

SOCIAL INTERACTION AND VARIATION IN
MIDDLE FORMATIVE TLAXCALA, MEXICO:
AN ANALYSIS OF CERAMICS FROM TWO VILLAGE SOCIETIES

by

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To my parents,
with much love and gratitude

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ABSTRACT

Social Interaction and Variation in Middle Formative Tlaxcala, Mexico:
An Analysis of Ceramics from Two Village Societies

by

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Chair: Joyce Marcus

This study evaluates the significance of Middle Formative (900-500 B.C.) pan-Mesoamerican ceramic motifs by documenting variability in vessel use and decoration at two villages in central Tlaxcala, Mexico. The widespread art style of the later Early Formative period (1200-900 B.C.) is characterized by shared motifs on pottery that included depictions of animals and supernatural forces and has been the subject of much debate concerning chiefly competition and interregional interaction. During the Middle Formative period, widespread similarities in ceramic decoration were still found throughout Mesoamerica but take the form of simpler “double-line-breaks” that few scholars have addressed beyond commenting that they are abstract.

The study examines variation in the designs and intra-site distribution of motifs at Amomoloc and Tetel to provide evidence for how Tlaxcala’s earliest sedentary

communities used pan-Mesoamerican motifs differently at varying social and spatial scales, and across time. An illustrated database of designs from Amomoloc and Tetel links motifs with exact provenience information, and is compared with published examples from Xochitécatl, the Basin of Mexico, Chalcatzingo, the Tehuacán Valley, and the Valley of Oaxaca.

At approximately 900 B.C., when Amomoloc was first settled, the presentation of food was not emphasized in ceramic assemblages, few pan-Mesoamerican motifs were used to decorate pottery, and villagers participated in long-distance exchange in a relatively informal manner.

From 800-650 B.C., before the development of ranked societies in central Tlaxcala, food service became increasingly focused on bowls with pan-Mesoamerican motifs, as the presentation of food was likely an important arena for the negotiation of socio-political dynamics. At the local level, a high degree of stylistic variability in the execution of motifs is observable, yet the motifs adhered to a central Tlaxcalan design tradition, referencing styles from other regions, as interregional trade networks became more formalized.

After 650 B.C., ceramic assemblages changed dramatically in color and shape, and decorated serving vessels became slightly less important to the internal dynamics of village life. Shared motifs exhibit greater standardization in the themes they referenced, and stylistic ties with Chalcatzingo decreased as ties to the Basin of Mexico were strengthened through the increased formalization of long-distance exchange networks.

CHAPTER 1

Introduction

Populations all over the world are becoming increasingly interconnected. Economic ties, electronic communications, faster and cheaper transportation, among other factors, bring people from distant countries and diverse backgrounds into closer and more frequent contact, both directly and indirectly. Although many may consider the process of globalization a modern phenomenon, long-distance and complex interaction spheres have been in existence throughout much of human history. From the sixteenth-century European world-economy (Wallerstein 1974) to the intense interregional interaction surrounding early civilizations millennia earlier (Jennings 2011), the long-distance movement of people, goods, and ideas has a deep past.

Social scientists studying modern globalization have noted significant cultural changes resulting from more intense global networks (see Jennings 2011:20; Wilk 2004), and it is no coincidence that many anthropologists recognize the importance of regional and long-distance exchange networks in the development of early complex societies. In societies with sociopolitical hierarchies intermediate between egalitarian groups and bureaucratic states (i.e., chiefdoms), interregional interaction is a significant factor in the establishment and maintenance of chiefly status and power, as chiefs acquire both prestige goods and esoteric knowledge through their relationships with other chiefs (e.g.,

Helms 1979). In fact, it has been argued that intense competitive interaction in chiefdoms is key to rapid sociopolitical evolution (see Flannery and Marcus 2000:30-33; Renfrew and Cherry 1986).

Beginning around 1200-1150 B.C. in Mesoamerica, during the Early Formative period, evidence for this kind of chiefly interaction is found in the long-distance movement of goods like obsidian, shell, magnetite mirrors, greenstone, and pottery, as emergent elites competed for high-status items and key partners in long-distance trade networks (Hirth 1984; Marcus 2007a:75-80; Pires-Ferreira 1975; Pires-Ferreira and Flannery 1976). Accompanying this exchange is the appearance of a widespread art style known as the Early Horizon style, defined by a shared set of design motifs on pottery, and some other media to a lesser degree, throughout Mesoamerica. The style has been found at a number of sites from the highlands of central Mexico and Oaxaca to the Gulf and Soconusco coasts to the south. The motifs include incised and excised depictions of animals and supernatural forces. Although there has been much debate about the nature of the interaction represented by this widespread style (e.g., Diehl and Coe 1996, cf. Flannery and Marcus 2000; Lesure 2004), evidence overwhelmingly supports the idea that this Early Formative shared art style was the product of chiefly display (e.g., Flannery and Marcus 2000; Niederberger 2000; Marcus 2007a).

During the following Middle Formative period (900-500 B.C.)¹, a period of increasing social differentiation and chiefly competition that witnessed the rise of complex chiefdoms, there was a change in the “world of objects” (Love 1999:132) as

¹ Archaeologists working within Mesoamerica subdivide the Formative period in a variety of ways. I follow Plunket and Uruñuela (2011:5), in using the general subdivisions suggested by the work of Lesure et al. (2006:484), Niederberger (2000:Table 1), and Sanders et al. (1979:93, Table 5.1) for the Central Highlands. In this dissertation, the Formative sequence is divided in sidereal time as follows: Early (1500-900 B.C.), Middle (900-500 B.C.), Late (500-100 B.C.), and Terminal (100 B.C.-A.D. 100).

greater economic and political power fell into the hands of certain social groups (Gillespie 2008:127). Widespread similarities in ceramic decoration are still found throughout Mesoamerica but one dominant motif takes the form of simpler “double-line-breaks” (Coe 1961; Grove and Gillespie 1992; Plog 1976).

While Middle Formative ceramic motifs are clearly derived from something similar to the Early Formative designs, few scholars have addressed the nature of Middle Formative motifs other than to comment that they are abstract (Grove and Gillespie 1992:29; Lesure 2004:77) and may have lost their original meaning (Stark 2007:55) (but see exceptions in work of Flannery and Marcus [1994:140], Marcus [1989], and Spencer and Redmond [2000] for the Valley of Oaxaca). Pan-Mesoamerican motifs that were common on pottery during the Early Formative shift to other media like monumental sculpture and portable greenstone artifacts during the Middle Formative, and pottery in general was no longer an elite item. It has been argued that, by the Middle Formative, pan-Mesoamerican symbols had “escaped” into wider circulation and became highly stylized (Stark 2007:55).

The objective of this study is to evaluate the significance of Middle Formative ceramic motifs by documenting differences in vessel use and vessel decoration at two small villages in the Apizaco Basin of central Tlaxcala (Figure 1.1). By examining variation in the designs and intra-site distribution of ceramic motifs at the sites of Amomoloc and Tetel, I will provide evidence for how Tlaxcala’s earliest sedentary communities incorporated and adapted motifs. The rich database of designs from Amomoloc and Tetel’s pottery is explored in detail. I then compare their motifs to those

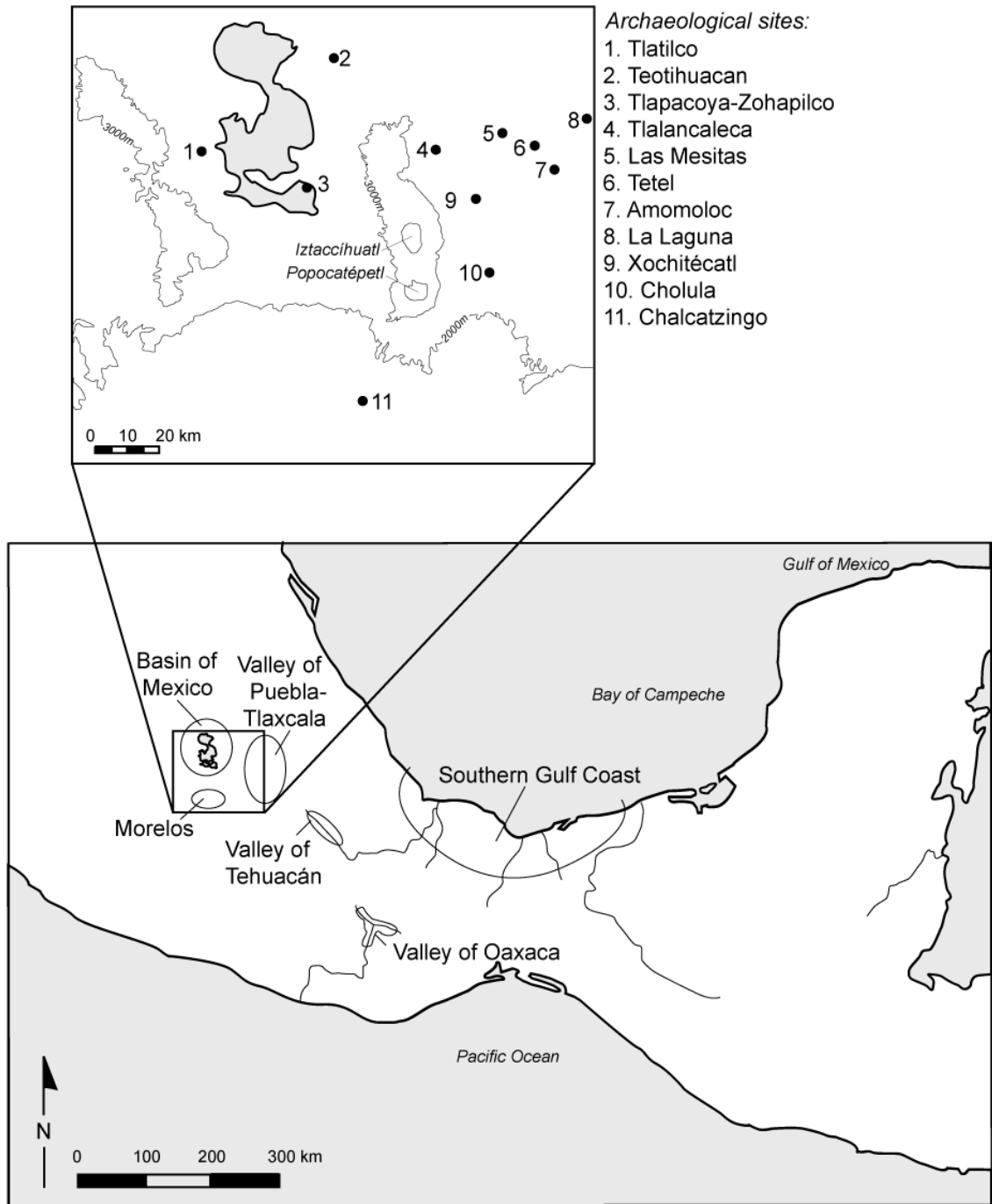


Figure 1.1 Map of Mesoamerica, showing locations of Amomoloc and Tetel, as well as other archaeological sites and regions mentioned in the text (redrawn from Flannery ed. 1976:Figure 1.1 and Grove ed. 1987:Figure 1.3).

from other sites across Mexico to better understand their variable participation in a network of societies exchanging goods, ideas, and motifs.

