muerto M43 and M70. In addition, Cemetery R was separated from the town by a quebrada, similar to Cemetery D at Omo M16. Cemetery P was the only cemetery located northeast of the temple complex at Omo M10. These locations contrast starkly with those of the six of the Chen Chen-style cemeteries found on the northern and western site boundary near arable lands.

Burials in Cemetery P contained hardly any ceramic offerings—the exception was a single polished blackware vasija in Burial P-23.2 Instead, the majority of vessels and containers used as grave offerings in Cemetery P were made from basketry and gourds (Table 8.10), which were more lightweight and portable compared to ceramic vessels. Cemetery P also showed the greatest diversity in tomb structure styles, which included one semi-subterranean cist, a type only recorded at the Rio Muerto M70B cemetery (Green et al. 2007). The unique presence of two double burials containing individuals of similar ages also marks the Cemetery P community as distinct in their ritual and social practices.
Also unusual was the age-at-death profile of Cemetery P. Despite the relatively large number of excavated tombs, and the total of 26 registered individuals, the burials contained 19 subadults and 7 adult males but no adult females. Other cemeteries at Omo M10 with similar proportions of adults all included at least one female individual. The absence of female individuals in this cemetery is perhaps indicative of different group social dynamics relating to migration, as has been proposed for other Omo-style cemeteries in Moquegua (Baitzel and Goldstein 2015).

I therefore tentatively propose that Cemetery P shares some features with Omo-style cemeteries identified elsewhere in Moquegua. Although it does not have the characteristic rockpiling on the surface, the presence of a semi-subterranean tomb, scarcity of ceramic vessels, and a secondary burial resemble the Omo-style M70B cemetery at Rio Muerto. Cemetery R presents a more ambiguous case. Despite its location near the camelid geoglyph sector, this cemetery predominantly used Chen Chen-style red-slipped serving wares as grave offerings. However, the ceramic iconography incorporated Omo-style features, such as continuous volutes and idiosyncratic zoomorphic motifs, and the incense burners used in extra-burial rituals mirror the extra-burial offerings found at Rio Muerto M70B (Goldstein and Palacios 2007, 2009). As is the case with much of the mortuary variability at Omo M10, these stylistic markers are subtle. Like cemetery M43A at Rio Muerto, Cemetery R at Omo M10 presents an amalgamation of Chen Chen-style and Omo-style assemblages. Both cemeteries are among the wealthiest found at these sites. A possible explanation for this phenomenon may be that these groups assumed a higher status in their respective settlements by acting
as interlocutors between different co-existing and complementary sub-populations in the region.

8.3.2 Inter-Community Interaction at Omo M10

Because the dispersal of the cemeteries along the site periphery and the relatively high level of homogeneity in burial styles, it is difficult to identify other types of evidence for inter-group affiliation interaction. One way in which this can be done is to identify specific objects that were shared or exchange between groups and that occurred in multiple cemeteries. For example, in Cemetery U, Burials U-19 and U-20 contained the remains of young children in standard Tiwanaku interment style. Both individuals had been given medium-sized keros with very similar STEP-STAIR designs and Coca-Cola-glass shape (Figure 8.3).

Another pair of keros with a similar iconographic motif was found in two children’s burials in Cemetery V (V-21) and M10W (W-12). These medium-sized keros had a distinctive design of fretbands, circles and crosses that was unique in Omo’s ceramic assemblage (M10=8400 and M10=7864, Figure 8.4).
Figure 8.3: Red-slipped Tiwanaku *keros* of the coca-cola-glass subtype with geometric STEP-STAIR design found in Burial M10U-19 (M10=7548) (above) and Burial M10U-20 (M10=7533) (below).
Communities at the Tiwanaku capital and in Moquegua set themselves apart through different relative frequencies of vessel forms, design motifs and artistic style (Janusek 2005:43; Goldstein 1985, 1989). It is possible that vessels of similar form and iconographic design like those described above were produced in the same workshop. This would imply that the communities from Cemetery V and W had access to the same ceramic workshop and may have shared in other aspects of production, as well.

Based on their radiocarbon dates, Cemeteries V and W were in use at the same time (Table 5.4). Their spatial proximity, and stylistic similarities support the hypothesis
that the communities that used these spaces shared a close bond. It also suggests a possible direct social relationship between the young child in Burial V-21 and the male adult found in Burial W-12, that warrants future investigation through bioarchaeological methods.177

Inter-community relationships among Tiwanaku-affiliated groups in Moquegua were neither strictly egalitarian nor highly stratified. There is no clear indication that communities were organized at a higher level into ayllu-like structures of nested levels of integration. However, the existence of kin communities represented by the individual cemetery sectors, clusters of communities as represented by the western and southern cemetery groups at Omo M10, and two (or more) stylistic traditions within the provinces, exemplified by the different funerary styles at Omo M10, strongly indicates that communities were not isolated. I would argue that they saw themselves as part of a, perhaps informal or situational, structure that did not become fully formalized and institutionalized until the Late Intermediate and Late Horizon periods in the form of the ayllu. Future study of population genetics, dietary and health patterns between cemeteries will elucidate how group interactions, and access to food and other resources may have been facilitated through these supra-community networks and relationships.

177 Keros found in Tiwanaku ritual deposits elsewhere support the idea that these vessels may have been produced in matching sets (Korpisaari et al. 2011), a characteristic that has been noted in the case of Inca royal q’eros or aquilla, as well (Cummins 2002:78). Among the Inca, matching q’eros were used in rites of hospitality, shared as gifts to establish bonds of reciprocity and obligation. Petrographic or compositional analysis of these vessels could reveal whether these keros were perhaps produced as pairs and used in similar “toasting” ceremonies.
Conclusion: Tiwanaku Community Identity in Moquegua

Like public events involving feasting and offering, mortuary practices played an important role in shaping community life and identity in the Tiwanaku provinces. Through interments and commemorative activities at the gravesite, communities materialized inter-community relationships of affinity and inequality, and marked social boundaries within and beyond their highland ethnic group. Mortuary space and style served as the primary means for expressing these dynamics. They became potent tools in the hands of Tiwanaku state agents or elites, who appropriated and transformed mortuary space and style. The result was a new form of death-related ritual that imbued elites with the power over life, ancestral bodies, and fertility.

The mortuary data from Omo M10 makes several significant contributions to ongoing debates about Tiwanaku social organization, inequality and ideology. First, through the sectorization of communal mortuary space, as seen at other provincial Tiwanaku sites, kingroups maintained a high degree of social distance even in death. The use of distinct burial spaces is indicative of corporate identities (see Beck 1995; Buikstra 1995; Goldstein 1982:67; Saxe 1980) among the communal normative cemeteries along the site periphery. Space was the most concrete way for marking community identity in life, through residential clusters and neighborhoods, as well as in death. The need to define social boundaries in such a way was perhaps caused, in part, by the great degree of homogeneity in mortuary practices that could be observed across the communal cemeteries. Normative style of Tiwanaku burial and commemorative activities allowed
for limited variability, so that the maintenance of discrete communal burials grounds was the principal form through which to express community identity.

Normative burials practices allowed for some variability in regard to the age, sex, and status of the deceased (see Chapter 7). They also varied, in a less overt form, between cemeteries. Some of the variability observed between cemeteries at Omo M10 could be attributed to different demographic profiles, which impacted the cemetery’s funerary assemblages because of the overrepresentation of certain age or sex groups (e.g., the high frequency of plain-colored textiles in cemeteries with predominantly female adult individuals). However, other stylistic characteristics appear to be more group specific, based on their repeated occurrence across different age and sex categories within a particular cemetery (e.g., use of unslipped ceramic vessels, or basketry objects). Stylistic differences were mainly found in the construction styles of tombs, and the materiality of grave offerings. In contrast, body position, numbers of offerings, and funerary dress were subject to death-related ideological or the personal characteristics of the deceased. Funerary styles differed mainly in terms of objects and practices that would not have been visible from afar, and therefore known to non-members of the community. The choices in offerings (e.g., utilitarian vs. serving ceramic vessels, and ceramic vs. basketry containers) also represent more deeply rooted differences in communal *habitus* and an everyday way of life.

These differences did not always reflect social inequality, but the unequal distribution of wealth items found in burials at Omo M10 suggests that kinship or corporate identity may have played a part in differential access to objects of wealth. Unlike status objects—e.g., spindles, pan flutes—that were made from local raw
materials, wealth objects, such as tapestry textiles, bone tubes, and metal adornments, were traded over long distance in Tiwanaku (Goldstein 2005:223) and likely imported to Moquegua through corporate exchange networks. Nevertheless, even in cemeteries with greater concentrations of wealth objects, particularly those in the southern cluster of cemeteries at Omo M10, access to wealth was not equal for all members of the community. Future studies are needed to confirm the non-local origins of these items, but their scarcity in Moquegua, the absence of provincial metal or bone workshops, and the presence of such workshops in the highlands suggests their non-local origin.

One of the central questions about Tiwanaku social organization is that of higher-level integration of communities within state society. Current models favor the ayllu as a nested, hierarchical system of moieties through which kin groups related to one another, and to the leaders of the Tiwanaku state. In Moquegua, this model has found support in the presence of multiple settlement clusters, each containing representatives of different stylistic groups (Omo-style and Chen Chen-style). Even though the non-mortuary, and many of the mortuary, components of Omo M10 clearly fall within the Chen Chen-style, some of the cemeteries also present Omo-style characteristics. This stylistic diversity can be attributable to the site’s special function as an administrative center, drawing in groups from beyond its residential constituency. This diversity, in turn, sheds some light on the inter-community relationships. There are no clear spatial or stylistic divisions that would suggest an ordered, integrated system of hierarchy or clustering for all the cemeteries at Omo M10. Most of them were intentionally dispersed. Others shared spatial niches with similar access and visibility. These rudimentary cemetery clusters also shared an increased access to wealth items and greater numbers of offerings (in the case of
Cemeteries S, R, and T), or a preference for pit tombs, utilitarian ceramic vessels with figurative designs (Cemeteries H, V, and W). Overall, this does not conform entirely to the later (perhaps idealized) models of dual- and quadripartite divisions in *ayllu* organization observed during the Late Intermediate and Late Horizon Periods. But it does potentially reveal the emergence of such a system in which some groups built and maintained stronger ties of affinity that allowed them better economic opportunities and a wider social network based on shared notions of descent or origin.
CHAPTER 9: DEATH AND POLITICS AT OMO M10

Introduction

In the preceding chapters, my analyses and interpretations focused on the “internal” social dynamics between individuals and kin communities who lived and died at Omo M10. In this chapter, I want to explore the role of mortuary and commemorative practices for expressing social identities and inequalities beyond the level of the kin group. In the first section, I will introduce the only non-Titanaku Middle Horizon cemetery, Cemetery X, at Omo M10. The differences in burial style between Cemetery X and the Tiwanaku-style cemeteries suggest that the stylistic homogeneity of highland burials in Moquegua was not only a means for perpetuating cultural identity among provincial Tiwanaku populations. They also provided an opportunity to perform ethnic identity vis-à-vis other populations living in the Moquegua valley and on the Pacific coast. A scenario of sustained interactions between Tiwanaku immigrants and local groups is furthermore suggested in the form of several individuals buried in the distinct Cemetery-X style found in a Tiwanaku-style cemetery at Omo M10.

In the second part of this chapter, I shift the focus of my analysis back to the internal politics of Tiwanaku provincial life. I focus in more detail on the non-normative Tiwanaku-style Cemetery Q located near the Omo M10 temple, which was introduced and discussed in a more preliminary fashion in Chapters 5 and 6. The unusual location, demographic profile, and burial style of this cemetery stand in contrast with the group-oriented funerals and personalized burials of Omo M10’s community cemeteries.
Comparisons with similar non-normative burial finds in the *altiplano*, together with a brief analysis of “violent” iconographic themes in Tiwanaku art guide my interpretation of the Cemetery Q burials as syncretic spectacles of death and power at the hands of Tiwanaku leaders.