The Social Analysis of Horizon Styles: Theoretical Considerations

My focus is to determine how ceramic motifs may have functioned in Middle Formative society. Therefore, I begin by exploring the concept of style in general, and then assess how social scientists have interpreted the sharing of similar styles across long distances (e.g., Willey 1962). First, what is style? Since the beginning of the discipline, archaeologists have suggested ways to interpret shared styles. Earlier archaeologists focused on artifact variability as a means of developing typologies, and often interpreted stylistic variability as indicating different archaeological cultures and/or chronological change (e.g., Ford 1954; Spaulding 1953, 1954), whereas more recent work has explored the concept of style itself in greater detail (e.g., Carr and Neitzel 1995; Conkey and Hastorf 1990; Hegmon 1992, 1995; Plog 1976, 1983; Sackett 1977; Stark 1998; Wiessner 1983; Wobst 1977).

Although different approaches to this complex topic exist, archaeologists appear to agree on two basic tenets: (1) style is “a way of doing something,” and (2) style “involves a choice among various alternatives” (Hegmon 1992:517). Archaeologists tend to disagree on the definition of style once they begin to examine the specific roles that style plays in society and how to demonstrate that role archaeologically. One of the major debates was whether style is the result of passive social interaction, such as the product of learning and being an apprentice (e.g., Deetz 1965; Longacre 1970), or, more actively, information exchange (e.g., Wobst 1977).

In general, three types of stylistic variation have been identified: isochrestic, symbolic, and iconographic variation (see Plog 1995:370). Isochrestic variation (discussed at length by Sackett [1977, 1985]) is stylistic patterning that is the result of passive enculturation or social learning. As such, it is stylistic variation produced unconsciously by an artisan. Since artisans make style choices according to the social norms of the particular society they live in, “the degree of similarity among the choices that are made in two historically related loci depends on the intensity of social interaction shared by their occupants” (Sackett 1977:371). Thus, the presence of a shared style assumes that similarities in stylistic attributes passively reflect “cooperating individuals who share norms,” and that the more intensively one group interacts with another, the more similar their material culture will be (Carr 1995a:153).

Symbolic variation, on the other hand, actively transmits information about personal and social identity (Wiessner 1983:256), while iconographic variation is “a specific case of symbolic variation in which stylistic statements conform to certain spoken ones, containing clear, purposeful messages aimed at a specific target population” (Plog 1995:370, drawing on Wiessner 1985:160-161). Symbolic variation may be employed by social groups of varying kinds and sizes, while iconographic variation is typically associated with larger social groups (Plog 1995:370). In both of these types of variation, style is used actively by the artisan to express information about group affiliation; shared styles reflect the various groups that people choose to identify themselves with at multiple social scales (the household, village, polity, region, and so on).

Initially, these theories of stylistic variation were viewed as competing (e.g., Braun and Plog 1982:511; Plog 1980:121), but more recently they have been viewed as complementary, and it has been argued that different formal attributes of material culture can reflect different kinds of processes, whether enculturation, communication, and/or other processes (Carr 1995a:153; Plog 1995). There is increasing consensus that style may function differently at differing social and spatial scales (e.g., Hegmon 1995; O'Shea and Milner 2002; Parkinson 2002, 2006), and that artifact visibility is an important factor in determining the possible function of style in society (Carr 1985, 1995b; Voss and Young 1995; Wobst 1977). In general, the more visible attributes of material culture tend to correspond to more active or overt uses (e.g., marking identity, boundaries, interaction, and ownership), and the less visible attributes tend to correspond to more passive uses (e.g., learning and enculturation) (Carr 1995b; O'Shea and Milner 2002:207; Parkinson 2006:36).

For example, the overall shape and color of ceramic vessels are highly visible attributes and have been associated with the communication of regional identity among modern Tarascan potters from West Mexico (Carr 1995b:Table 7-7; Hardin 1983:10), while paint thickness and number of brush strokes used to make a design configuration are less visible attributes and have been interpreted as reflecting passive and personal methods of manufacturing (Carr 1995b:Table 7-7; Hardin 1977:121-124). Beyond the specific attributes of an object, it is also important to consider visibility in terms of context and use. For instance, serving vessels and drinking vessels (because they are used and displayed in social situations involving multiple people) tend to be more visible in a community than cooking pots or water storage vessels.

When archaeologists discuss horizon styles, a term originally defined by Phillips and Willey (1953:625) as a “spatial continuum represented by the wide distribution of a recognizable art style,” they are referring to broad similarities in “a way of doing something” across a large region. The term “horizon style” is not very specific, and typically shared styles have been identified in an impressionistic way, so that highly visible general similarities are highlighted while temporal and regional variability are glossed over. Accordingly, interpretations of widespread art styles have tended to focus on assumed iconographic functions of the styles at the macro-regional level, while other active and passive uses at different scales have been of less concern. Finding decorated vessels in meaningful contexts would provide much needed clarity on the social significance of widespread motifs.

Previous Studies of Formative Mesoamerican Ceramic Motifs

The presence of pan-Mesoamerican motifs at various sites during the Early Formative period has been interpreted at the macro-regional level as resulting from the elite exchange of prestige goods (e.g., Grove 1989; Niederberger 2000), and little attention has been paid to how the motifs may have functioned at varying scales or during later time periods. The work that has been conducted in the Valley of Oaxaca is an exception.

At the community level, analyses by Pyne (1976) and Flannery and Marcus (1994:136) suggest that certain Early Horizon motifs may have represented the apical ancestors of male descent groups. At the site of San José Mogote, for example, motifs symbolizing the supernatural force “Sky” were found associated with the cluster of

houses in Areas A and C, while the houses in Area B were associated with motifs symbolizing “Earth.” These motifs tend to occur on ceramics of contrasting color (i.e., Sky motifs on Leandro Gray and Delfina Fine Gray pottery, and Earth motifs on Atoyac Yellow-white pottery), and mortuary data suggested that the motifs were associated only with male burials, supporting the idea that such an association was inherited through the male line. Interestingly, Tolstoy (1989) and Joyce (1999) have reassessed burial data from the site of Tlatilco in the Basin of Mexico, and they suggest that Tlatilco was divided into competing residential groups. Tolstoy (1989:102) notes that Early Horizon motifs are associated with only one of the groups and more often with female than male burials, so it is clear that there is variation in the use of Early Horizon motifs at the community level in the Basin of Mexico and the Valley of Oaxaca.

Through detailed ceramic motif analysis at the regional level for the Valley of Oaxaca, Plog (1976) has documented less interaction among competing chiefdoms. His work is still the only published study of double-line-breaks in Mesoamerica that uses actual sherd counts and statistical methods to estimate the intensity of interaction between early villages from 900-600 B.C. By comparing the predictions of the gravity model, which proposes that “the amount of interaction between two communities is directly proportional to their populations and inversely proportional to the distance between them” (Plog 1976:256), to the design similarity coefficients calculated for shared motifs between sites in the Valley of Oaxaca, Plog found that the competing chiefdoms of Huitzo and San José Mogote were less similar in design motifs than expected, even though they were not far apart, while some smaller sites in the Valley of Oaxaca were more similar to San José Mogote than predicted. He reasoned that some nearby sites, like

Huitzo, were less similar to San José Mogote than predicted because they were not close allies.

Barbara Stark (1997) reviewed ceramic motifs in Veracruz to determine the spatial extent of style zones diachronically and to assess possible changes in the political geography, defined as “the disposition and characteristics of polities on the landscape” (Stark 1997:278). During the Early and Middle Formative periods, Stark argues for spatially extensive pottery styles, and suggests that in the Late Formative there were more style zones, with more localized styles, across Mesoamerica due to growing complex polities which placed constraints on social interactions (Stark 1997:288). The studies by Plog and Stark suggest the potential contributions that design studies may make in furthering our understanding of ancient socio-political systems and interaction.

It is important to build on this research and evaluate how the existence of an early horizon style affected communities that were smaller, later, and more rural than the core areas in which the earlier shared style had its genesis. How did prestige, competition, and interregional interaction affect the social landscape? How did style function at varying social and spatial scales over time?

Reconstructing the Function and Significance of Middle Formative Motifs

The nature of pan-Mesoamerican motifs and their implications for Formative interregional interaction is a frequently debated issue in Mesoamerican archaeology, yet few new excavation data related to the topic have been published in the last 20 years (Plunket and Uruñuela 2011:9). Recently, sourcing studies of pottery displaying Early Horizon motifs have been conducted and much discussed (e.g., Blomster et al. 2005;

Flannery et al. 2005; Hancock et al. 2008; Neff et al. 2006a, b; Sharer et al. 2006; Stoltman 2011; Stoltman et al. 2005). And a few articles and ceramic monographs have incorporated analyses of Formative motifs, though none present a complete inventory with total counts of individual motifs for the purposes of interregional comparisons. The majority of these studies present motifs as secondary to ceramic typologies, merely charting general temporal changes in design motifs (e.g., Cyphers Guillén 1987, 1992; Love 2002; MacNeish et al. 1970; Niederberger 1976, 1987). Except for the Valley of Oaxaca (Flannery and Marcus 1994; Plog 1976; Pyne 1976; Spencer and Redmond 1997, 2000), we have very little information on the specific contexts where vessels with Early Formative motifs were used and discarded within sites; data on Middle Formative motifs are even more limited.

This study will provide a contextual analysis (*sensu* Marcus 1996:286) of motifs from the Middle Formative villages of Amomoloc and Tetel, considering not only where individual motifs were found at each site, but also the kinds of ceramic vessels they were associated with, and where they were employed and disposed. Flannery and Marcus (1994:36) distinguish between proveniences (such as excavation lots or feature numbers) and contexts, which entail interpreting proveniences as meaningful units such as “community midden,” “house floor,” or “platform fill.” This information is sorely lacking for the majority of sites where we find Formative motifs. This study will assess actual variability in style and meaning at multiple social and spatial scales from excavation units and meaningful units such as bell-shaped pits and other features associated with early households.

Another problem in the study of Formative motifs is the quality and number of illustrations for motifs and descriptions of ceramic typologies in general. As Barbara Stark (1997:284) notes, published information on Mesoamerican ceramic type collections continues to emphasize ideal types, so that variability within types is obscured, and ceramic illustrations, when provided, often include a mix of common designs along with unusual ones, not clearly distinguished from each other nor with actual count data. Plunket and Uruñuela (2011:12) suggest that publications dealing with Formative motifs would be more useful if they included “copious” illustrations of individual style elements so that scholars can make better comparisons between regions. By providing a complete inventory of motifs from meaningful contexts at Amomoloc and Tetel, this study addresses the lack of detailed illustrations of Middle Formative ceramic motifs.

To evaluate the social and spatial scales upon which style may act, we must approach ceramic motifs and their function in Middle Formative society at a variety of levels. This study examines the issue at the following levels:

(1) At the level of the individual vessel, what specific motifs are depicted? Do the motifs refer to an identifiable subject, such as supernatural forces (as argued for Early Horizon motifs), or does the characterization “abstract decoration” seem more appropriate? The purpose of this line of investigation is not to attach specific meanings to the motifs but to assess possible isochrestic, symbolic, and/or iconographic stylistic variation within the motifs and relate that patterning to other contextual analyses. As Fogelin (2007:58-59) notes in reference to the archaeological study of ritual, it is often more useful to study how a symbol is used and the people who use it, rather than interpret

the meaning of the symbol itself, especially in instances where the application of ethnographic and historic data may not be very reliable.

(2) At the community level, where are motifs depicted? Are motifs displayed on all pottery? Or are they restricted to certain types or shapes? What is the distribution of motifs within Amomoloc and Tetel? Are motifs common to all depositional contexts, or is there variability in where and how motifs were used and discarded within these two villages? By considering both vessel shape and stylistic data at the site level, I will evaluate the multistage dynamics associated with consumption and exchange, as well as how people actually displayed and used style.

(3) At the regional level, what are the differences between Amomoloc and Tetel, and how does their use of motifs change over time? The data available for Amomoloc and Tetel together span four hundred years, from 900-500 B.C., and they coincide with the development of complex chiefdoms in the area. Assessing both synchronic and diachronic variability in the use of motifs at these two small rural villages thus contributes to a better understanding of the impact of developing complexity at different scales.

(4) Finally, at the macro-regional level, how does the patterning in motifs at Amomoloc and Tetel compare to the use of motifs at other Formative sites in Mexico? Was there a local design tradition in central Tlaxcala? Are some motifs unique to central Tlaxcala, and/or are some motifs used elsewhere but missing in the design inventory at Amomoloc and Tetel?

Too many scholars have considered the pan-Mesoamerican style as a unified, standardized phenomenon, missing the variation in space and time, as well as what the

social significance of such variation might signify. The early villages of Tlaxcala provide valuable comparative cases for analyses of shared art styles in early sedentary societies, allowing us to trace, with exact contextual data, the transformation over a four hundred year period in the use of ceramic motifs in relation to other aspects of culture.

Organization of the Study

In order to address the questions outlined above, Chapter 2 presents the excavations at Amomoloc and Tetel, providing background information on the environmental setting of central Tlaxcala as well as previous archaeological research conducted in the region. I describe the sites of Amomoloc and Tetel and the methods of data collection employed by the Apizaco Formative Project. I present the results of the excavations and identify the contexts that are meaningful units for the analyses in subsequent chapters.

In Chapters 3 and 4, I present the ceramic typology and chronology for Amomoloc and Tetel. Three sequential ceramic complexes (Tzompantepec, Tlatempa, and Texoloc) were identified from various contexts at the sites. In Chapter 3, I present all the ceramic types and vessel shapes found at Amomoloc and Tetel, which is followed in Chapter 4 by a discussion of the differences between the ceramic complexes, including the tentative division of the Tlatempa phase into two subphases. This information is then linked to the excavation data, in order to seriate the various contexts at Amomoloc and Tetel and assign them to chronological phases.

In Chapter 5, I present the complete inventory of motifs from meaningful excavation units at Amomoloc and Tetel. I discuss the classification system I developed

to assist our assessment of variation in the motif data for the subsequent analysis chapter. In Chapter 6, I address the first three questions presented in the previous section by evaluating the specific motif elements, the context and distribution of motifs, differences between Amomoloc and Tetel, as well as changes over time.

In the concluding Chapter 7, I compare the motifs at Amomoloc and Tetel to those at other sites throughout Mexico to evaluate macro-regional networks. I also relate the patterns of variability identified in Chapter 6 to broader social and political trends and present an interpretation of how Middle Formative ceramic motifs were used differently at varying scales of society.

CHAPTER 2

Excavations at Amomoloc and Tetel

In this chapter, I summarize the fieldwork conducted at Amomoloc and Tetel, and present the contexts at each site from which the ceramic sample was obtained. First, I describe the environmental setting of the Apizaco region, indicating why this area may be considered marginal when compared to other locations within the Mexican highlands where early villagers settled. I then assess previous archaeological research in the region and discuss how the goals of the Apizaco Formative project changed over time. The results of surface survey and excavations at Amomoloc and Tetel are presented, along with the specific contexts that allow us to evaluate intra- and inter-site differences in ceramic and design motif use.

The Environmental Setting of Central Tlaxcala

The Formative villages of Amomoloc and Tetel are located in the state of Tlaxcala near the city of Apizaco, about 80 km southeast of the Classic period urban center of Teotihuacan and 50 km north of the second largest Classic period city, Cholula (see Figure 1.1). Drennan and Haller (2007) have noted how variability in annual precipitation and catchment productivity shaped relative population densities and degrees of centralization in different portions of highland Mesoamerica. Along these lines, the

Apizaco region should be considered marginal when compared to other areas occupied during the Formative period in Mexico. The state of Tlaxcala is located within the central Mexican highlands and has an elevation ranging from 2100 to 4461 m above sea level, with its highest point being the summit of La Malinche in the southeastern part of the state (Borejsza 2006:9). Research in the Basin of Mexico suggests that in prehispanic times maize agriculture was not possible above an elevation of 2700 m (Sanders 1976:61-63), and many of the sites in the Apizaco region, including Amomoloc and Tetel, lie just below 2700 m.

In addition to its high elevation, the region receives lower precipitation than adjacent areas of southern Puebla and the southern Basin of Mexico. Average rainfall (below 2700 m) is between 600 and 850 mm, the majority of which falls during the rainy season from May to October (Borejsza 2006:12). There is significant variation from year to year, which, for a variety of reasons, neither groundwater nor canal irrigation is effective in lessening (Borejsza 2006:13; Lesure et al. 2006:476). Temperatures average between 13 and 15° C, but there are large daily fluctuations, making frosts and potentially hazardous hailstones common early in the growing season (Borejsza 2006:13; Lesure et al. 2006:476). Frosts were probably the major factor that discouraged the earliest farmers from establishing villages here.

Perhaps because this area was somewhat marginal, it was not until ca. 900 B.C. that pottery-using villages appeared in Tlaxcala, centuries after settlement in more choice locations for maize agriculture (Lesure et al. 2006). Prior to 1400 B.C., there is evidence for early settlements at lower elevations in Morelos and Puebla (Cyphers Guillén and Grove 1987; Grove 1974; Hirth 1987) and exploitation of lake resources at higher

elevations around Tlapacoya-Zohapilco (Niederberger 1976, 1979). It is very likely that the first settled agriculturalists in central Tlaxcala were migrants from less marginal areas, where societies had already become increasingly hierarchical. People at lower elevations moved gradually uphill to found new villages, as the landscape at lower altitudes filled in with more villages and people.

Previous Research in the Apizaco Basin

Amomoloc and Tetel were first identified in the early 1970s by the Proyecto Arqueológico Puebla-Tlaxcala, directed by Angel García Cook (1972, 1974). García Cook and his colleagues conducted research over an area of approximately 6000 km², recovering survey and excavation data from the entire state of Tlaxcala and portions of the Valley of Puebla to the south. Based on these data, García Cook (1972, 1974) outlined a cultural sequence for Tlaxcala. In subsequent publications he discussed the Formative phases in greater detail (García Cook and Merino Carrión 1997[1989]; Mora 1996[1975]).

García Cook and Merino Carrión (1997[1988], 1997[1989]) identified four sequential Formative ceramic complexes (Tzompantepec, Tlatempa, Texoloc, and Tezoquipan), each with distinct cultural manifestations. The later phases have been discovered by Serra Puche et al. (2004) at the ceremonial center of Xochitécatl. The ceramic complexes pertinent to this study are:

- (1) Tzompantepec, which García Cook and Merino Carrión (1997[1988], 1997[1989]) date from 1600 to 1200 B.C.;
- (2) Tlatempa, 1200 to 800 B.C.; and

(3) Texoloc, 800 to 350 B.C.

Excavations by Lesure et al. (2006) support the existence of these complexes (see Chapter 3), though their dating will have to be revised, based on new radiocarbon dates and an assessment of ceramic cross-ties with other regions. Following these revisions, the Tzompantepec Complex now dates from 900 to 800 B.C., the Tlatempa Complex from 800 to 650 B.C., and the Texoloc Complex from 650 to 500 B.C., placing all three complexes within the Middle Formative period.

The Tzompantepec Complex is characterized by monochrome red, brown, and white ceramics, with a limited set of shapes, including tecomates, ollas, and globular bowls. García Cook and Merino Carrión (1997[1989]:307-310) report 27 sites with Tzompantepec material in Tlaxcala and Puebla, and suggest that society was homogeneous and composed of autonomous agricultural villages displaying no social differentiation among their inhabitants.

The Tlatempa Complex is characterized by white, red-on-white, brown, and red ceramics in a variety of shapes. White is the predominant ceramic ware, with the most common shape being a large bowl with a rounded base and thickened interior rim (often decorated with incised and/or excised designs). García Cook and Merino Carrión (1997[1989]:311-313) report 50 sites for the first part of this phase and 130 sites for the later part (though they do not provide information on how to separate these two subphases from each other). In the Tlatempa phase some larger sites with low platform architecture begin to appear.

The subsequent Texoloc Complex is characterized by a higher proportion of brown and black ceramics. Red and red-on-brown types are also common. The white

ceramics of the Tlatempa phase are less common though still present. Population continued to increase, with 164 sites identified for the earlier part of the Texoloc phase and 230 for the later part (García Cook and Merino Carrión 1997[1989]:322-323). They report the emergence of macro-regional centers with plazas and monumental architecture and suggest the development of complex societies by the Texoloc phase. It is not surprising then, that the Texoloc phase coincides with the first large constructions at Xochitécatl (Serra Puche and Palavicini 1996:47).

In the following Tezoquipan phase, more than 20 macro-regional centers emerge, and this time period represents the height of cultural florescence in the region, with the largest settlements and greatest differences in social classes (García Cook and Merino Carrión 1997[1989]: 324-338).