**9.1 Identity and Interaction Beyond the Tiwanaku Community**

**9.1.1 Interaction with non-Tiwanaku Highland Groups**

The nature of interaction between residents of the Tiwanaku enclaves in Moquegua and contemporaneous populations living in the Osmore drainage, namely the indigenous Huaracane population and groups associated with the Wari empire of the central Andes, continue to be subject to debate (e.g., Costion 2013; Goldstein 2005:168; Owen and Goldstein 2001:185). Wari-associated materials (from the Arequipa region) are exceedingly rare at Tiwanaku sites. They have been identified at Omo-style sites and in Chen Chen’s burial assemblages (Garcia M. 1990; Goldstein 2005:170; Sharratt 2011:178).

At the Omo M10 cemeteries, no Wari-style ceramics were recovered. The only object of possible Wari-style and origin is a poorly preserved tapestry cloth that was found in a wealthy child burial (U-1, M10=7387.01) alongside with Tiwanaku-style ceramics, textiles, and artifacts (Figure 9.1).\(^{178}\)

\(^{178}\) Only one similar object has been identified in Moquegua in the M16D elite burial alongside various other fine polychrome Tiwanaku textiles (Dr. Amy Oakland, personal communication 2013).
This tapestry was made using cotton warps, a technology that has been considered diagnostic of Wari tapestry weaving, as opposed to Tiwanaku tapestries that are made entirely of camelid fiber (Oakland and Cassman 1995:37). The iconographic design of the preserved textile fragments falls squarely within the broader Middle Horizon tapestry iconography tradition. It therefore cannot be assigned to either Tiwanaku or Wari definitively. The radiocarbon date from this textile (A.D. 772-985, 2-sigma) (Table 5.4) assigns the textile to the earlier group of Middle Horizon burials. The inclusion of this textile alongside other high-status objects in Burial U-1 (polychrome ceramics, zampoña) would lend support to Sharratt’s argument that the interaction of Tiwanaku-affiliated populations with the nearby Wari enclave may have occurred through the exchange of preciosities at the level of elite individuals (Sharratt 2011:179).

179 Middle Horizon radiocarbon dates from Omo M10 burials are listed in Table 5.4. The calibrated dates cluster into two groups: an earlier group of early 8th to late 10th century A.D. dates, and a later group of early 9th to late 11th century dates. This clustering is caused by a “shelf” in the calibration curve.
A second object of non-Tiwanku style was a decorated ceramic bowl (M10=8425) found in burial M-26 (Figure 9.2). This straight-walled hemispherical bowl was covered in a partially faded dark-red slip painted with three horizontal, tightly undulating dark purple-reddish lines alternating with three black bands.\(^{180}\) The bowl was found in a completely looted pit tomb with no other materials. Based on the size of the pit, it originally would have contained the bundle of a small child.

\[\text{Figure 9.2} \text{ Red-slipped straight-sided bowl with black-and-red/purple design (M10=8425) found in Burial M10M-26.}\]

\(^{180}\) Non-Tiwanku style ceramics in other Tiwanaku burials at the site of Chen Chen were identified as being of the regional Qoscopa style variant derived from Wari ceramic style (Garcia 1990). As Owen and Goldstein note, Qosqopa-style sherds are a rare occurrence in the Omo ceramic assemblage (2001:179). I was unable to find sufficient illustrations of this style to make a conclusive identification, although the slip color of the bowl in tomb M-26 seems too dark and the surface is not polished enough (compared to Owen and Goldstein 2001:figure 10A). Tung and Owen have pointed out that the Qosqopa style is a poorly defined, variable range of styles found mostly in the department of Arequipa that have unmistakable Wari features (2006:441).
Provincial Tiwanaku mortuary practices used objects like the emblematic serving wares and camelid-fiber garments to display their affinity with the highland. It is therefore not surprising that foreign or exotic luxury objects played a small role in burial assemblages and would not have played a role as indicators of wealth, authority or long-distance influence. Foreign objects were also rare at the residential and ceremonial sectors at Omo M10 (Goldstein 1989:141), pointing to limited interactions between Tiwanaku and other ethnic groups in the region more generally.

9.1.2 Interaction with Coastal Groups

In Moquegua, Tiwanaku interactions with other ethnic groups—though limited—were primarily directed toward the Pacific Coast. Marine resources found in domestic middens (Goldstein 2005:217), and in caches and ritual deposits at the temple complex at Omo M10 (Goldstein 2005:297; Kjolsing and Goldstein 2013) suggest that the motivations for seeking interactions with coastal populations were economic as well as ideological.

Cemetery X at Omo M10 differed substantially in its burial style, indicating that its occupants did not share the same ethnic identity as the other communities represented by the peripheral normative cemeteries. Cemetery X was located along the northwestern edge of the site on the upper slope of the bluff top facing the river valley. The sector was also located near the Formative Period boot tomb cemetery (M10Y), which separated it from the Tiwanaku-style residential area. A single radiocarbon date from a funerary reed mat assigns the M10X cemetery a Middle Horizon date of A.D. 683-965 (2-sigma, cal.), contemporaneous with the earliest Tiwanaku-style burials at Omo M10.
Thirty-nine burials located in two excavation units were excavated in Cemetery M10X. The density of tombs (1.1 tombs/m²) far exceeded that of the Tiwanaku-style cemeteries (0.4 tombs/m²). As a result of the condensed burial space, tombs often overlapped and cut into one another. Because there are no natural or topographic limits that surround this cemetery, I find it unlikely that crowding would have been caused by lack of space in the short or long term. It seems more probable that the close placement of the tombs formed part of a distinct burial practice, which de-emphasized “personal” space for the deceased, in contrast to the regularly spaced Tiwanaku-style tombs.

Without exception, the tombs consisted of unlined pits, many of them between 10 and 40 cm deep with an average depth of 33 cm. Tomb openings were marked by stone collars or single rocks, and the funerary bundle would have been covered with a layer of loose field stones and cobbles, originally. The shallow depth and protrusion of the rock piles above the surface indicates that the burials were very superficial and exposed. From the fifteen intact and lightly disturbed tombs found in Cemetery X it was discernible that the interred had been placed on their sides supine with their legs tightly flexed\(^ {181} \), their bodies wrapped loosely in textiles and fine reed mats (Figure 9.3). Individuals were generally oriented with their feet toward the northeast, and their heads toward the southwest, although some were found facing west, as well.

\(^ {181} \) The individuals were often found with their legs resting on one side and the torso (and rib cage) “twisted” in the direction of the legs with one side of the back in contact with the ground. This gave them the appearance of being between a supine and “on-the-side” position. However, adult durials X-20 and X-42 found in fully supine position with tightly flexed legs lead me to propose that the “twisting” of upper bodies seen in child burial X-29 was the result of taphonomic processes during which gravity pulled the flexed legs and body to one side.
Figure 9.3 Burial M10X-17 of an older child in supine, flexed body position wrapped in textiles and reed mat.

The textile garments used for wrapping the bodies of the deceased in Cemetery X were produced in the regional tradition of warp-faced camelid-fiber structure. Tombs contained a mean of two textiles (1.95) per burial, similar to Tiwanaku-style burials (1.91 textile/tomb). Ninety-three percent of textiles at Cemetery X were woven in warp-face. They included some warp-striped design executed as bichrome or polychrome patterns. The remaining seven percent (n=3) of textiles were balanced plainweaves, a structure that was not used in Tiwanaku-style funerary garments at Omo M10. Furthermore, four percent (n=2) of textile specimens found at Cemetery X had been woven from cotton fiber, compared to less than 1 percent in the Tiwanaku-style cemeteries. The lower selvage of one warp-faced tunic in Burial X-32 had been finished with a chain-linked selvage (M10=8752.06), a technological feature not found among the Tiwanaku-style textiles at Omo M10. Polychrome cross-knit loop stitch embroidery was used on only
four percent of the textiles, compared to 26.8 percent of embroidered Tiwanaku-style funerary textiles.

Based on diagnostic elements, six probable tunics or *llicllas* were identified at Cemetery M10X. The textile assemblage included two additional textile structures that were not found in Tiwanaku-style burials. In tomb X-16, a fragment of a warp-face plainweave band made from undyed camelid fiber measuring 1.2 cm in width was found attached horizontally to the frontal portion of an infant cranium (M10=8675.01, Figure 9.4). The weft selvages of the band were preserved enough to determine the overall width of the object.

**Figure 9.4** Fragments of subspecimen M10=8675.01, a 1.2-cm wide warp-face band woven from camelid fiber found on the frontal bone of an infant in Burial M10X-16.

Based on the context and shape of this textile, it is possible that this band had been used as a cranial modifier to give the cranium the diagnostic fronto-occipital style common among populations in the western coastal valleys of the southern Andes. Cranial

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182 Burial X-21 (n=1), Burial X-32 (n=4), Burial X-34 (n=1).
modifiers are not found in Tiwanaku-style funerary contexts in Moquegua; like fajas or belts, they may not have been considered appropriate funerary attire. The fact that the band was not removed in the case of the infant buried in tomb X-16 could point to a distinct cultural practice.

The second unusual textile object found at Cemetery M10X was the fragment of a faja or belt found in burial X-32 (M10=8752.04). Although only 55 cm of the length of the textile had preserved, the lateral selvages were intact enough to reconstruct the original width of 11 cm. Woven from naturally-colored camelid fiber in a warp-face pattern, the warp and weft threads were significantly coarser than those used for larger structures (1.2 and 1.5 mm, respectively, compared to the average 0.55 mm). The belt was perhaps intended to sustain more tension and stress than ordinary warp-faced plainweave structures, like carrying objects. Placed inside the funerary bundle, the belt fragment had been used like other textiles to loosely wrap the body, giving no further indication of its original function. No similar object has been identified in other Tiwanaku textile assemblages at Omo M10 or elsewhere.183

Overall, the textiles included in the funerary assemblages of Cemetery X bear much resemblance to highland textiles in terms of their raw material and weave structure. However, they also display a number of characteristics (cotton fibers, balanced plainweave structure, chain-linked selvages) that indicate different technological traditions and cultural influences. The decision to include textile objects like cranial

modifiers and *fajas* in burials is also unusual in light of the highly conservative nature of Tiwanaku mortuary textile assemblages in the valley.

The critical evaluation of ceramic evidence from cemetery M10X is made complicated by the extensive looting of the sector. No intact vessels or in-situ ceramic fragments were recovered from secure contexts. Because the residential midden deposits reach up to the southeastern border of the cemetery, some of the fragments found on the surface may also have a non-mortuary origin. The surface sediments and disturbed tomb sediments contained 769 ceramic fragments belonging to seven distinct ware types (Table 9.1).