Given the revised dates for the Tzompantepec Complex, we see a rather late transition to village life when compared to other areas of Mesoamerica, including central Mexico. Interestingly, the first villages in central Tlaxcala remained autonomous for several centuries after being founded. Although more complex sociopolitical systems had already developed in other regions of Mesoamerica by the time of the first settlements in Tlaxcala (by 1200 B.C. along the Gulf Coast, in the Valley of Oaxaca, and Basin of Mexico), it is not until around 650 B.C. that we see the appearance of chiefly centers in the region at sites like Xochitécatl and Tlalancaleca (García Cook 1981; Serra Puche et al. 2004).

Site Descriptions and Data Collection

The Apizaco Formative project, directed by Richard Lesure, conducted survey and excavations at four Formative sites in the Apizaco Basin of central Tlaxcala, spanning the late Early Formative through Late Formative periods (900 B.C. – A.D. 100). The goal was to document increasing socioeconomic complexity (Lesure et al. 2006). Lesure's project will be described in greater detail in a four-volume monograph he is preparing for publication (Cotsen Institute of Archaeology at the University of California, Los Angeles).

We targeted Amomoloc and Tetel for excavation because one of the goals was to test the claim that agricultural villages existed in Tlaxcala as early as 1600 B.C. These two sites were among the few in the Apizaco region reported to have been occupied during the Tzompantepec phase (García Cook 1972:Figures 2, 3); we now suggest this phase begins at approximately 900 B.C. (Lesure et al. 2006).

At an average elevation of 2425 m, the site of Amomoloc is a small Middle Formative village lying approximately 1.5 km south of the modern town of San Andrés Ahuashuatepec, just north of the Amomoloc River. García Cook identified the site as T-79 (1972:Figure 2). The site is part of E14B33-076 recorded by the Registro Público de Monumentos of the Instituto Nacional de Antropología e Historia. We refer to Amomoloc by the numbers given to it by the registry (TLX-076) to conform to the more recent catalog system established by INAH. The site consists of a dispersed sherd scatter covering approximately 6.75 ha. Settlement over this area does not appear to have been continuous, but instead concentrated on Terraces 1 through 4, covering approximately 1.2

ha, and on a much eroded area south of the terraces, close to the edge of a barranca, or water-worn ravine (Figure 2.1).

Amomoloc is bordered on three sides by deeply eroded barrancas. The majority of the site is terraced. The terraces located upslope of Amomoloc, as well as Terraces 5 through 8, are now used for maize cultivation, while Terrace 1 is eroded down to the tepetate-forming layer. (For a discussion of Tlaxcalan soils and the formation of tepetate, also known as duripan, see Borejsza 2006:20-35.) Terraces 2 through 4, the only areas of the site where we found intact features, do not appear to have been cultivated for many years, and are covered with different types of vegetation. The southern side of Terraces 2 through 4 is grassy with small conifers (*sabino*), while the northern side is more eroded and sandy, and supports tall pine trees (*ocote*). Areas closer to the barranca of the Amomoloc River where Formative sherds were also found are highly eroded and not terraced. It is very unlikely that any intact features are left in this area of the site, as we did not find any features in the few profile cuts that remain.

Located about 9 km to the northwest of Amomoloc, on the northeastern slope of Cerro Santa Ursula just west of Apizaco, the site of Tetel appears to have been a Middle Formative village of about 2 ha (Figure 2.2). We identify it as the site referred to as T-26 by García Cook (1972:Figure 2). It forms part of E14B33-053 recorded by the Registro Público de Monumentos of the Instituto Nacional de Antropología e Historia, and as such, we refer to Tetel as TLX-053 in reports and on artifact labels.

Tetel lies at an average elevation of about 2555 m and consists of a scatter of sherds, over a series of terraces. Formative sherds were identified on the surfaces of Terraces 4 through 8. Terraces 4 and 5 are heavily eroded, and only portions of Terraces

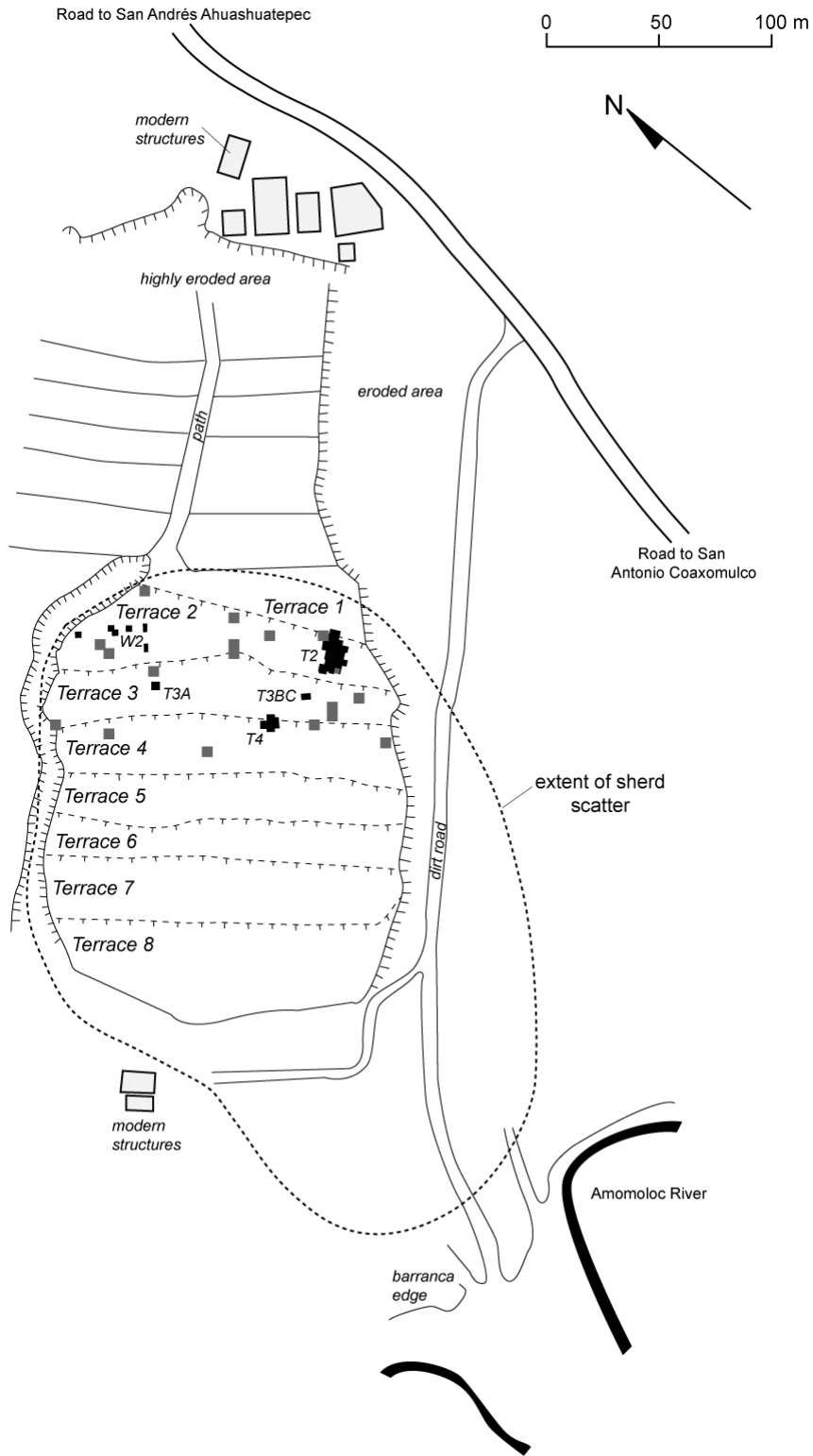


Figure 2.1 Map of Amomoloc, showing location of terraces and excavation units. Units excavated in 2001 and 2003 are shown in black; units excavated in 2004 are shown in gray.

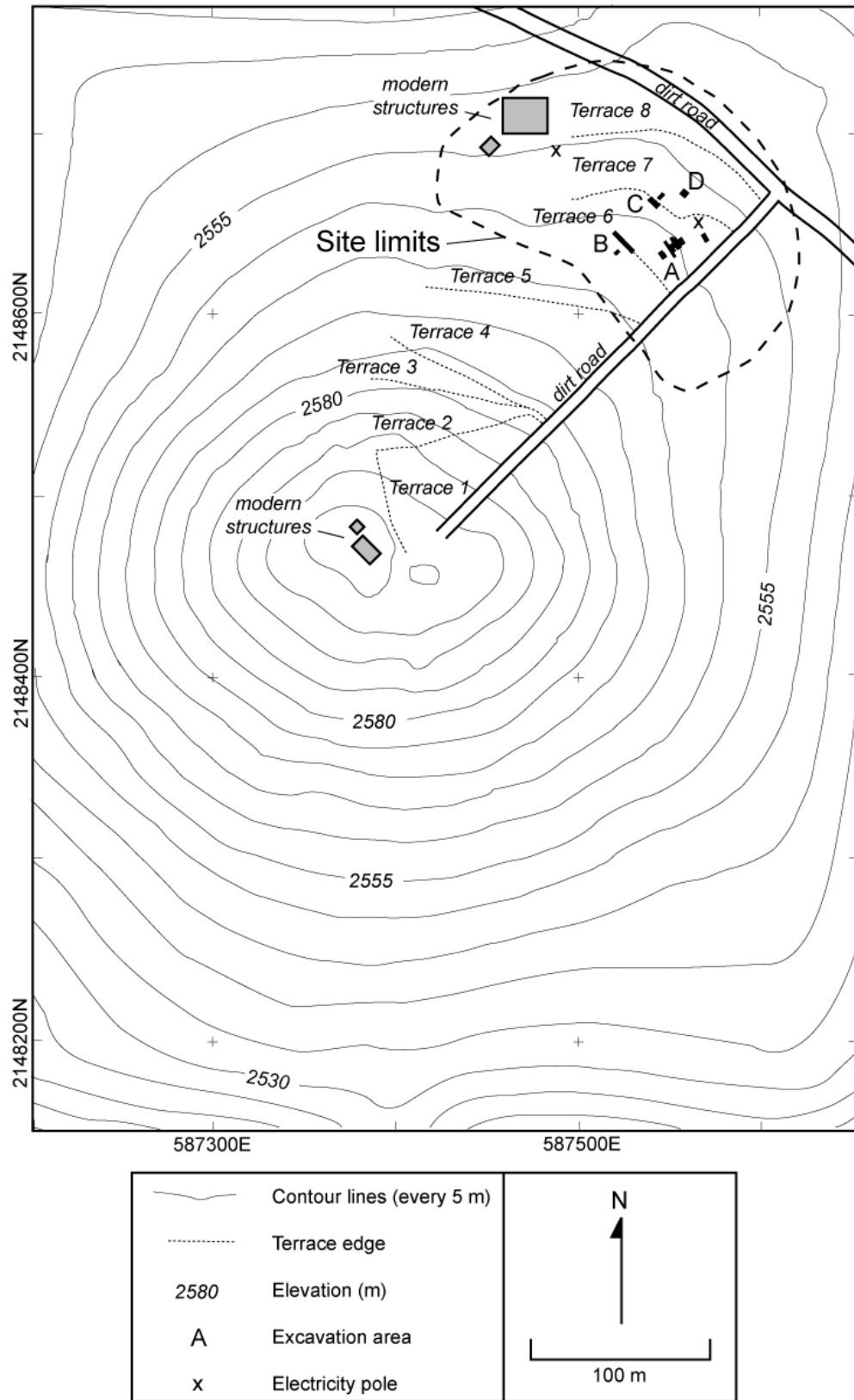


Figure 2.2 Map of Tetel, showing location of terraces and excavation units.

6 and 7 (mostly a small area covered by pine trees and bushes) remain better preserved. A portion of Terrace 7 was being cultivated during our excavation season, and we found several looters' pits on Terraces 6 and 7.

Even the least damaged areas of both sites are heavily eroded, with many artifacts resting directly on the sterile substrate. We believe that no Formative occupation surface is preserved anywhere at either Amomoloc or Tetel (Figure 2.3). No house floors or other above-ground primary contexts were recovered with any degree of certainty. A few possible postholes were noted at Amomoloc, and we may have encountered the fill of two highly eroded platforms at Tetel. In general, however, finds were limited to pits dug into the sterile substrate by the sites' inhabitants. These were bell-shaped pits and other irregularly shaped pits where secondary refuse was discarded (Figure 2.4). Other pits appear to be the lower sections or bases of hearths. These features contained an abundance of artifacts, including fragments of pottery vessels, figurines, chipped stone, ground stone, plant and animal remains, and burned daub.

Investigations at Amomoloc and Tetel were undertaken from 2000-2004, with our strategy for uncovering Formative features evolving from season to season. In 2000, we made systematic surface collections and prepared preliminary maps at both sites. Beginning in 2001, our excavation goals at Amomoloc and Tetel were to find intact Formative features and identify Tzompantepec, Tlatempa, and Texoloc phase components. As we learned more about the erosion that had occurred at the sites, we realized that only subsurface features remained intact. We then decided to scrape the first 10-15 cm of topsoil off the surface of an excavation unit to reveal the sterile substrate into which Formative subsurface features, such as pits, had been excavated by the sites'



Figure 2.3 Severe erosion at the site of Amomoloc.



Figure 2.4 Excavation of the base of a bell-shaped pit at Amomoloc (Feature A68).

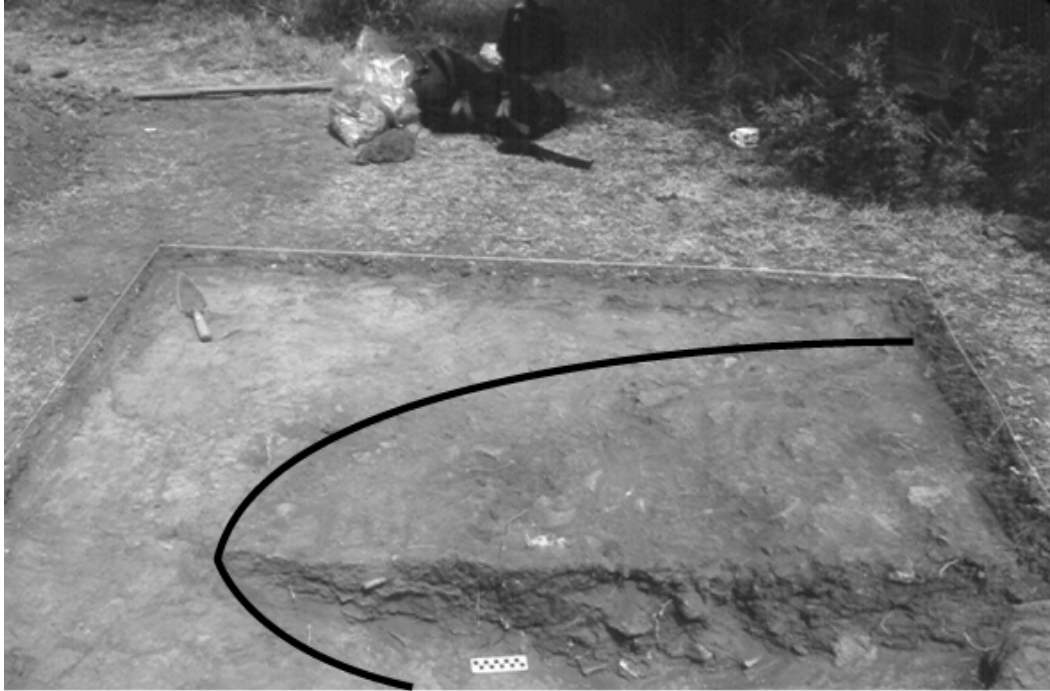


Figure 2.5 Excavation of shallow trash pit at Amomoloc (Feature A23). Note the dark stain in lower right corner, indicating the extent of the pit, just a few centimeters below the modern ground surface.

inhabitants (Figure 2.5). All of these features were excavated according to stratigraphic levels.

Terrace investigations at both sites indicated that this terracing postdated the Formative occupation (Borejsza 2006:128-135). In 2001 at Tetel, we excavated approximately 84 m² in four areas, designated A through D, and discovered ten pits (four bell-shaped pits and six other pits), all dating to the Tlatempa and Texoloc phases (Figure 2.6).

At Amomoloc, excavations were limited to three of the terraces (Terraces 2 through 4), covering an area of 1.07 ha. This area of the site is covered in trees and was not as damaged by contemporary farming or erosion. In 2001 and 2003, we cleared an

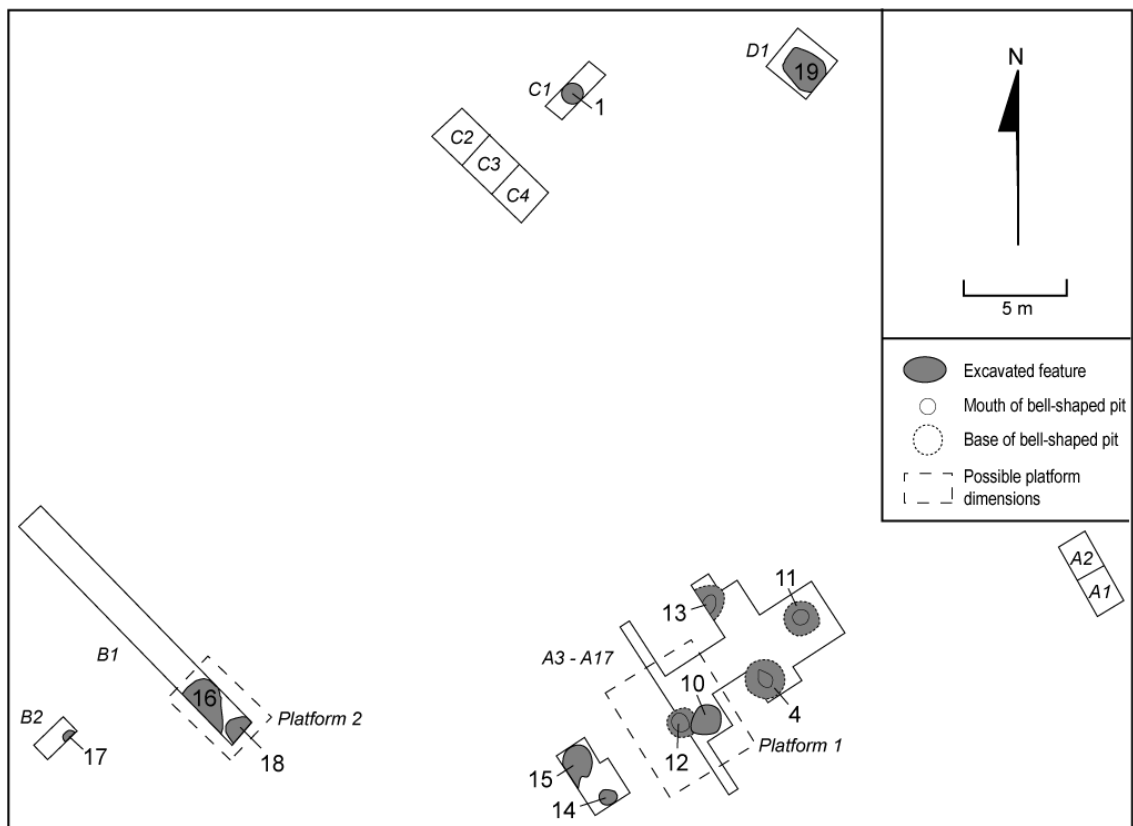


Figure 2.6 Excavation areas and features recovered at Tetel.

area of 227 m², which revealed 23 subterranean features, all dating to the Tlatempa phase except for one Tzompantepec-phase bell-shaped pit. We opened a large area on the southern portion of Terrace 2, revealing features in two concentrations. We also found two features in a small test area on Terrace 3 (Figure 2.7). In general, it appeared that only 20-30 cm of the upper sections of these features had eroded, leaving the majority of the features intact. Only two highly eroded features were found in the northern portion of the site, which was surprising, considering the density of features in the south.