**Table 9.1** Ceramic ware types identified at Cemetery M10X.

<table>
<thead>
<tr>
<th>Ware Type</th>
<th>n</th>
<th>Diagnostic</th>
<th>Form Types</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiwanaku Red</td>
<td>60</td>
<td>34</td>
<td><em>kero, tazon, vasija</em></td>
<td>7.5YR 6/4; 7.5YR 5/4; quartz, calcium carbonate, mica</td>
</tr>
<tr>
<td>(Tiwanaku) Plain</td>
<td>477</td>
<td>0</td>
<td><em>olla</em></td>
<td>5YR 5/4 – 10YR 6/4; no slip; quartz, calcium carbonate</td>
</tr>
<tr>
<td>“Thin Orange” Ware</td>
<td>82</td>
<td>24</td>
<td>restricted-neck bowl, <em>olla</em></td>
<td>5YR 6/4; no slip; mica, calcium carbonate</td>
</tr>
<tr>
<td>Huaracane</td>
<td>23</td>
<td>1</td>
<td><em>bowl</em></td>
<td>7.5YR 4/3, no slip; quartz, calcium carbonate</td>
</tr>
<tr>
<td>Wari</td>
<td>1</td>
<td>1</td>
<td><em>bowl</em></td>
<td>2.5YR 7/3; Slip 10R 4/4; quartz, calcium carbonate</td>
</tr>
<tr>
<td>Chiribaya</td>
<td>18</td>
<td>16</td>
<td><em>bowl, keros, tazones</em></td>
<td>7.5YR 4/4; Slip 10R 4/4; mica, quartz, calcium carbonate</td>
</tr>
<tr>
<td>Unknown</td>
<td>24</td>
<td>4</td>
<td><em>vasija, olla</em></td>
<td>7.5YR 6/4, Slip 10R 4/4, inclusions: mica, feldspar, quartz, calcium carbonate</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>769</td>
<td>80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sixty fragments were clearly Tiwanaku red-slipped serving wares (Figure 9.5). Their form types included red-slipped serving wares included *keros*, *tazones*, *cuencos* and *jarras*. The majority of ceramic sherds came from undecorated plainware vessels (n=477). Eighty-two fragments belonged to a previously unidentified ware type that consisted of orange-beige, relatively homogenous paste tempered with small quartzite inclusions. The vessels made from this paste were thin-walled (3-4 mm). Their forms included medium-sized bowls, globular vessels with restricted openings and flat-based vessels with restricted openings and flaring rims (e.g., M10=8583.06, Figure 9.6). Twenty-two fragments of this ware type were also identified in the domestic ceramic assemblage recovered from Cemetery W.
The other sherds recovered from Cemetery X were of distinctly non-Tiwanaku styles. Several fragments of Huaracone coarse and fine wares (n=23) included pieces of a straight-sided, burnished bowl (Figure 9.7a). Another rim fragment was identified as a piece of a possible Qosqopa Wari-style bowl, with a painted black-and-cream “X” motif on a dark-red slip (Figure 9.7b; compare to Goldstein 1985:figure 9e,f). Several more fragments (n=18) were identified as belonging to possible Chiribaya-style bowls and keros, with brown paste, and black-on-red line designs (Figure 9.7c). Finally, the ceramic assemblage from Cemetery X included 24 fragments from an unknown style. Their paste was of reddish-brown color with small or medium-sized inclusions of mica, quartz, feldspar and calcium carbonate. The slip had a purple-red color and included large quantities of mica. The vessels were thin-walled (3-4 mm) and included a small vasija (rim diameter 8 cm) with a pre-firing perforation in the base (Figure 9.7d).
Figure 9.7 Fragments of miscellaneous non-Tiwanaku ceramic styles from Cemetery X: a) Huaracane Fino bowl; b) Wari-style bowl; c) Chiribaya-style bowl; d) Unknown style perforated vasija base.

The great stylistic variability in the Cemetery X ceramic assemblage is the result of taphonomic (intrusive domestic materials) and cultural processes. The presence of fragments of Wari-style, Chiribaya-style, and of unknown cultural affiliation at Cemetery X become relevant in light of the sector’s unusual interment patterns. Even though the different styles constitute small percentages of the total ceramic assemblage at Cemetery X, they are nevertheless relevant because they were not identified among the other mortuary and non-mortuary Tiwanaku assemblages. The dating of these styles in relation to the burials is challenging. Qosqopa-style and Chiribaya-style ceramic materials have been dated to the later Middle Horizon period.\(^{184}\) Considering also the earlier radiocarbon

\(^{184}\) According to Owen and Goldstein (2001:179), who cite Lumbreras (1983) and Neira (1990), the Qosqopa style is probably a later Middle Horizon style, provincial and derived from Wari. No absolute dates are given. The dating of the Chiribaya ceramic
date from Cemetery X, it seems plausible that this sector was in use throughout entire Tiwanaku occupation of the Omo M10 settlement, evidencing the sustained interaction between highland and coastal groups.

The grave offerings in Cemetery X included both quotidian objects of highland or local provenance, as well as non-local objects of possible coastal origin. Of the fifteen intact or disturbed tombs, seven contained offerings beyond the textiles and reed mats used to wrap the funerary bundle. A comb found in child burial M10X-8 (M10=8672, Figure 9.8) resembles similar objects found in Tiwanaku tombs, where combs were found exclusively with the remains of adult women.

Figure 9.8 Comb (M10=8672) from child burial M10X-8.

The absence of a spindle typically found together with combs indicates that in this case the comb may not have signified the weaving ability of the deceased, as it usually would in the context of Tiwanaku-affiliated burial. Instead, combs may have served a different function in this group, or the decision to use a comb as burial offering could have been motivated to a different ideology of death and afterlife related to the occupants of Cemetery X.

![Image of a comb](image)

**Figure 9.9** One of seven split-cane pieces wrapped in herring-bone pattern with camelid-fiber thread from Burial M10X-32.

Burial M10X-32, which included the *faja* (see above), contained an assortment of funerary offerings, consisting of a worked gourd container with perforations below the rim, and several split-cane sticks wrapped in string with unknown function (Figure 9.9). Other tombs contained a basket plate (M10= 8600, M10X-19), a carved wooden spoon (M10=8546, M10X-7), all made from locally available material and similar to Tiwanaku grave offerings.

Objects made from non-local materials consisted primarily of marine resources. Burials M10X-30 and M10X-34 included three fishhooks made from cactus-spines (Figure 9.10a). Three other tombs contained beads and whistles made from large *Oliva*
*peruvianis* shells (Figure 9.10b). Necklace pendants of zoomorphic and geometrical shapes were also made from marine shells and greenstone.

![Figure 9.10 Grave offerings of coastal origins. a) Cactus spine fishhook from Burial M10X-30. b) Shell whistles from Burial M10X-9.](image)

Cemetery X also had the highest frequency of metal objects. Of eleven silver and copper objects found at Omo M10, seven were from Cemetery X. They included two copper rings (Burials M10X-2 and M10X-10) and two silver rings (M10X-16) (Figure 9.11) crafted in distinct styles, and three silver objects that may have also been beads (Burial M10X-14). There was also indirect evidence to suggest that the burials had included larger copper objects, such as pendants.

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185 The three objects consisted of thin sheets of silver approximately 2-cm wide that had been rolled and tied with string.

186 The skeletal remains of a young child in Burial X-11 had stains the color of oxidized copper. The staining was limited to the bones of the upper rib cage and shoulders. Discoloration of bone in copper-producing regions has been associated with the inclusion of metal grave offerings (Morris 1981). It is possible that the child in Burial X-11 had been interred wearing or wrapped in a large copper object, perhaps a breast plate, neck or chest ornament that had been removed during later looting events.
Based on the distinct funerary practices and material assemblages recovered at Cemetery X, its occupants were likely not of highland Tiwanaku origins. They also showed no evidence of acculturating to Tiwanaku-style lifeways. Body preparation, interment style and offering assemblages indicate a distinct cultural identity. Preference for marine-associated objects like shells and fishhooks points to an affiliation with the Pacific littoral. This hypothesis is further supported by the high frequencies of Cribræ orbitalia and porotic hyperostosis identified on the skeletal remains from Cemetery X, which were on average 20 to 30 percent above the rate found in the Tiwanaku-affiliated populations (Baitzel and Dahlstedt 2014). Blom (2005:162) has argued that these indicators of systemic stress were the result of a mixed diet of marine foods and maize in combination with exposure to unclean water sources in the lower river drainage zone.

In contrast, the use of warp-face camelid wool garments, stone beads and metal ornaments cannot be conclusively tied to a particular region or culture within the valley. The early Middle Horizon date associated with the cemetery, together with its peripheral location near the Formative boot tomb cemetery, suggest that the Cemetery X community is contemporaneous with the Tiwanaku occupation at Omo M10, and may have continued
into the later Middle Horizon phase as indicated by the presence of Qosqopa and perhaps Chiribaya ceramics.

9.1.3 Multiethnic Interactions at Omo M10

Because of the segregated nature of cemeteries at Omo M10, it is difficult to make inferences about the interactions that would have taken place between users of Cemetery X and the Tiwanaku-descendant populations. As in the case of inter-community interaction between Tiwanaku groups (see above), evidence for inter-ethnic interactions exists in the form of isolated burials that suggest the movement of individual persons across community boundaries.

Cemetery I was a Tiwanaku-affiliated cemetery with subterranean, single-individual interments, seated-flexed bodies, and typical serving wares and weaving assemblages. Three burials within Cemetery I did not conform to this pattern—Burials M10I-10, M10I-14, and M10I-22 (Table 9.2). All three were shallow stone-collared pits that had been disturbed. The tombs contained the remains of adolescent to young-adult individuals, of whom only one could be sexed definitively as female.\(^{187}\) Their bodies lay in a reclining or supine position with the legs tightly flexed and the arms crossed over the chest or stomach.

A fragment of reed mat found near the head of individual I-10 indicates the body may have been wrapped in textiles and reed mat similar to the treatment of bodies in

\(^{187}\) Because the burials had been disturbed and the bones exposed for a prolonged period, many of the diagnostic features on the crania and innominate bones had been destroyed. Cranial modification styles were tentatively assigned as fronto-occipital for individuals I-14 and I-22.
Cemetery X. Formal burial offerings were only found in Burial M10I-22, consisting of two baskets (a deep and a shallow bowl) and a wooden spoon (Figure 9.12). Two similar objects were found in the adjacent Tiwanaku-style Burial M10I-24.

Table 9.2 Biological and mortuary attributes of possible “outsider” individuals at Cemetery I.

<table>
<thead>
<tr>
<th>Burial Number</th>
<th>Age (yrs)</th>
<th>Sex</th>
<th>Tomb Structure</th>
<th>Body Position, Orientation</th>
<th>Offerings</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-10</td>
<td>13-18</td>
<td>unknown</td>
<td>Shallow Collared Pit</td>
<td>Supine flexed, NE</td>
<td>reed mat</td>
</tr>
<tr>
<td>I-14</td>
<td>22-26</td>
<td>Female</td>
<td>Shallow Collared Pit</td>
<td>Reclined flexed, E</td>
<td>-</td>
</tr>
<tr>
<td>I-22</td>
<td>17-20</td>
<td>ambiguous</td>
<td>Shallow Collared Pit</td>
<td>Supine flexed, SW</td>
<td>2 baskets, spoon</td>
</tr>
</tbody>
</table>

The body position, tomb structure and interment style of these three I cemetery individuals also do not correspond to Tiwanaku-style deviant or non-normative social position (see Chapter 6). Instead, they resemble the burial style of Cemetery X in terms of body position, shallow tomb structure, and the use of reed mats. The baskets and spoon found with individual I-22 resemble Tiwanaku-style materials though without pottery we cannot be conclusive about mixed affiliation.
Figure 9.12 Planview of Burial I-22 in Cemetery I, a young unsexed adult buried in the style of Cemetery X (supine-flexed) with offerings of baskets and spoon.

The three unusual individuals in Cemetery I were all of young adult age. If these individuals were of different (local or coastal) ethnic origin, they may have joined the M10I community just shortly before their death and had not become acculturated at the time of their death. Although they were afforded a burial space among their new home community, in all other respects the mourners (Tiwanaku, non-Tawanaku or both) used the funeral to materialize their cultural origins and affiliation. Ongoing bioarchaeological, isotopic, and biological distance studies of the remains from the three burials can test whether these individuals had undergone significant recent changes in diet or residential location.

The representation of local or coastal populations in the form of cemeteries in or near Tiwanaku-affiliated enclaves in Tiwanaku is not limited to the Omo M10 site, and occurred several times within the Moquegua region. Cemetery sectors M43C at Rio
Muerto and M1-29 at Chen Chen (see Chapter 4) presented similar characteristics of shallow burials, individuals in supine flexed position wrapped in reed mats and with offerings of metals, and marine materials (Goldstein and Palacios 2009; Palacios 2005; Somerville et al. 2011). The recurrent placement of local or coastal-affiliated cemeteries near Tiwanaku settlement clusters suggests a broader, more organized pattern of multi-ethnic interaction in the mid-valley Moquegua region.