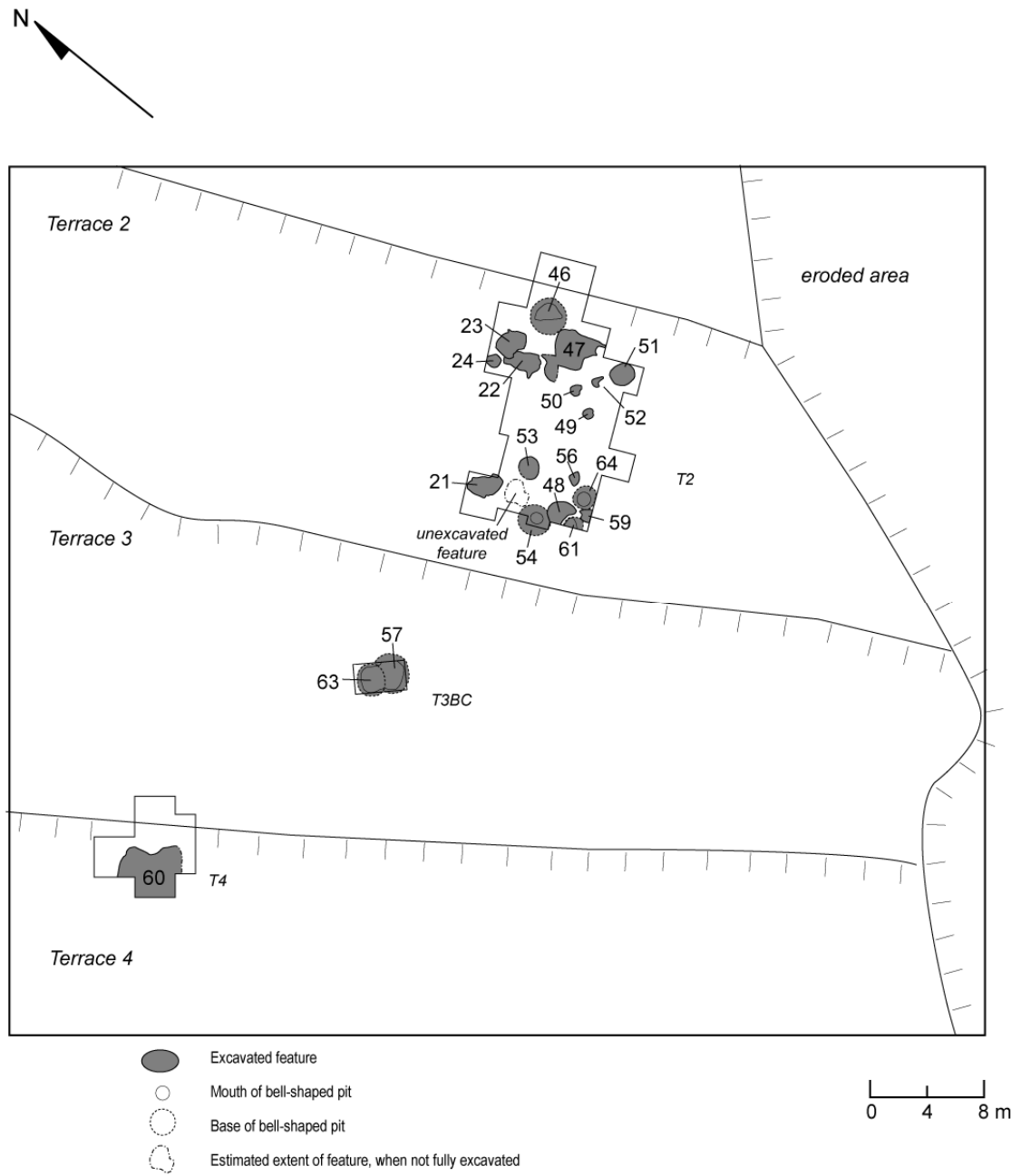


Figure 2.7 Southern portion of Amomoloc, showing features from the 2001 and 2003 excavations.

In 2004 at Amomoloc, our strategy shifted from simply recovering features to an attempt to understand the internal layout and organization of the Formative community. We devised a program of random testing in 4x4 units to discover the density of household units, based on a series of assumptions and arguments derived from previous work on Formative communities in highland Mexico, as well as the results of our first two seasons at Amomoloc. Drawing on the work of members of the University of Michigan's Oaxaca project at San José Mogote, Tomaltepec, and Tierras Largas (Flannery ed. 1976; Flannery and Marcus 2005; Whalen 1981; Winter 1972), we thought it likely that the villages of Amomoloc and Tetel comprised a scatter of small houses of perishable materials, each surrounded by a "yard" in which domestic activities took place. The archaeological signature of a house-yard would be a concentration of subsurface features, including bell-shaped pits, roasting pits, and burials. Although the loss of the Formative ground surface at Amomoloc and Tetel made identification of houses themselves practically impossible, we reasoned that we might be able to identify house-yards at Amomoloc by looking for dense concentrations of subsurface units that had been excavated into bedrock.

One aspect of community organization that seemed both of general interest and amenable to investigation at Amomoloc was the density or packing of house-yards. Our reasoning, based on the results of the first two seasons at the site, was as follows. An important initial concern was whether the site might be an unreadable palimpsest of features without evident grouping into house-yards. Two facts seemed to suggest that this was not the case. First was the density of features on southern Terrace 2 (in contrast to the absence of features in our tests in the northern part of Terrace 2). Second was the

pattern of features in our large Terrace 2 excavation (Figure 2.7). We had cleared 144 m² and revealed 18 Formative features that seemed to form two concentrations separated by about 4 m. The features included bell-shaped storage pits, shallow pits or toss-middens, hearths, and roasting pits (Figure 2.8). In the empty area between the concentrations of features, we noted one or two possible postholes. We speculated that what we had excavated was the yard area of a single house, now eroded away except for subsurface features. A small house of perishable materials such as those evidenced at Formative sites in other parts of the central highlands could have stood in the middle of our two concentrations. This idea seemed to be consistent with other really extensive excavations of Formative habitation zones in highland Mexico (see Chapters 6, 7, and 8 of Marcus and Flannery 1996), and it remains a plausible interpretation of our findings on the southern part of Terrace 2, though we now would date the features to different subphases.

We decided to base our excavation strategy and sampling procedure on inferences drawn from the southern Terrace 2 concentration of features. We estimated that a house-yard would be characterized by a concentration of subsurface features covering an area about 17 m in diameter. A house-yard would thus cover approximately 227 m², some of which would be devoid of features. This hypothesized house-yard size (based on evidence from Amomoloc) is compatible with results from other areas (Abascal Macías 1976; Flannery and Marcus 2005; Whalen 1976:78; Winter 1972:85-87).

To estimate the density of occupation in the site, we defined and planned to investigate a macro-feature, the house-yard. We had neither the time nor resources to uncover all the house-yards at the site. We therefore needed to devise a sampling procedure that would allow us to estimate the density of house-yards without exposing



Figure 2.8 Roasting pit excavated on Terrace 2 at Amomoloc (Feature A51).

them fully. Since we could identify a house-yard by the presence of subsurface features, we needed a sampling unit large enough to reveal at least one feature if we were in a house-yard. It would be virtually impossible to place a 4x4 m unit in the southern Terrace 2 house-yard without hitting at least one subsurface feature. The same could not be said for smaller sampling units (for example, 2x2 m tests). We therefore superimposed a 4-m grid across the preserved area of the site, to create 670 grid units (the total area sampled was 10,720 m²). For ease of excavation, we aligned the grid with the terraces. They thus ran at an angle of 51 degrees east of magnetic north across the site. We numbered the squares from t1 to t670, moving from top to bottom and left to right on the map (Figure 2.9).

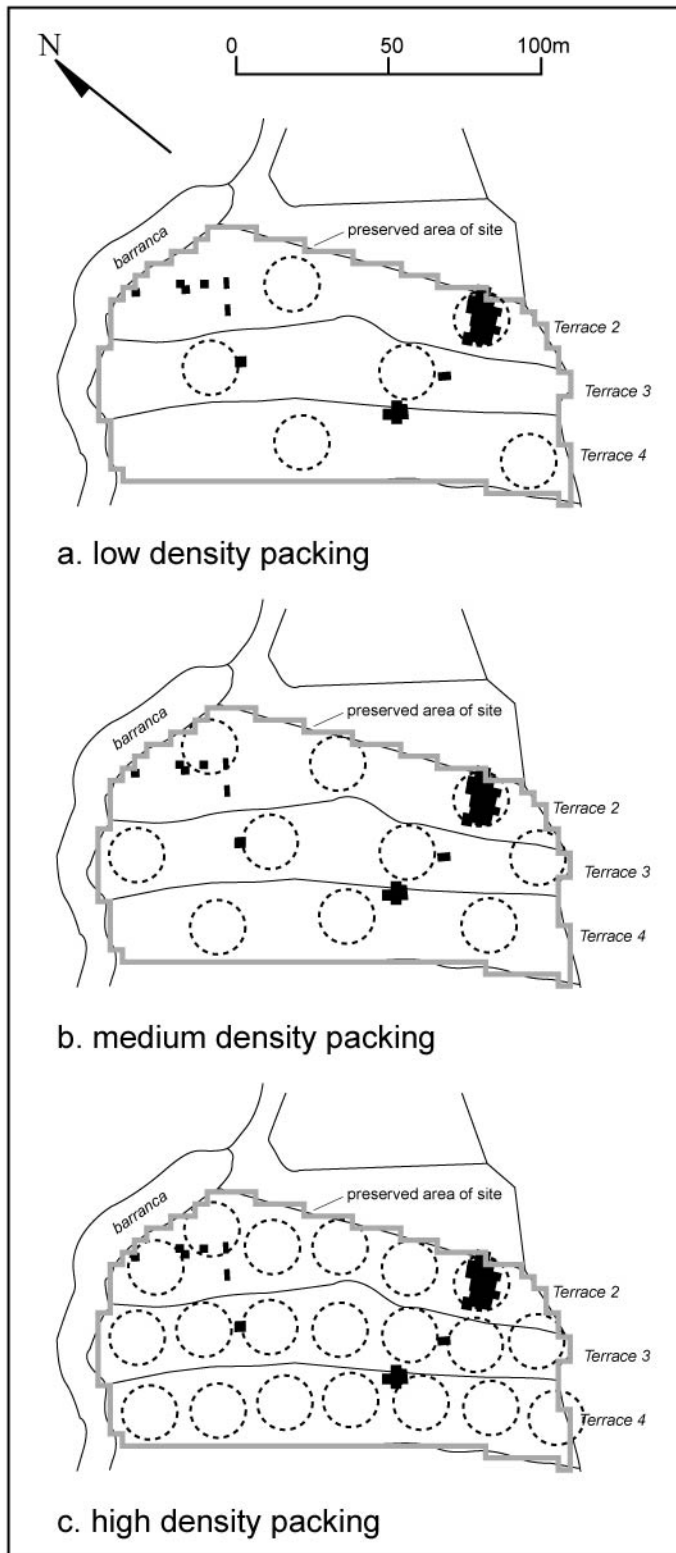


Figure 2.10 The three models of possible house-yard densities.

be covered by house-yards in each model. Light packing would suggest house-yards covered 13%, moderate packing 21%, and high packing 42% of the preserved site area. We randomly chose without replacement 15 of the 670 grid units for excavation. (We chose that number to excavate because the expected number of hits for light packing rose above 1.0 and because we felt it was the maximum number of units we could complete with the time and resources available.) If the packing of house-yards was light, we would expect 2.0 of the 15 units to yield subsurface Formative features. For moderate packing, we expected the number of positives to be 3.2; for heavy packing, we would expect 6.3.

We excavated the 15 squares during the summer of 2004. The randomly chosen sample (Units 2, 45, 97, 103, 109, 124, 144, 356, 392, 438, 462, 467, 480, 511, and 604) were not distributed evenly across the site: seven units were on Terrace 2, three units on Terrace 3, and five units on Terrace 4. We did have some representation from each terrace on both the northern and southern areas of the site (Figure 2.9).

In three cases, we decided to shift the location of the unit that we excavated due to vegetation (Units 480, 511, and 604 were moved to Units 481, 549, and 566, respectively). One of the randomly chosen units (Unit 462) overlapped with excavations we conducted in this area in 2003 (Units T4C through F), so we already had information on features in this unit. During the 2004 season, we also excavated an extension to one of our test pits to examine the terrace step just south of Unit 124 (Unit 158), an extension to follow two bell-shaped pits (Unit 431) and a small test pit on the northern end of Terrace 3 to recover an eroding feature (Unit 220). The systematic random sampling of the site brought the total excavated area of the site to 471 m² and 34 features.

Excavation Results

At Amomoloc, our attempt to estimate the density of house-yards produced unexpected results. We identified features in four of the 15 4x4 m sample units excavated on Terraces 2, 3, and 4 (Units 356, 392, 462, and 549). Such results would correspond to a model of light to moderate packing of house-yards (see Figure 2.10). However, several lines of evidence now suggest (1) an original high density packing of house-yards, (2) followed by severe destruction through erosion in much of the area currently under trees on the northern part of the site.

The only area where our sample units hit features was along the southern margin of the site. Excavations in this area (which includes the southern part of Terrace 2 but which extends also to the southern parts of Terraces 3 and 4) revealed a similar stratigraphy in which pits appeared immediately below a 10 cm humic layer and intruded into a compact sterile substrate. To the north of this area, a very thin humic layer generally overlay sandy sediments that were not compacted, which in turn rested atop compact substrate. All artifacts recovered in the northern area were highly eroded, suggesting exposure on the surface and/or movement from their original context.

This difference from area to area corresponds to a noticeable difference in vegetation on either side of a division running approximately east-west across the southern part of the preserved area of the site. We now believe that most of the northern area has been eroded so much that we are seeing the level below Formative features. This area was later covered with water-borne sands and silts. That interpretation is supported by two Formative features identified on Terrace 3, Features A27 and A78 (not

included in our random sample), that appear to be on remnant pedestals preserving fragments of the earlier ground surface.

It appears that the preserved portion of the site is considerably smaller than we had originally postulated. In the best-preserved area of the site the density of features is high, and the density may even exceed our model of high packing.

We did not undertake a random sampling of Tetel, but placed excavation units in four areas of the site that seemed promising for recovering Formative features, and where we hoped deposits would be less disturbed by erosion. Our excavation areas were separated by about 25 m, and we found the remnants of features in each area and possibly platform fill in two areas. Accordingly, it is likely that the features in the different areas represent different house-yards, but our sample has clear bias.

To refine our understanding of the chronology of the occupations at Amomoloc and Tetel and to further our understanding of the village layouts so that more meaningful intra-site comparisons of motifs could be made, we conducted detailed analyses of the contents of the features uncovered. In Chapter 3, I outline the ceramic typology and seriation procedures employed to assign chronological phases to the various excavation contexts at Amomoloc and Tetel, then create tentative maps of the different house-yards at the sites for different time periods.

CHAPTER 3

Middle Formative Pottery of Amomoloc and Tetel

In this chapter I summarize the ceramic complexes found at the sites of Amomoloc and Tetel and lay the foundation for the design inventory and analyses presented in the following chapters. Since so many of the questions I hope to address rely on contextual data from a variety of scales, it is important that the vessel types and shapes upon which design motifs were depicted are described clearly. Coupled with the contextual information provided by excavation data, this preliminary ceramic typology contributes to our understanding of patterns of vessel and decorative motif use, and allows us to assess both synchronic and temporal variability.

I first present all the ceramic types found at Amomoloc and Tetel. Most of the types described below are present throughout all phases of occupation at the two villages, from the Tzompantepec through Texoloc phases. What varies over time is the relative popularity and proportion of types. Thus, I do not divide the types by phase initially, but discuss all types and their common shapes, providing general trends of temporal variability for each type. Then, in Chapter 4, I discuss the differences between the phases identified at Amomoloc and Tetel more specifically, while explaining the samples considered and analyses undertaken to differentiate those phases through the seriation of features.

García Cook and Merino Carrión (1997[1988], 2005) provide a general ceramic typology for the Puebla-Tlaxcala region, based on survey and test excavations conducted in the 1970s, and many of the types and shapes they describe occur at Amomoloc and Tetel. Unfortunately, contextual information and frequency data are absent in their publications. Our data confirm the types outlined by García Cook and Merino Carrión, adjust the absolute dating of their ceramic complexes with new radiocarbon dates (Lesure et al. 2006), provide information on additional types, and provide contextual data as well as actual counts. Through multivariate analyses, we are also able to divide their Tlatempa phase into two probable subphases, Early and Late Tlatempa, allowing us to gain finer chronological control of features.

Other publications from the local area (Serra Puche et al. 2004; Snow 1966) contain detailed ceramic descriptions and provenience data, but pertain to later time periods (the end of the Tlatempa phase and later) and they deal with the more politically complex sites of Xochitécatl and La Laguna.

The names and descriptions of types provided in this chapter are intended to facilitate comparisons with other sites. They were developed collaboratively with other Apizaco Formative Project members who were analyzing material from various sites in the region. A detailed presentation of the ceramic chronology, based on the results of analyses at all four sites excavated by the Apizaco Formative Project, is being prepared for a co-authored publication under the direction of Richard Lesure. I analyzed the ceramics from Amomoloc and Tetel. Paloma Diez de Sollano analyzed a subset of the Las Mesitas ceramics for her thesis at the Universidad de las Américas in 2007, and a full analysis of the Las Mesitas material was completed by Isabel Rodríguez López in 2010.

Isabel Rodríguez López and Aleksander Borejsza analyzed ceramics from La Laguna from excavations conducted in 2003 and 2004. Additional finds from La Laguna excavations conducted by David Carballo after 2005 (separate from the Apizaco Formative Project) were also considered in developing the typology. Only the ceramics from Amomoloc and Tetel, which date to the Tzompantepec, Tlatempa, and Texoloc phases, are presented in this study.

Goals and Methods of Ceramic Analyses

Our initial goal was to confirm the complexes identified by García Cook and Merino Carrión (1997[1988]) for Puebla-Tlaxcala, in order to date the sites being excavated by the Apizaco Formative Project. Later, our goals included the intra-village, inter-site, and regional comparative analyses of ceramics and design motifs.

In 2001, we began by separating rim sherds according to their surface treatment, mainly by color, and then by shape. After identifying preliminary ceramic types and vessel shapes based on the larger and better preserved features of our first excavation season (Features A4, A11, and A23), we began the process of recording each rim sherd, allowing for the fact that we might add types or revise the divisions between types as we progressed. We created a hierarchical coding system for the identification of shapes, highlighting specific attributes of vessels so that variation would not be obscured. And we attempted to reconstruct vessels to avoid counting the same vessel multiple times in our analyses.

In three excavation seasons at Amomoloc, a total of 68,530 ceramic sherds were recovered, 7,872 of which were rim sherds. In one excavation season at Tetel, a total of

20,516 ceramic sherds were recovered, 2,670 of which were rim sherds. All rim sherds from Amomoloc and Tetel were recorded by the author from 2004-2007 using an attribute-based coding system (see Drennan 1976a, 1976b; Love 1993, 2002). Up to 24 observations were recorded for each sherd, including ware (based on surface color and paste; see below and Drennan 1976a:21), shape, various measurements of the vessel (such as rim diameter, percentage of rim present, vessel height, wall thickness, etc.), as well as information on surface treatment and decoration.

All decorated rim sherds were recorded in a separate registry to create a detailed record for each design motif, in which I included drawings and information on decorative techniques. Diagnostic body sherds, those fragments which displayed information on the shape of a vessel or its decoration, were recorded in an additional separate registry. Undecorated body sherds were counted and weighed so that we might have a control when comparing statistics across features (for example, density of artifacts).

While all rim and diagnostic body sherds from Amomoloc and Tetel were recorded, only a subset is considered in this study. Recognizing the importance of site formation processes and the quality of different archaeological contexts to good ceramic studies, particularly those concerned with chronological questions (see Flannery and Marcus 1994:25-37), only our best proveniences, containing large and “pure” samples, (i.e., representing short time periods and unmixed contexts [see Drennan 1976a:45]), are included here. As such, sherds from contexts that could not be assigned to a phase, although considered in developing our overall understanding of the different types and how ceramics were used at the sites are not incorporated into statistical analyses or comparisons within and between sites. I discuss this further in Chapter 4.

Data Presentation

Since a primary goal of my study of Tlaxcalan pottery is to compare it to pottery from other regions in Mesoamerica, I chose, like Flannery and Marcus (1994:43), to present the data in a format similar to other publications that provide detailed descriptions of Formative Mexican pottery (e.g., Coe and Diehl 1980; Cyphers Guillén 1987, 1992; Flannery and Marcus 1994; MacNeish et al. 1970; Niederberger 1976). Although our typology would not be considered a type-variety approach in the classic sense, our types do have binomial names that include a descriptive word or phrase pertaining to the color of the type, plus a geographical or family name from the nearby region to distinguish it from other types of a similar color. Since many types are present across multiple chronological phases, we do not include references to time in any type names (e.g., “Yauhtentzi White,” rather than “Tlatempa White”). Our ceramic types may be considered more like wares, as defined by Love (2002:86), as “a category of pottery sharing the same slip and paste—which appear the same to the naked eye.”

Ceramic types are grouped by color, and are roughly ordered by temporal importance. For each type, I present its temporal range, including the relative proportions of the type for each phase, as well as the distinguishing characteristics of the type. I then describe the surface treatment of the type, together with an assessment of color using Munsell Soil Color Charts. In my descriptions, I follow the common terminology clarified by William Payne in his technical analysis of pottery from Oaxaca (Flannery and Marcus 1994:16-20).

With a few exceptions, there is a common paste that dominates from Tzompantepec through Texoloc phases at both Amomoloc and Tetel, so I do not describe

it for each type. The color of the common paste is typically reddish brown (5YR5/4, 5YR6/4, 5YR5/6, 5YR6/6, 2.5YR5/4, 2.5YR6/4), ranging to yellowish brown (2.5Y7/4) and dark reddish gray (5YR4/1-4/2). Dark gray or black cores are common (5YR2/1, 10YR4/1). The texture of the paste is semi-compact and soft (5%, 1 mm porosity; see Rice 1987:349), and inclusions include quartz and other minerals, likely volcanic ash and feldspar. Surface finishes associated with this paste tend toward matte. All the types described below have this paste, unless otherwise noted.