9.2 Death and the Tiwanaku State in Moquegua

Introduction

The continuous use of community cemeteries throughout the Middle Horizon occupation of the Omo M10 site supports a model of kin-based social organization. This is in accordance with the evidence from residential compounds at Omo M10, where community plazas, clustered residences, and segregated living spaces were maintained despite other substantive changes in household activities during this time (Goldstein 2005:214; Janusek 2004:222). The lack of clear-cut inequalities in terms of space and grave offerings between the cemeteries at Omo M10 supports the arguments based on domestic contexts that emphasize the high degree of autonomy among communities (e.g., Goldstein 2000b: 197; 2005:315). This evidence must be brought into accord with the role of Omo M10 as the ceremonial-administrative center of the Tiwanaku enclaves in Moquegua.
9.2.1 Non-Normative Death Rituals Beyond the Kin Community

As the evidence presented in Chapter 8 illustrated, none of the communities appears to have held absolute power over others, although access to wealth and the making of prestige and status varied somewhat between kin communities. I propose that if we are unable to detect social inequalities in normative mortuary practices employed by kin communities in the provincial Tiwanaku society, perhaps we may be able to identify their actions in non-normative mortuary practices, instead. Models of leadership in Tiwanaku society have portrayed Tiwanaku elites as autocratic rulers who directly controlled means of production (labor) and exchange (Kolata 1993, 2003b), or community-embedded leaders who coordinated social cohesion and economic collaboration (Seddon 2013; Janusek 2004, 2008). In both cases, elites are considered to have assumed sponsorship of public ceremonies and festivities to achieve their goals.

Tiwanaku non-normative death rituals offer a complementary perspective to this debate. Non-normative burials found in association with monumental architecture at the Tiwanaku capital and secondary sites (Couture and Sampeck 2003; Korpisaari 2006) suggest that death-related rituals may have formed part of political ceremonies or spectacles beyond the better-known elite-sponsored feasting rituals. Human remains in sacrificial and offering contexts (e.g., Blom and Janusek 2004; Blom et al. 2003; Couture 2003: 252–254; Verano 2013) have generally been considered as isolated phenomena associated with consecration and termination events of elite architecture.

Given the consistent association of elite-associated mortuary practices with monumental architecture, I return to the burials excavated in Cemetery Q, near the Omo M10 temple. As the only structure of its kind in the Moquegua valley, the Omo M10A
monumental complex is considered the most direct representation of Tiwanaku state power and agency in the region (Goldstein 1993a, 2005). Within the temple, rituals involving human remains resembled those at monumental structures at the site of Tiwanaku (see Chapter 4). They included secondary interments of mixed, disassociated remains in shallow pit and associated with architectural foundations in the upper court of the temple structure (Dahlstedt and Goldstein 2013; Goldstein and Palacios 2015:138). Human body parts were often disposed of alongside camelid remains, a possible indicator that human and animal remains were used and valued in similar ways.

I propose two scenarios of how Tiwanaku death-related rituals may have become part of elite controlled ideology and practice. To position themselves as primus inter parem, state-associated elite groups or individuals could have co-opted and reproduced community funerary rituals at a larger scale and more public context. This would resemble the maximal ayllu, with elites as nearest descendants of “ancestral” figures. This co-option could take the form of higher quantities and qualities of grave offerings in state-associated contexts, greater visibility of funerary architecture to continuously invoke the memories of the dead, and the intensification of commemorative practices near state-associated graves.

Conversely, if state-sponsored death rituals “inverted” or opposed communal funerary rituals, then state elites would have positioned themselves as protectors against the potential threat or danger that “bad deaths” presented to the social order. The ability of ritual practitioners to control such a threat presented a source of power and legitimization. Rather than reproducing communal funerary practices, negative representations of death would be reflected in the violent actions against the living or
dead bodies, careless disposal of the remains, absence of offerings and funerary dress, lack of funerary architecture and prolonged commemorative activities.

Alternatively, this group of non-normative burials, although found near the temple, may have been the result of idiosyncratic community-organized rituals, in the absence of elite persons or state agents who organized these events.

9.2.2 Temple-Affiliated Burials and Human Sacrifice in Cemetery M10Q

A brief description of its location, size, and demographic profile identified Cemetery Q (Chapter 5) as non-normative in comparison to peripheral, large, and self-reproducing communal cemeteries at Omo M10. The cemetery was situated approximately 40 m east of the temple’s upper court on an artificially raised terrace without formal boundaries. It was significantly smaller (400 m²) than the other Middle Horizon cemeteries at Omo M10.

The body preparation and interment of the individuals interred in cemetery M10Q was non-normative (Chapter 6.4.3) with circumstantial evidence of a violent cause of death. Particularly notable were the atypical facedown-flexed body position of the interred (Figure 6.22), as well as the uniform funerary attire, the lack of offerings, and the covering of the interred bodies with reed mats and large stones. As suggested in Chapter 6, this funerary treatment suggests an ambiguous attitude toward the deceased. The de-personalized treatment of the deceased also entailed an increased investment. Rather than dressing the dead in their personal, everyday garments, these bodies were wrapped in identical warp-striped tunics. The hairstyle and four-pointed hat used to cover the face of Individual Q-7 suggests great investment in the preparation of the living and dead body.
The disposal of the funerary bundles in cemetery Q contradicts and inverts the perceived and physical proximity between the living and the dead that marks the communal cemeteries. The facedown position and covering of the body in reed mats and rocks created a physical boundary that made the remains of the deceased inaccessible or taboo. By locating the burial in the temple-associated space away from the communal burial ground, the distance between the deceased and their community was also reinforced. The absence of materials on the surface of Cemetery Q indicates that the deceased were excluded from prolonged commemoration and did not become part of the social memory of their community. Stylistically, the temple-associated burials bear resemblance to an offering of paired-camelids offering found in the upper court of the Omo temple complex (Dahlstedt 2013; Goldstein and Palacios 2015), and to the Aymara practice of dressing and adorning camelid sacrifices (Abercrombie 1997:167). However, the Q burials were interred outside the temple, without any indication of direct access to the temple via lateral entrances. This suggests that the individuals in Cemetery Q did not serve the same purpose (of consecrating or terminating structures) as the “foundation sacrifices” found at Tiwanaku.

I would argue that the Cemetery Q burials formed an intermediate or syncretic ritual practice between formalized architectural offerings (Blom et al. 2003:436–437; Couture 2003:252–253), the less formal deposit human and camelid sacrifices found in open public space (Verano 2013), and the exclusionary, “punitive” non-normative burial styles used among communities to ward off the dangers caused by “deviant” deaths.
9.2.3 Iconographic Evidence of State-Sponsored Violence at Omo M10

The tombs in Cemetery Q did not contain iconographic evidence of sacrificial or other types of violent practices, but objects from other tombs at Omo M10 suggest that provincial Tiwanaku residents knew of elite ideologies relating to sacrifice and head-taking. At Tiwanaku itself, the act of head taking is represented in the form of chachapumas, “guardian” figures of anthropomorphized felines holding human heads, and that were probably placed at the staircase of major monuments (Kolata 2003c:191–192). Textile and ceramic art also frequently depict “sacrificer” figures of anthropomorphitic felines or camelids that hold human heads and axes or other weapons (Conklin 2005). A fragment of a Tiwanaku tapestry textile depicting a “sacrificer” figure was found in the M10A temple (Goldstein 2005:298).

In the cemeteries at Omo M10, this particular iconographic motif is represented only once, on a pyro-engraved bone tube (Figure 9.13). The bone artifact had been placed in the tomb of an older adult female (M10S-12), alongside several ceramic and basket vessels, a spoon and a comb. The bone tube was carved and polished from the right humeral shaft of a juvenile camelid (S. deFrance 2013, pers. comm.). The pyro-engraved design depicted a zoomorphic figure in profile.
Figure 9.13 Pyro-engraved Bone Tube (M10=8943) found in Burial M10S-12 depicting a camelid “sacrificer” holding a disembodied trophy head.

The figure is shown kneeling on the right knee with the left foot placed slightly forward. The right foot has a split toe, characteristic of a camelid, while the left foot has three claws or talons, similar to those of a feline or avian figure. Around the neck is a band decorated with opposing triangles; the end of the band has a split end and hangs loosely in front of the neck. The figure has a black-rimmed split eye. Out of the top of the head comes a band, rope or braid bent backwards over the ears, ending like the tail in three plumes. The ears are “floppy”, an attribute used for camelids in Tiwanaku iconography. The snout consists of a projecting nose (more often seen in depictions of felines), as well as long canines and a tongue or object that projects from the teeth. In the hand that is shown, the figure holds the hair of a disembodied human head shown in profile. The eye seems to be closed, and the lips are stitched shut. There seems to be a
dark-colored substance—perhaps blood—flowing from the chin, the same color as the object protruding from the snout of the camelid figure. The upper edge of the bone tube is decorated with a horizontal “S”-motif. Similar bone tubes have been recovered at Tiwanaku and Lukurmata (Janusek 2004:180), raising the possibility that this object was imported to the Moquegua valley rather than locally produced.

Residents of Omo M10 may have gained access to knowledge of Tiwanaku’s death-related state ideologies in two ways: material objects or first-hand experiences or accounts of sacrifice rituals taking place at Tiwanaku. Local leaders received exotic objects like bone tubes and tapestry tunics from the highlands, or produced them locally. The iconographic motifs associated with these objects depicted the violent taking of lives and heads. We know from the evidence at Tiwanaku that human sacrifice and head-taking were part of ritual practices performed in elite spaces by the time social inequality became institutionalized in the city and throughout the state. First-hand or second-hand knowledge of these rituals through travel to the capital or import of state-directed iconography enabled local elites or ritual specialists to perpetuate similar practices in the provinces.

9.2.4 Death, Power and Tiwanaku State Ideologies

The iconographic evidence of violence and death sheds a new light on the non-normative burials in Cemetery Q. I would argue that in the hands of the state and its agents, death-related rituals and human bodies acquired a new purpose that was distinct and in many ways opposed to the ways in which communities interacted with the dead and their memories. Comparing the low quantity of burials in Cemetery Q (estimated 50
burials), with the hundreds or perhaps thousands of burials in the peripheral community cemeteries at Omo, it becomes apparent that state-sponsored or elite-organized sacrifices and burial rituals would have occurred very infrequently at Omo. The potentially violent manner of death, the careful preparation of the bodies, and the symbolically charged rock-fill of the burial pits presents a recombination of stylistic burial elements from the Tiwanaku capital with individual, non-normative interments in communal cemeteries at Omo M10.

The temple at Omo M10 has been interpreted as an administrative or ceremonial structure built following the highland colonization of the valley in an effort to strengthen the control of the capital and heartland, or perhaps as an effort by provincial residents to formalize their diasporic highland identity (Goldstein 1993a, 2005:304). The burials in Cemetery Q offer further evidence for the link between this provincial ceremonial space and monumental spaces in the Tiwanaku capital. This strengthens the model of a close ideological connection between provincial leaders and capital elites, and suggests that the semi-autonomous communities living at Omo M10 and nearby sites were integrated by participating in or witnessing the actions, ritual or otherwise, that took place in or around the Omo M10 temple under the coordination of a group of elite individuals or ritual specialists. At the Tiwanaku capital, rituals involving the sacrifice of human bodies were persistently associated with elite spaces and public monuments, and thus did not form part of a communal set of death-related practices. The reproduction of similar rituals at the provincial ceremonial center suggests that the ritual practitioners of these sacrifices

188 Although more radiocarbon dates are necessary to determined at what intervals such events would have taken place
had direct knowledge of these events, tying them closely to the urban monumental spaces and residents of the capital.

The inversion of bodies and traditional communal burial and commemorative practices in Cemetery Q furthermore suggests that Tiwanaku state elites may have constructed an ideology of power and inequality through the unequal treatment of human bodies as valued objects in the context of discrete and deviant burial. Rather than preserving bodies and memories in accessible places, the power of state leaders lay in the ability and right to dispose of human lives and bodies in an exemplary or punitive, but certainly spectacular fashion that did not require them to maintain the memories of the dead through continued offerings. Although it is not yet possible to say on what basis individuals were chosen for interment in Cemetery Q (e.g., age, sex, ethnicity, kinship, origin), their cranial modification styles and the careful preparation of the bodies suggests they had been members of Tiwanaku society, i.e. kinship communities, in life. The practice of appropriating human life, separating bodies from their communal burial spaces, and eradicating personal memory would create a (temporary) state of exception in which community ideologies of death and ancestors were inverted and upset in favor of elite interests.

Conclusion

Tiwanaku communal burial practices presented an opportunity to maintain and reshape the memories of the homeland, but also to assert the colonists’ identity claims vis-à-vis other ethnic populations living in the region. The presence in cemetery X of a
contemporaneous, Middle-Horizon, non-Towanaku cemetery at Omo M10 raises for the first time the possibility that provincial Tiwanaku social networks actively extended beyond the boundaries of the highland enclaves. What exactly the nature of the relationship would have been between local (possibly coastal) and highland-descendant populations in the Middle Moquegua Valley begs future investigation. The presence of several individuals buried in a foreign (local or coastal) non-Towanaku style found in one of the communal Tiwanaku cemeteries at Omo M10 indicates that this relationship may have been substantial and enduring.

Lastly, death-related ritual practice was not an exclusive domain of Tiwanaku kinship communities. With the arrival of the state—as represented by the construction of the temple at Omo M10—an, the manipulation of human bodies and their disposal was no longer the prerogative of the community. The non-normative burials and possible human sacrifices interred outside the walls of the Omo temple amalgamated characteristics of non-normative burials and non-mortuary offerings. What I would call “state-related” death rituals isolated the deceased from their communities and gave them deviant or punishing interments, while also carefully dressing and treating their bodies in a gesture of bestowing value and respect on the dead. In doing so, state agents or elites in the Tiwanaku provinces temporarily assumed the role of taking human life and transforming bodies into high-value offerings that legitimized the status of leaders in society. Future studies on the health, dietary, and migratory practices of sacrificed individuals will provide information about their origin and social status throughout their lives.

In conclusion, mortuary practices enabled kinship communities and state agents to associate with the recent- and long-deceased members of the community. Their
differential engagement with human remains, personal and social memories played an important role in forming and demarcating community identities and inequalities within and beyond provincial Tiwanaku society.
CONCLUSION

In the introduction, I asked whether social diversity in Tiwanaku derived from identities of age, gender, and kinship, or from inequalities situated within these identities. I also asked how these found expression in the contexts of ritual practices and ideologies. In the previous chapters, I have presented different types of evidence that built toward answers, which I discuss in this concluding chapter. Before doing so, I want to briefly revisit some of the most relevant arguments made in the earlier parts of the dissertation to guide this final discussion.

In Chapter 1, I argue that a more comprehensive study of the experience of life in early states provides an alternative to macro-level approaches to political and economic inequality and social diversity. Individuals living in early states were more than state subjects. Their everyday experiences were shaped by a multitude of other identity categories related to the physical body (age and gender), to kinship, and practices. Even though individuals had many identities, through which they associated with other members of their identity communities, only some identities were salient at any given moment. During such moments of salience, the imagined identity community became a community of practice. The shared consciousness and practices allowed them to revive and create new social memories, therefore perpetuating their bonds of affinity.

Together with material wealth and immaterial prestige, the access to and transformation of social memories and practices exclusive to the community presented a way to establish social boundaries and to create inequality. Rituals and other symbolically charged social practices constituted one particular source of power for state
rulers as much as they were for individual members and groups living within the state. I introduce the *ayllu*, the dominant model for Andean kinship organization, its structural composition, ritual practices, and modern-day articulation with the state. Chapter 1 ends with a discussion of identities related to age, gender, and ethnicity (or kinship), especially in terms of how these identities can influence the social interactions and position of individuals within society based on ideologies and structures of dominance, hierarchy or equality.

In Chapter 2, I present an overview of the history of mortuary archaeology. The different schools of thought that have developed in North American and European mortuary archaeology over the last 50 years offer a number of theories and models that balance the more scientific analyses of mortuary contexts with the symbolic and psychological dimensions of death and burial. I introduce recent discussions of the role of human remains and burial sites as objects of agency and practice (e.g., Chesson 2001; Nielsen 2008), which I believe to have merit for studying burials not simply as abstract representations of meaning and social organization, but as sites where personal histories, memories, ideologies, and power relationships converged. Human remains and their contexts are objects and places where identities, memories and cultural norms, and ideologies become salient, enacted, and reproduced.

My review of mortuary archaeology in the Andean region from the Archaic to the end of the Prehispanic period illustrates some of the overarching patterns of similarity in Andean burial practices. Kinship and community, indicated through the shared use of mortuary spaces inside or outside the house, present the most constant variable in Andean mortuary practice. The use of discrete community cemeteries of belowground burials in
the coastal desert regions, and of aboveground structures in the highlands were another means for enforcing and representing social boundaries.

In the Andes, mortuary space was also used to indicate status differences, as suggested by the presence of elite cemeteries and funerary complexes associated within monumental and elite spaces at Wari, Chimu, and Inca cities. Another consistent mortuary indicator of status in Andean societies as early as the late 1st millennium B.C. is burial offerings. Lavishly equipped tombs of royal figures speak to the fact that the unequal access to economic wealth (e.g., labor, exotic goods) was a source of power and status in Andean communities. Differences in status were as important in life as they were in death, as mourners took care to furnish funerary bundles and tombs with the same objects (garments, serving wares, adornment, tools) that had distinguished the deceased in life. Andean mortuary practices therefore, lend themselves to processual-based quantitative analyses of burial style and space.

Investigations of burial style as indicators of social identities of age and gender are surprisingly rare in the Andes, given the rich mortuary record and excellent preservation of human remains. Gender and age are rarely studied systematically through burial assemblages. Instead, research-oriented mortuary studies more often focus on structures of inequality (in terms of gender hierarchy and acquired status) and ethnicity or kinship (diversity of age and sex profiles as indicators of kin-based social groups). With my analysis of age and gender identities in Tiwanaku, which supplements archaeological data from Omo M10 with ethnographic and ethnohistorical descriptions of Andean social identities in the more recent past and present (Chapter 7), I have attempted to present a foundation for future pursuits of this subject.
Another noteworthy characteristic of Andean mortuary practices is their highly standardized burial style. Regardless of status, most members of a culture, ethnic group, or polity were subject to the same normative funerary treatment. Because of their conservative and homogeneous nature, Andean mortuary practices are therefore useful for tracing changes in sociocultural or political dynamics and for identifying non-normative burials practices. Across the Andean region, the persistent use of serving vessels as grave offerings is striking and points to the existence of a pan-regional ideology of continued interactions of feasting between the living and the dead.

Andean archaeologists have developed a great interest in ancestor veneration and commemorative practices, as evident from the rich body of publications on this topic over the last two decades. In part, this can be traced back to ethnographic and ethnohistorical documents in which ancestors figure prominently as sources of identity, power, and resistance, such as Inca royal mummies and the extirpation of idolatries in Colonial-era Peru. Until recently, debates about the temporal and spatial origin of the ayllu were also tied closely to the ability to identify and conceptualize ancestor figures. The preservation of human remains and burial materials in the arid and cold climates of the Andes, together with the high visibility of mortuary monuments, impresses upon us the sense of permanence that must have been associated with the dead in ancient times.

In my review of mortuary archaeology, and of Andean mortuary archaeology specifically, I mention a select number of contexts and cases that can be considered non-normative or deviant burials based on divergent funerary space or body treatment. Non-normative burials in the Andes were motivated by different factors. Normative treatment could be altered to mark some aspect of the deceased’s history or his or her relationship
to the group in an effort to prolong exclusion from the group. Other reasons for changing the manner of burial were associated with the perceived potency of human life and the body as valuable offerings used in the context of sacrifice and dedication. Whereas normative Andean funerary practices primarily marked boundaries between kinship and status communities, non-normative funerary practices counteracted, negated, or increased the value of the deceased in society. Andean mortuary practices can be useful for studying identity at the individual and group level, as well as the role of the dead as sources and agents of power in Tiwanaku society.

My discussion of Tiwanaku’s sociopolitical development and structure in Chapter 3 introduces the debates and models that have resulted from decade-long research conducted at the capital city, its hinterland and provincial settlements. Archaeologists widely agree that the size, diversity, and hierarchical organization of the capital city of Tiwanaku and rural landscapes present the hallmark of an early state. Yet, opinions differ on the nature and sources of inequality in Tiwanaku society. On the one hand, the culturally diverse and pluralistic constituent groups of the state continued their autonomous cultivate craft production, subsistence, trade, and domestic practices and rituals. On the other hand, some form of centralized authority, likely an elite class, coordinated and controlled the construction of monumental buildings, the unequal distribution of wealth (exotic objects, fine metals, textiles, and ceramics), the reorganization of urban residential space, and the rapid regional diffusion of the emblematic material style and feasting practices.

Feasting and reciprocity were the *raison d'être* of the Tiwanaku state. In the past and present Andes, individuals share food, drink, and hallucinogens with each other and
with the earth to evoke memories and communion, and to create feelings of obligation and reciprocity. Tiwanaku elites made public feasting events part of their dominant ideology by controlling the production and distribution of valuable goods (ritual paraphernalia, maize beer). Large-scale feasts legitimized the unequal distribution of elite goods and perpetuated existing inequalities. But feasting was also embedded in the structure and daily lives of kinship groups; as such, it also presented a pathway to lower-level group autonomy. Festivities in commoner neighborhood of Tiwanaku and in smaller towns and villages outside the city used similar materials, spaces and practices, albeit at a smaller scale and lower quality.

I also think that complementarity was an important aspect of social relationships in Tiwanaku. Complementarity existed in asymmetrical relationships between ritual actors and participants, elites and non-elites, and highland and lowland residents. This can be seen in the structural organization of the Colonial-era and modern ayllu, in which complementarity legitimized the inequalities and asymmetries of Andean social structure. Our efforts to reconcile Tiwanaku social diversity with the centralized integrative models of early states benefit from seeing diversity not as antithetical to centralized social organization, but—given the ideological and ritual source of power—as a requisite condition for the institutionalization of inequality. What I mean by this is that Tiwanaku’s society was built on unequal, likely hierarchical, relationships of complementarity enacted through reciprocal practices.

Among the areas that came under the influence of the Tiwanaku state in the late 7th century A.D., the Moquegua valley, the regional focus of this dissertation, saw the most sustained, substantial occupation by highland Tiwanaku peoples. Multiple lineage
groups co-residing in larger settlements mirror the diverse population of the Tiwanaku capital. Living hundreds of kilometers from the capital, Tiwanaku immigrants and their descendants maintained their lifeways over generations. Individuals continued to move between the highlands and lowlands, perhaps acting as conduits for the transmission of sociopolitical processes that led to the restructuring of Tiwanaku society in the 9th century, and its collapse in the 11th century A.D. Although located at several hundred kilometers distance from the Tiwanaku capital, the social connection between the heartland and provincial settlements in Moquegua enables me to use this region as a proxy for the study of Tiwanaku social identities and organization.

In Chapter 4, I summarize previous investigations and interpretations of Tiwanaku-style and Tiwanaku-related mortuary rituals in highland and lowland regions. Mortuary analysis has proven fruitful for examining status hierarchies and regional diversity in burial style. Among the most important contributions has been the identification of social “classes” of capital elites at Tiwanaku, who were distinguished by way of palace burials and luxury grave goods, and in smaller sites, based on the differential access to Tiwanaku-style ceramics and more elaborate tomb structures. The homogeneity of Tiwanaku burials in terms of body treatment, interment style, and grave good choices one of the defining factors of Tiwanaku mortuary practices. As a matter of fact, Tiwanaku mortuary archaeology, in combination with bioarchaeology, has been useful for distinguishing between different forms of Tiwanaku influence in the southern Andes, as burial styles vary in regions with other cultural influences (Cochabamba, San Pedro de Atacama), but remain highly standardized in areas of direct Tiwanaku colonization (Moquegua, Azapa).
Implications of Archaeological Sampling and Excavation Methodology for Understanding the Tiwanaku Mortuary Record

The fragmentary nature of the Tiwanaku mortuary record is one of the greatest obstacles to arriving at definite conclusions about the variability of Tiwanaku funerary processes and what it means in regard to social diversity and inequality. In Chapter 5, I showed that mortuary excavation conducted at the provincial Tiwanaku center of Omo M10 in Moquegua can address some of the challenges faced by earlier studies.

Excavated burials from the city of Tiwanaku itself comprise a small sample; they often constitute fortuitous finds made during excavations of domestic or monumental spaces. Where found, they seem to represent exceptional burial practices of high elites, offerings, or isolated normative burials. The absence of community cemeteries, or at least higher numbers of normative interments, at Tiwanaku makes it impossible to correctly assess and interpret the mortuary variability observed at other sites. The greatest difference between the burials excavated at the site of Tiwanaku and those found at Tiwanaku-affiliated sites in the altiplano and the lowland provinces is the difference in grave wealth and location. The size and elaborate nature of burial structures and offering assemblages found in Tiwanaku at the Putuni Palace and the Akapana pyramid surpass the great majority of burials found elsewhere, with the exceptions of a handful of tombs found in Moquegua and Cochabamba.

Hundreds of Tiwanaku burials reported in the archaeological literature, including the elite burials at Tiwanaku, had been disturbed, often making it difficult to assign
cultural and temporal affiliation based on anything other than a few ceramic sherds. Our efforts to assess the causes of variability (regional styles, status, other forms of identity) are thus stymied in many cases by the lack of secure dating and cultural contexts. The most convincing cases of Tiwanaku burials are found at sites where mortuary contexts were associated with Tiwanaku-affiliated domestic assemblages, or where substantial numbers of tombs included Tiwanaku-affiliated cultural materials, for example, at Tiraska and in Moquegua. Area excavations of Tiwanaku cemeteries in these locations have illustrated the potential of this sampling strategy for obtaining a representative sample of the normative cemetery population and for identifying non-normative burials. The differential preservation conditions of sites in highland and lowland regions pose an additional obstacle for regional comparisons, forcing archaeologists to rely heavily on inorganic grave goods and tomb structures as a common denominator.

With my excavations at Omo M10, I have sought to address and rectify some of these problems. The Omo M10 site, with its monumental complex and town, presents a close analog to the Tiwanaku capital in terms of function and social landscape. Sampling of cemeteries in different areas of the site (the periphery and the center near the monumental temple) enables me to identify the full range of normative and non-normative burial practices that were previously found only in isolation. Although looting did affect a substantial portion of burials at Omo M10, I counteracted the negative impact of man-made disturbances though my sampling methodology in two ways. First, rather

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189 The domestic sector of the site has not yet been sufficiently tested to identify high-status residences, but it seems unlikely, given the relatively scarcity of Tiwanaku wealth objects in the Moquegua, that future investigations would come across structures akin to the Putuni or Akapana East 1M neighborhoods at Tiwanaku.
than excavating tombs visible on the modern surface, I excavated several trenches of 4-x-4-m in different parts of each cemetery at Omo M10, usually in areas with little surface disturbance. This enabled me to identify and access smaller burials with less pronounced surface markers, many of which were also found intact.

The positive impact of this strategy is reflected in the revised demographic profiles of the cemeteries. Compared to the earlier pilot sample of burials excavated at Omo M10 in 1984 and 1987, the new sample adjusted the distribution of ages to raise the proportion of subadults and balance the proportions of male and female adults, confirming that most of the cemeteries at Omo M10 had indeed been used by self-reproducing populations, likely some form of kin or lineage groups. Furthermore, it allowed me to calculate tomb densities for each sector independently. Using the revised tomb densities, I was able to recalculate cemetery populations based on the cemetery areas established through aerial photography and ground-truthing to arrive at a total estimated number of over 5,000 burials at Omo M10, a significantly higher number than the original estimate of ca. 800 tombs (Chapter 5). Exposing use surface areas of cemeteries also revealed evidence of different types of post-funerary activities not previously reported for Chen Chen-style Tiwanaku cemeteries in the region (Chapters 6, 8).

Although preservation conditions in Moquegua compare favorably to the wetter climates of the altiplano and eastern Andean lowlands, burials across the Omo M10 site still vary in degree of preservation. As the best-preserved burials at the site show, grave goods were made from a wide range of organic animal and plants materials such as animal hair, leather, feathers, reeds, and wood. I proposed the use of a “preservation
index” that assigns contexts to one of three groups based on the presence or absence of “essential” funerary materials, such as the textiles and plant fiber rope used to prepare the funerary bundle. My analyses and discussions hold with the traditional approach of giving all contexts equal weight for the sake of preserving sample size to facilitate comparison with existing studies elsewhere in Moquegua and the highlands. Nevertheless, the preservation index can be used in the future to re-evaluate the findings made here and the possible implications this has for current interpretations of Tiwanaku mortuary practices throughout the south-central Andes. The integrity of the burial sample recovered in 2010 and 2011 also has the unique advantage of providing a more detailed view of the taphonomic processes that altered body position and contents of burials (Chapter 5). Revisiting the observations made by Goldstein (1989, 2005), I have expanded and systematized the various sequences of taphonomic processes and their implications for the preservation and interpretation of the burial content.

**Findings of a Multiscalar Analysis of Tiwanaku Mortuary Practices**

My methodological contributions to the study of Tiwanaku mortuary practices, and Andean mortuary practices more generally, are made apparent in the wealth of information now available to us about many previously unknown aspects of the funerary process, for expressing the social diversity and relationships that converged in the context of funeral and commemoration of the dead. In order to evaluate how social diversity and inequality intersected in Tiwanaku, I return to the four questions posed in the introduction of this dissertation as the “building blocks” of my hypotheses.
1. What were the various stages, practices, and material components of Tiwanaku mortuary ritual? Is it possible to distinguish between normative and non-normative burials, and to identify the causes of divergent funerary treatment?

The results of the Omo M10 mortuary analysis agree with previous assertions that Tiwanaku funerary rituals were highly standardized. All members of provincial Tiwanaku society shared a common understanding of the rules that governed the preparation and interment of human bodies. This understanding is reflected in the universal use of the “feather headdress”—a minute detail that reflects intimacy and care for the deceased, which was not publicly visible as an emblematic marker of status or other types of social difference. Other aspects of Tiwanaku funerals, including the wrapping of the dead, the seated-flexed positioning the body facing east inside a subterranean tomb, the types of offerings and tomb structures were likewise subject of society-wide norms deeply embedded in the cultural repertoire of provincial Tiwanaku residents. In terms of broader normative aspects of the funerary process, the Omo M10 burials align closely with the patterns observed elsewhere in Moquegua and the altiplano.

Many, if not most, of the ceramic vessels and wooden spoons used as grave offerings at the Omo M10, Chen Chen and Tiraska sites had been used before interment. The textiles used to wrap the dead likewise showed evidence of repair and seem to have been worn for some time before death. The grinding stones used for tomb constructions in some of the cemeteries are worn extensively. Goldstein (2005:249–250) hypothesized that the use of woolen textiles in burials as symbolic of an expectation of return to the homeland, an interpretation taken up by Korpisaari, as well (2006:158). In light of the use wear and repair efforts found on textiles and other grave goods, I argue that the actions
and choices of Tiwanaku mourners were directed by a certain level of pragmatism. Rather than manufacturing new objects solely for the purpose of interment, personal possessions, dress, and other objects became grave offerings that accompanied the dead into the afterlife.

I also show that mortuary rituals were more prolonged and spatially diffuse than originally thought. My documentation of taphonomic processes—including entomological and geomorphological evidence—reveals that the time frame between death, body preparation, and interment was relatively short. The interment and placement of offerings likewise appears to have taken place during a single event. There were several indications at Omo M10, such as the removal of crania and a secondary burial, that point to continued physical contact between the living and the dead. Although these cases are rare, they suggest that the manipulation of human remains in tombs was not taboo. This somewhat contradicts the argument made by Isbell and Korpisaari (2015) that the Tiwanaku burial style was counterproductive to the preservation of human remains and the continued veneration of the dead.

Additional evidence for Tiwanaku commemorative activities at Omo M10 consisted of materials deposited on cemetery use surfaces. These objects included the popular serving wares (*keros, tazones, vasijas*) that were ubiquitous in domestic assemblages, offering caches and burials. The presence of large flat baskets, isolated sherds of plainware utilitarian vessels, smashed incense burners, and carbon pieces, objects not found inside burial contexts, points to the performance of additional activities, possibly related to ritual burning and feasting.
There is no indication among the Omo M10 cemeteries that tombs were regularly opened and accessed, or that offerings were deposited inside the burial after the initial interment. I identified no aboveground funerary structures at Omo M10 similar to those reported at Lukurmata and Tiwanaku. Perhaps such spaces existed outside the cemetery boundaries associated with other public spaces, but this will require further investigation.

Overall, the interaction between the living and the dead in provincial Tiwanaku society was prolonged. All members of society shared the belief that the dead, although no longer part of the living community, continued to matter to the living. The investment in the dead was greatest during the time right after death, as mourners mediated their feelings of loss and memories of the deceased through culturally embedded burial traditions. In a few cases, mourners deposited offerings on top of capstones, possibly an intermediate form of commemoration that memorializes the deceased individual.

The mounted capstones and scattered material remains of ceremonies attest to the continued presence of the dead in Tiwanaku society. The placement of the Omo M10 cemeteries along the settlement perimeter emphasized the importance of the dead in the social landscape. Residents of the site passed these spaces of death and ancestors daily as they descended to their canals and fields to the west and north, or drove their camelid herds down or upriver along the southern and eastern edge of the site. Far from being peripheral, the location of the cemeteries at Omo M10 afforded the dead a continued presence in society.

I think there is little evidence at Omo M10 to suggest that Tiwanaku ancestors were *malquis*, powerful progenitors with political influence. Instead, the dead constituted a general body of ancestors whose personal memories merged with the social memory of
the cemetery’s social group after some years. Placing offerings in tombs and performing feasting and burning ceremonies at the temple were two ways in which the living upheld a cultural ideology of reciprocity. The emphasis on symbols of feasting in death-related contexts that is so prevalent in Tiwanaku burials is less indicative of the state ideology that has been linked to the propagation of standardized serving wares like *keros* and *tazones*. Serving dishes are found in Formative *altiplano* burials before the rise of the Tiwanaku state. Like the seated-flexed position and east-facing orientation of the dead in many other prehispanic cultures of the Andes, offerings of serving containers appears to have been part of a pan-regional ideology of literal or symbolic feeding of the dead in the afterlife, a custom that persisted into the historical and modern era. Ceramic *keros* and *tazones* were among a diverse array of serving containers (made from ceramics, wood, woven plant fibers, and gourds) that were used as grave goods. Although I suspect that *keros* and *tazones* did not carry a greater symbolic value as grave goods, it is a point that certainly warrants future investigation.

The relationships of obligations with the dead that arose from the giving of gifts and libations presented community members with a source of power. In light of cemetery location and accessibility, burial style uniformity, and homogeneity of appearance of the tombs from the surface, I argue that the source of power was diffuse, and could not easily be restricted and manipulated. Yet Tiwanaku ideology of death was not egalitarian, because social inequalities were built into many components of the funerary process (see Chapter 7, below). Nevertheless, the homogeneous funerary treatment calls into question the existing of singular *mallqui* figures in provincial Tiwanaku society, which elites could have manipulated to legitimize their status.
If we consider interment within the spatial boundaries of community cemeteries one of the defining characteristics of normative Tiwanaku mortuary practices, as evidenced not only based on the data from Omo M10, but also from other Tiwanaku settlements in Moquegua, Azapa, and the altiplano. I reiterate my argument made in Chapter 4 regarding the categorization of isolated burials of normative style in residential patios at Tiwanaku and Lukurmata as distinct or even non-normative. Unfortunately, the sampling strategy for my excavations in Moquegua precludes me from identifying similar burials at Omo M10. Nevertheless, these singular intramural burials may very well present the only line of evidence for mallqui-like ancestor figures in Tiwanaku society we have to date.

Normative Tiwanaku funerals sanctioned the deceased’s full membership in society. Bereaved persons in Tiwanaku society employed non-normative funerary treatments to signal the temporary or permanent exclusion of a person from the group. Reasons for this could relate to the cause of death. For example, death in childbirth or as the result of unusual illnesses was cause for the community to take additional measures that separated the dead from the living. Although the deceased was not excluded from the communal ancestral space, the body could be placed in a different position (facedown, flexed) and was often found covered with rocks, as if to construct a physical barrier between the body and the outside world. Whereas access to the space and remains of full members of society was desirable, a right and source of social power and memory, the tombs of marginalized persons presented a threat that needed to be averted and through additional measures and non-normative mortuary practices. I think it is noteworthy that individuals who were perceived as liminal, marginal, or outsiders to mainstream society
were only marked in certain ways (body position, tomb construction) while their bodies were similarly prepared and placed among the general ancestral population. Of course, the sampling strategy of my project did not allow me to identify isolated tombs beyond the cemetery boundaries, and it is possible that exclusion from cemeteries was an additional measure reserved for higher levels of deviance.

Non-normative burials were also a means of marking more permanent, established forms of exclusion, for example based on social ties to social groups or institutions beyond the community. I return to this issue below in my response to Question 4 below.

2. How were Tiwanaku burials modified to acknowledge the personal histories, identities, and status of the deceased in relation to their age and biological sex?

Earlier studies of Tiwanaku mortuary practices established that funerals were deemed appropriate spaces for materializing social identities based on age and gender. Nevertheless, small sample sizes and partial offering assemblages made it difficult to discern persistent patterns of correlation between bodies of known age and sex, funerary treatment, and material objects or social practices.

Age was certainly an influential factor during the funerary process. Body treatment and tomb construction did not vary significantly with age. Most distinctly, children buried at Omo M10 were less likely to receive grave offerings. Young individuals, who were buried with grave goods, received fewer offerings on average than adults. Investment in the burials of children increased as they matured, reflecting an increased social attachment through shared memories and experiences. The ability to form social relations and acquire recognition, status, and wealth, was directly linked to
physical maturation. This trend continued throughout life. Older adults received the largest grave offering assemblages and higher average numbers of offerings per tomb than young adults.

In addition to the quantitative differences between children and adult burials, there also were qualitative differences. Children between two and ten years of age were the only age cohort to receive offerings of pan flutes and modified cooking pots. Miniatures were found predominantly with children, as well. Comparisons with other Tiwanaku sites reveal that pan flutes at Chen Chen and Rio Muerto M43A also were found with (male) adults, and may not present an age-specific grave good. The association of miniatures with children is consistent across the region, and can even be found in ethnographic accounts. On the contrary, weaving tools and ritual objects (bone tubes, pigment boxes) were exclusively used in adult burials at Omo M10, an observation that seems to match Tiwanaku burials elsewhere.

These data imply that children grew up as members of a family community, in which daily interactions of play with peers, learning crafts, and making music contributed to the growing emotional attachment and social bond between adults and children. As a result, the death of older children evoked more elaborate ritual responses from parents or caregivers, reflected in higher funerary investments. From the moment of birth, all children were considered members of the community and buried in the community cemetery. Nevertheless, children whose talents or abilities as nascent craftspeople or musicians distinguished them at an early age were specially acknowledged. The presence of a small number of children elite burials in several cemeteries at Omo M10 suggests that in a few cases, children (generally older) were held in high esteem. At least in one of
these cases, it is possible that the richly buried child may have been a final heir, the last member of a high-status lineage, who received family heirlooms and regalia as offerings in spite of his or her young age (Baitzel and Goldstein 2014).

Age-related differences in burial assemblages illustrate that the external imposition of social norms and practices shaped the experience of coming-of-age in Tiwanaku society. It is quite possible, therefore, that age shaped identity communities of peers, elders, and offspring, that related to one another in different ways. For example, belonging to the same generation within the community or kin group would have been the basis of shared memories (participating in life-cycle rituals, learning with peers) that created lasting bonds between individuals of similar age.

If funerary investment indeed reflected the extent of the deceased’s social relationships with the community, then the ability to acquire social status was certainly linked to age in Tiwanaku society. The time spent in the community, building relationships through exchange, reciprocity, marriage ties and other mechanisms would have provided adults with a significant advantage for gaining influence and wealth through interpersonal relationships. Nevertheless, advanced age did not automatically qualify the deceased for a more elaborate funeral, and the ability to gain higher social status in age was closely tied to the individual history, character, and abilities.

Beyond age, biological sex also contributed to the identity and status of Tiwanaku individuals in the community. I found traditional Tiwanaku wealth objects like metal adornments, tapestry textiles, and finely painted ceramics with males and females. Sample sizes are too small to make any meaningful comparisons between the sexes. Funerary dress at Omo M10 revealed distinct patterns of male individuals associated with
polychrome tunics, and of female individuals associated with plain-colored tunics and *llicllas*, or shawls, as they are depicted on Tiwanaku effigy vessels. This distinction was not absolutely consistent and it was, in part, complicated by the multiple layers of textiles in the funerary bundle, of which only the innermost garment was with high likelihood a personal vestment of the deceased.

The importance of textiles for shaping the bodies and lives of Tiwanaku peoples was not limited to wearing cloth, but also to weaving it. Weaving tools (spindles, combs, and needles) were found almost exclusively with women, at Omo M10 and several other Tiwanaku sites in Moquegua and the altiplano (Goldstein and Palacios 2007; Bermann 1994; Korpisaari 2006). Weaving tools were uncommon grave goods, although they would likely have been found in all Tiwanaku households. I therefore think that the decision to include weaving tools as grave offerings must have been a personal one meant to recognize publicly the role of the deceased and ability as spinners and weavers in life. Future studies may show what the formal characteristics of these tools imply about the type and quality of yarn and textiles they made. For now, we must content ourselves with the observation that weaving was a craft activity through which women gained status in the community. Although weaving implements made from expedient raw materials like wood and cactus spines held no material value (compared to metals or polychrome ceramics), the possession of weaving tools and of extraordinary knowledge and abilities needed to produce textiles offered a source of prestige for women in Tiwanaku society.

The identification of weaving tools symbolic of a woman’s prestige in the community presents a groundbreaking contribution to the study of Tiwanaku gender identity and relations. Previously, archaeologists argued that the association of males
with *keros* and greater consumption of maize, was representative of unequal gender participation in feasting and of higher status of males as facilitators of reciprocity ceremonies. At Omo M10, males were 50 percent more likely to be buried with *keros* than women, who were found predominantly interred with *tazones*, *vasijas*, and *ollas*. Nevertheless, women also received cups and containers made from basketry and gourds, so as to afford them the opportunity to participate in the symbolic feasting between the living and the dead.

The textiles and tools used as grave goods also were associated with the personhood the deceased and the memories that stayed with the mourners. I think it probable that the choices in vessel forms made by the mourners reflected some aspect of the personal history of the deceased. Although men were more likely to have owned and be buried with *keros*, women also had access to them—even portrait-head *keros*, elaborate variants that portray men. Because of this, I do not think we can say that the participation in feasting ceremonies was an exclusively male domain. There also remains the possibility that *keros* were used as grave offerings interchangeably with other vessel forms and held no particular symbolic meaning associated with male gender.

Nonetheless, I consider *keros* and male persons as complementary to *vasijas*, *ollas*, and women’s bodies. Similar to the feasting practices in colonial and modern Andes communities, Tiwanaku women provided and served the food and drink that was consumed by men during public rituals. Women perhaps used *keros* in other contexts, during smaller-scale feasting events in the family, or during libations and offerings. Women who had *keros* and men who had weaving tools may represent examples of the fluidity of Tiwanaku’s gender roles. They attest to the fact that practices of weaving and
feasting were not gendered simply by virtue of the physical sexual characteristics that performed these tasks, but by broader ideologies of gender, complementarity, duality, and perhaps hierarchy.

Neither age nor sex exempted Tiwanaku persons from social exclusion. Children and adults, males and females were found in non-normative burial contexts. The female body may have presented a greater threat to the integrity of the social group. Community members took additional measures during the funerals of women who had died in childbirth in order to protect themselves from future interaction with the deceased. Women may also have moved between groups because of marriage ties, as perhaps suggested by the young female in Cemetery I whose burial style identified her as having a different cultural identity. The decision to mark different cultural or ethnic background in death suggests that such women had not yet fully adopted a cultural highland identity.

In summary, age and sex had important roles in shaping social diversity and inequality. The material world and ideologies that were constructed around bodies of different age and sex suggest that both characteristics determined how individuals related to one another throughout life. Age and gender were sources of power and inequality, which individuals were subject of and privy to at different stages of life. That mourners were so selective in recognizing the high status of a few individuals in death shows that neither age nor sex guaranteed access to status. Individuals crafted and constructed their status in the community over time and through social practices and networks.

3. Did burial styles mark social identity at the kin group level, and if so, did they reflect social inequalities between kin communities?
The issue of Tiwanaku social organization is closely tied to that of community identity and kinship structure. To date, archaeologists have relied on two lines of evidence for modeling social organization at the site-level. Both are related to the spatial distribution of material culture. Inhabitants of residential compounds at the capital city and in the Moquegua provinces used empty spaces and large walls to emphasize the more subtle distinctions in cultural practices found within the domestic residential units. Based on the differential distribution of ceramic styles, artifacts, and food remains across residential compounds, we know that preferences in subsistence and craft production recreated real and imagined social distances on a daily basis. Some groups living at the Tiwanaku capital and at secondary centers like Lukurmata and Omo enjoyed greater access to wealth and power. This inequality appears to have been based on residential location and the social identity and kinship affiliation of compound residents.

Although we have known for some time that spatially segregated cemeteries at highland and lowland Tiwanaku sites were used by the kin groups who inhabited these discrete residential spaces, the opinions of mortuary archaeologists vary as to how these groups differentiated themselves. For example, Korpisaari (2006:147) hypothesized that spatially discrete burial areas at Tiraska correlated perhaps with age or status, while the cemeteries at Chen Chen in Moquegua were overwhelmingly homogeneous in their funerary treatment. Goldstein, on the basis of the burials excavated at Omo M10 in the 1980s, argued that cemeteries and their occupants were associated with vertical and longitudinal segments of provincial society (Goldstein 1989:171). My results help clarify and correct some of these claims; they contribute significant new insight into the ways that social groups recreated collective memories and maintained boundaries through
mortuary practices. Inter-cemetery comparisons reveal that group relationships were not uniform across society, and that wealth as well as affinity helped shape representations of community identity in death.

Space remains the most prominent means of marking kin-based group identity in Tiwanaku cemeteries. Discrete cemetery spaces contained the tombs of all members of the group. The lack of cemetery-internal age or sex-based organization indicates that social differences were perceived as strongest between rather than within groups. The intentional dispersal of community cemeteries along the periphery of the Omo M10 also suggests that no single kin group laid claim to the temple structure by interring their dead within the temple walls.

Unlike residential contexts, where group identity was recreated through specific craft or subsistence practices, the highly normative nature of Tiwanaku ritual seems to have left little room for expressing kin-based identity. Body preparation was a highly standardized process, and the range of tomb styles and proper grave goods was limited. For example, in Cemetery H pit tombs are common, grinding stones were used as tomb covers, and grave goods consisted of plainware cooking vessels and decorated serving wares. In contrast, Cemetery, P stands out for its lack of ceramic vessels and abundance of basket and gourd vessels.

Nevertheless, most groups at Omo M10 either did not have the need or desire to develop a distinctive burial style. Instead they fully complied with Chen Chen-style Tiwanaku mortuary practices. Perhaps it was more important to the mourners to modify the burial style to acknowledge the deceased’s status and identity. In addition, the Tiwanaku mortuary process—with its funerary bundles that were prepared in the home,
the belowground tombs and the small size and personal nature of the offerings—did not lend itself for the large-scale display of distinct group identities. Compared to the open plazas of public monuments or even residential compounds, funerals were focused toward the interior of the group and the ground. In this case, excluding non-group members from participating in the event and from the cemetery space would have been the strongest marker of social boundaries.

New evidence for Tiwanaku ancestor veneration helps substantiate this idea. Tiwanaku funerals were not terminal events that separated the dead from the living. Tiwanaku cemeteries were not places of disposal for the dead. They provided the backdrop for funerary processions and ceremonies, and for the staging of post-interment celebrations. Tiwanaku cemeteries were the territories of the ancestors. Located on the edges of the site, the ancestors enclosed, protected and defined the residential spaces of the living, and guided the movement of Omo M10 residents from their houses to their fields and caravan routes. The interaction with ancestral spaces—rather than bodies—appears to have been one of the foundations of social memory and identity that bound group members to one another.

The question whether Tiwanaku kin groups were of equal status or part of a hierarchical system of rank is important and has been central to modeling the nature of the Tiwanaku state. Inter-cemetery differences in grave wealth and funerary investment are stronger indicator of group-based status differences. Yet, at Omo M10, differences between cemeteries in terms of funerary investments are rather subtle. None of the excavated tombs contained grave assemblages that rivaled the elite burial at Omo M16D,
or the sub-floor elite tombs at Tiwanaku’s Putuni palace or Akapana mound. Average numbers of offering per tomb at Omo M10 varied little between cemeteries.

Wealth objects, such as metal ornaments, tapestry tunics, pyro-engraved bone tubes, and fine polychrome ceramics, are scarce at the Omo M10 burials. In this sense, Omo M10 resembles secondary Tiwanaku sites like Lukurmata or Chucaripupata in the altiplano, whose residents had access to wealth objects that were produced in or near Tiwanaku and traded throughout the region. Wealth objects were dispersed across various community cemeteries at Omo M10, so that not any one group controlled access to them. At the same time, not every cemetery contained such objects. I think this shows that access to wealth objects was also not shared by all groups at Omo M10 and would have depended on the specific exchange network in which the group participated.

Status was influenced by factors other than access to wealth. We cannot discount the possibility that the rank of a group in Tiwanaku society also depended on size, subsistence strategies, extent of trade networks, specialized craft production or other factors. One important line of future research is to connect individual cemeteries to particular residential areas at Omo M10 and other sites. The full suite of mortuary and non-mortuary materials and activity patterns will help us understand if and how status and status representations differed in life and death.

Korpisaari (2006:156) is correct to argue that the social stratification into elite and commoner groups at Tiwanaku did not exist as such outside the capital city. The burial population from the regional center of Omo M10 does not support a pronounced social hierarchy or inequality at the group level despite the presence of a monumental temple on
the site. The question remains whether inter-cemetery variability at Omo M10 reflects other forms of social structure or organization, specifically the Andean *ayllu*.

Goldstein (e.g., 1993b, 2000a, 2005) proposes the co-existence of two Tiwanaku maximal *ayllus* or moieties in the Moquegua region during the Middle Horizon. Although both groups were clearly Tiwanaku affiliated, their differences in size, settlement location, architectural style, and ceramic assemblages point to probable differences in subsistence and mobility patterns.

Neither the spatial organization of the cemeteries nor the subtle variability in community mortuary styles at Omo M10 clearly indicate a dualistic or otherwise structured organization of provincial Moquegua society. I think there are several reasons for this. The domestic sector of Omo M10 has been identified as a Chen Chen-style site. The subtle inter-cemetery variability may reflect social differentiation within the Chen Chen-style moiety, rather than represent the broader spectrum of cultural differences in Tiwanaku provincial society.

The large number of cemeteries at the Omo M10 site—when compared to the size of the residential sector—can be explained by the special administrative or ceremonial function of the temple as a pull factor for its expanded ritual use. This makes the site a likely candidate for representing the entire social diversity of provincial Tiwanaku society, in terms of status, cultural, or ethnic difference. The problem with identifying the two stylistic groups in mortuary contexts is that Omo-style cemeteries are rare. Only two cemeteries in Moquegua have been identified with certainty as Omo-style based on their burial style and proximity to Omo-style settlements; together, they contain fewer than 100 burials.
Only one cemetery at Omo M10, Sector P, exhibits some of the characteristics typical of Omo-style cemeteries (lack of ceramic vessel offerings, preferences for lighter and more portable offerings like baskets and groups, and greater diversity of tomb structures). It is therefore possible that although no Omo-style residences have been identified at the Omo M10 site (but several are found just to the north at Omo M12 and Omo M13), non-residents came to bury their dead here.

Beyond the evidence for a dualistic but disproportionate moiety structure, the cemeteries at Omo M10 provide tentative evidence for the existence of moiety-internal organization. Among the spatially discrete and dispersed Chen Chen-style cemeteries at Omo M10, three (Cemeteries H, V, and W) clustered around the slopes of a single quebrada. They share a preference for pit tombs, ceramics decorated with “flamingos,” more numerous ceramic offerings, and an overall absence of wealth objects. It is possible that their communities or kin groups shared a stronger sense of affinity with one another than with any other group at the site, perhaps based on extended kinship ties. In contrast, the southern Cemeteries S and R shared greater access to wealth objects, and their members were more likely to be of higher status as indicated by their large grave good assemblages.

Future biological distance studies will prove instrumental for distinguishing the degrees of biological affinity between Omo-style and Chen Chen-style groups, and even within the large Chen Chen-style community (made possible now by the existence of a larger sample). The heterogeneity of cemetery-based burial styles at Omo M10 also seems to contradict Sharratt’s (2011) findings at Chen Chen. The Omo M10 temple certainly played a role for attracting mourners to the site. My systematic and careful
recovery, recording, and analysis of a large sample of mortuary contexts at Omo M10 has been instrumental for identifying and interpreting these differences.

4. What role did funerals and other death-related practices play as performances of identity and power among different factions within and beyond Tiwanaku society (e.g., kin groups, state agents, or other ethnic groups)?

In the preceding discussion, I explained how mourners acknowledged the status of deceased individuals through mortuary practices within the setting of community cemeteries. Status was based in part on age and gender, but also derived from kinship through differential access to wealth objects. Nevertheless, I consider the relative lack of status or stylistic distinctions between community Tiwanaku funerals and commemorative practices to indicate that funerals were primarily an occasion for generating group cohesion and signaling social boundaries, rather than expressing relationships of inequality between communities. There is no unequivocal evidence at Omo M10 for the existence of a provincial elite class. The few wealthy burials at Omo M10 are distributed across multiple cemeteries; it seems that their occupants held high status within their respective communities, and were not members of an institutionalized elite class.

Although we are missing mortuary evidence of an elite class, We see the actions of state leaders reflected in the group of non-normative burials in Cemetery Q near the Omo M10 temple. The new evidence from Cemetery Q adds important information for contextualizing and interpreting similar non-normative burials found at the capital city of Tiwanaku and the small highland site of Tiraska. There, such burials have been interpreted as dedicatory, their occupants seen as outcasts or as deviants. The sample
from Cemetery Q contained more adults than subadults, a demographic profile atypical for community or kin group cemeteries. The deceased were buried in facedown-flexed position in simple pits without offerings, and covered with reedmats and rocks, indicative of a negative association and the attempt to distance the interred from the living. At the same time, the proximity to the temple, the use of standardized funerary dress and status regalia (a four pointed hat) suggests to me that these individuals were not social outcasts.

The evidence for a violent or unnatural cause of death at Cemetery Q and in the highland non-normative burials is circumstantial. Nevertheless, the combination of negative associations and positive investments in these burials reflects the ambiguous attitude of the living toward the dead in Cemetery Q. The scarcity of offerings, especially status markers, and the absence of state-associated iconography or symbols (front-face keros, feasting, or ritual paraphernalia) leads me to speculate that these non-normative burials and the events preceding them (likely related to sacrifice or other forms of violence) were associated with monumental ritual spaces and with the actions of those elites who have not yet been identified archaeologically in Moquegua. Future bioarchaeological studies of diet, mobility, and biological distance of the Cemetery Q individuals should shed light on their social identity in life and perhaps even on the reason for their unusual interments.

My final contribution here to the investigation of Tiwanaku social identity and organization is the discovery of a non-Tiwanaku Middle Horizon cemetery at the Omo M10 site. The burial style associated with Cemetery X differs sufficiently from the homogeneous, diagnostic Tiwanaku burial style to support the theory that its occupants were not ethnic highland populations. Instead, they may have been local to the mid or
lower Moquegua valley with access to marine resources. It is possible that the Cemetery X community was tied to the Tiwanaku enclave at Omo M10 through inter-ethnic marriage patterns; three burials of young adults found in a Tiwanaku-style cemetery displayed characteristics identical to those observed at Cemetery X. This phenomenon of interethnic interaction probably was not exclusive to Omo M10, and other Tiwanaku settlement complexes in Moquegua may have maintained similar relationships with coastal groups.

**Final Thoughts**

How do these new interpretations of mortuary rituals contribute to our understanding of the organization of Tiwanaku society, and the experiences of its citizens? Was Tiwanaku society organized into diverse, pluralistic, and relatively autonomous kin groups in which distinctions based on age and gender dominated the human experience? Or was it centralized into a hierarchical structure of ranked kin groups whose institutionalized differential access to wealth and power overshadowed lower-level hierarchies of personal prestige related to gender and age? What implications does the answer have for the study of early states in the Andes and beyond?

Comparison of mortuary evidence from the Tiwanaku capital city and its hinterlands and provinces reveals that social status were more evident in the capital than any in other region, including the Moquegua Valley. For one thing, direct comparisons between samples from different regions and even sites must be conducted with caution, because differences in sample sizes, excavation strategies, and preservation conditions,
present numerous pitfalls to archaeological interpretations. Regardless of the methodological issues faced by Tiwanaku mortuary archaeology, I agree with Korpisaari (2006:163) that the wealth and status invested in a few elite (or perhaps mallqui) burials and residences at the Tiwanaku capital is only equaled by a very small number of individuals in secondary sites in terms of the wealth and labor investment. Even settlements as important as Omo M10 did not display comparable levels of social differentiation.

This suggests to me that the status distinctions apparent in urban Tiwanaku society did not extend beyond the city boundaries. If it were indeed the case that institutionalized forms of social inequality in early states were limited to a specific location, should they be considered institutionalized at all? If so-called class divisions were not reproduced in other locations, then the inequalities present in urban society must have been situational and dependent on elite associations with monumental places in the capital like the Putuni, Akapana, and Kalasasaya. But perhaps the incessant search for elite contexts has clouded our view of other forms of inequalities and identity, and their sources. The lack of a pronounced social hierarchy in provincial Tiwanaku society helps broaden our perspective of mortuary rituals as sources of social memories, identity and communities, power and inequality.

The evidence I have presented here leads me to favor social pluralism as a model for Tiwanaku social organization. Social diversity related to status identified at Omo M10 does not fit well with a model of institutionalized, kin-based social classes. The source for power and inequality was more diffuse and fluid over the life course than one would assume in connection with early states. In its stead, diverse forms of social identities were
rooted in everyday activities, such as craft and food production, and in community rituals of feasting, burial, and ancestor veneration. Kinship, gender and age were important aspects of Tiwanaku life experiences because they shaped the role and place of individuals in these activities and practices.

At Omo, the institutionalization of non-normative mortuary practices reflects the actions of a ruling class, a new source of power through which ritual actors could temporarily assume leadership positions. In places like the provincial center of Omo M10, those in ritual positions of prestige and power probably lacked the resources necessary to maintain their position over a longer time. This explains why status differences were less pronounced at Omo M10 than at Tiwanaku, and also why prestige and status were more consistently associated with individuals, rather than with entire social groups. Given the monumentality, diversity, inequality of Tiwanaku and its influence over the south-central Andes, it was undeniably an early state. But we must take into account the impermanent and provisional nature of “state” power in parts of these societies, especially as older, embedded social structures of kinship and gender relations continued to shape the lives of people.

Social diversity and inequality existed in a web of different contexts and relationships that should be acknowledged and studied in their entirety. In societies like Tiwanaku, death-related rituals represented individual identities and social order, and recreated community cohesion and boundaries. The study of mortuary variability continues to be a valuable approach for multi-scalar analyses of life in the past. My data and interpretations form a starting point for future material and bioarchaeological studies of Tiwanaku, and comparative endeavors beyond the Andes. I seek to call attention to the
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Webster, Ann D., and John W. Janusek


Wernke, Steven A.


Wheeler, Brandon


Whitley, James


Wiessner, Polly


Williams, Patrick Ryan

Wood, James W., George R. Milner, Henry C. Harpending, and Kenneth M. Weiss

Zuidema, R. Tom