For each ceramic type, I also present the proportions of vessel shapes by phase, listed in descending order so that the most common shapes are first. Vessel shapes are depicted in Figures 3.1-3.3. General shape categories were created (such as “plate” [Figure 3.1a] and “simple bowl” [Figure 3.1b]) to group the various vessel shapes coded during analysis into broader categories of vessel shapes that appear relevant to general temporal trends. The analysis codes (e.g., P1 and P2 for plates and U110-113 for simple bowls) are provided in italics for each shape category. In addition to Figures 3.1-3.3, several examples of vessels are illustrated for each type, with proveniences included. When present on vessels, design motifs are depicted in these illustrations but I do not discuss them until later chapters.

Finally, I provide a short list of types from the immediate region that appear equivalent to our types. In this chapter, the list is restricted to the following publications: García Cook and Merino Carrión (1997[1988]), Serra Puche et al. (2004), and Snow (1966). Comparisons to more distant regions within Mesoamerica will be considered in Chapter 5.



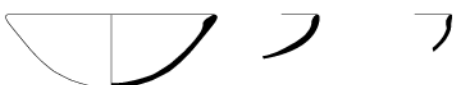

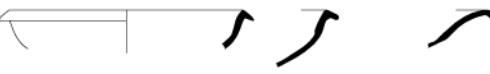



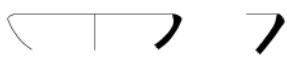
Simple vessels with rounded walls and bases	
a. plate	 <i>codes: P1, P2</i>
b. simple bowl	 <i>codes: U110-113, DR, DR1, DR2</i>
c. bowl with beveled rim	 <i>codes: U120-124</i>
d. bowl with horizontal-flat rim	 <i>codes: U130-134</i>
e. bowl with downcurving-everted rim	 <i>codes: U140-142, DC5a, D(C)5b</i>
f. bowl with outcurving rim	 <i>codes: U150-151, DR5, B7</i>
g. bowl with outcurving rim and band of interior thickening along the rim	 <i>codes: U152-153</i>
h. bowl with exterior fold at rim	 <i>codes: U162</i>
i. bowl with interior fold at rim	 <i>codes: U161, BR5</i>

Figure 3.1 Ceramic shapes and code designations (a-i).










Other simple vessels with rounded or flat bases		
j. bowl with pinched-in walls		
<i>codes: U17, BK</i>		
k. bowl with slightly incurving wall		
<i>codes: U180-183</i>		
l. bowl with outleaning wall		
<i>codes: U410-413, U420-424, B4</i>		
m. bowl with vertical wall		
<i>codes: U610-613</i>		
n. cylinder with vertical wall		
<i>codes: U611, U2B11</i>		
Composite silhouette vessels with rounded bases		
o. closed bowl with incurving wall and direct rim (no change from wall)		
<i>codes: U2A31, U2B31, U331</i>		
p. closed bowl with incurving wall and vertical rim		
<i>codes: U2A37, U2B37, U337</i>		
q. composite silhouette dish with outcurving upper wall (variety of rims)		
<i>codes: U2A20-25, U2B20-25, U2A40-45, U2B40-45, U320-325, U340-345, DC1a, DC4, BC1a-d</i>		
r. composite silhouette vase		
<i>codes: U2A21-2, U2B21-2, U321-2</i>		

Figure 3.2 Ceramic shapes and code designations (j-r).

Restricted rim vessels	
s. jar with vertical neck and rim	
<i>codes: R121, R221</i>	
t. jar with outcurving neck and direct rim (no change from neck)	
<i>codes: R141, R143, R241, R243, R102-3, R202-3, O1</i>	
u. jar with outcurving or vertical neck and horizontal-everted rim	
<i>codes: R144, R244, R104, R204, O2</i>	
v. jar with outcurving neck and downcurving rim, usually with exterior thickening	
<i>codes: R145, R245, R105, R205</i>	
w. jar with incurving neck and direct rim (no change from neck)	
<i>codes: R151, R251</i>	
x. heavy tecomate	
<i>codes: R3A11, T1, T2, TR</i>	
y. fine tecomate	
<i>codes: R3B11, T1, T2, TR</i>	

Figure 3.3 Ceramic shapes and code designations (s-y).

Ceramic Typology

UNSLIPPED

Amomoloc Plain

Temporal range and distinguishing characteristics. Amomoloc Plain was abundant during the Tzompantepec phase (50%) and was present during later phases, but began to diminish in importance over time (Early Tlatempa, 30%; Later Tlatempa, 22%; and Texoloc, 10%) (see Figures 3.4-3.13).

Surface treatment. Vessel surfaces are scraped, often with burnishing on portions of the rim or exterior body. There is no slip, and surface color corresponds to the color of the paste, varying from tan to brown, light reddish brown, and reddish yellow tones (5YR5/3, 5YR6/4, 5YR6/6). Typically, the entire surface of simple bowls is either scraped or burnished, but with jars, the rim and exterior body are burnished, while the exterior neck and entire interior are scraped.

Vessel shapes (refer to Figures 3.1-3.3).

Tzompantepec:

Jars with downcurving rims (see Figures 3.3v, 3.6d-f, 3.7, 3.8) (57%);

Simple bowls (see Figures 3.1b, 3.4a-e) (19%);

Bowls with slightly incurving walls (see Figures 3.2k, 3.4f-h) (7%);

Fine tecomates (see Figures 3.3y, 3.5a-c) (7%);

Jars with outcurving necks and direct rims (see Figures 3.3t, 3.6a,c) (4%);

Jars with vertical necks and rims (see Figures 3.3s, 3.6b) (less than 2%);

Jars with incurving necks and direct rims (see Figures 3.3w, 3.9) (less than 2 %);

and

Heavy tecomates (see Figures 3.3x, 3.5d) (less than 2%).

Early Tlatempa:

Jars with outcurving necks and direct rims (see Figure 3.3t) (72%);

Simple bowls (see Figures 3.1b, 3.11a,b) (14%);

Jars with downcurving rims (see Figure 3.3v) (2%);

Heavy tecomates (see Figure 3.3x) (2%);

Bowls with slightly incurving walls (see Figures 3.2k, 3.11d) (2%);

Bowls with outleaning walls (see Figure 3.2l) (2%);

Fine tecomates (see Figure 3.3y) (1%);

Bowls with horizontal-flat rims (see Figure 3.1d) (less than 1%);

Bowls with downcurving-everted rims (see Figure 3.1e) (less than 1%);

Bowls with outcurving rims (see Figures 3.1f, 3.12) (less than 1%);

Bowls with an exterior fold at rim (see Figure 3.1h) (less than 1%);

Bowls with pinched-in walls (see Figure 3.2j) (less than 1%);

Closed bowls with incurving walls and direct rims (see Figure 3.2o) (less than

1%);

Jars with vertical necks and rims (see Figure 3.3s) (less than 1%); and

Jars with horizontal-everted rims (see Figure 3.3u) (less than 1%).

Late Tlatempa:

Jars with outcurving necks and direct rims (see Figures 3.3t, 3.10) (77%);

Simple bowls (see Figure 3.1b) (9%);

Jars with downcurving rims (see Figure 3.3v) (5%);
Fine tecomates (see Figure 3.3y) (3%);
Bowls with slightly incurving walls (see Figure 3.2k) (2%);
Heavy tecomates (see Figure 3.3x) (1%);
Bowls with an exterior fold at rim (see Figure 3.1h) (less than 1%);
Bowls with pinched-in walls (see Figure 3.2j) (less than 1%);
Bowls with outleaning walls (see Figure 3.2l) (less than 1%);
Jars with vertical necks and rims (see Figure 3.3s) (less than 1%); and
Jars with horizontal-everted rims (see Figure 3.3u) (less than 1%).

Texoloc:

Jars with outcurving necks and direct rims (see Figure 3.3t) (54%);
Simple bowls (see Figure 3.1b) (34%);
Heavy tecomates (see Figure 3.3x) (4%);
Bowls with slightly incurving walls (see Figure 3.2k) (3%);
Jars with horizontal-everted rims (see Figure 3.3u) (3%);
Closed bowls with incurving walls and vertical rims (see Figures 3.2p, 3.13)
(1%); and
Fine tecomates (see Figure 3.3y) (1%).

Comparisons. Tzompantepec café, Tlatempa café, Texoloc café (García Cook and Merino Carrión 1997[1988]:164, 165, 171, 184); Grupo café cerritos temprano, Grupo café oscuro (Serra Puche et al. 2004:51, 52).

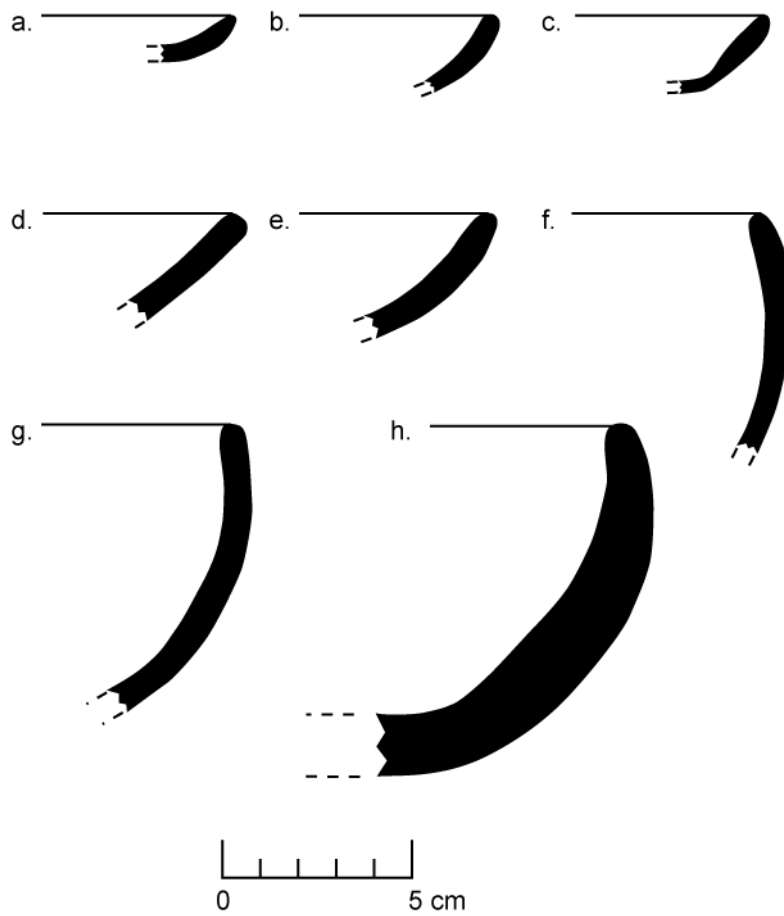


Figure 3.4 Amomoloc Plain simple bowls (a-e) and bowls with incurving walls (f-h), Tzompantepec phase. Note that (a), (c), and (h) are tending toward a flat base. All sherds are from Feature A46 at Amomoloc.

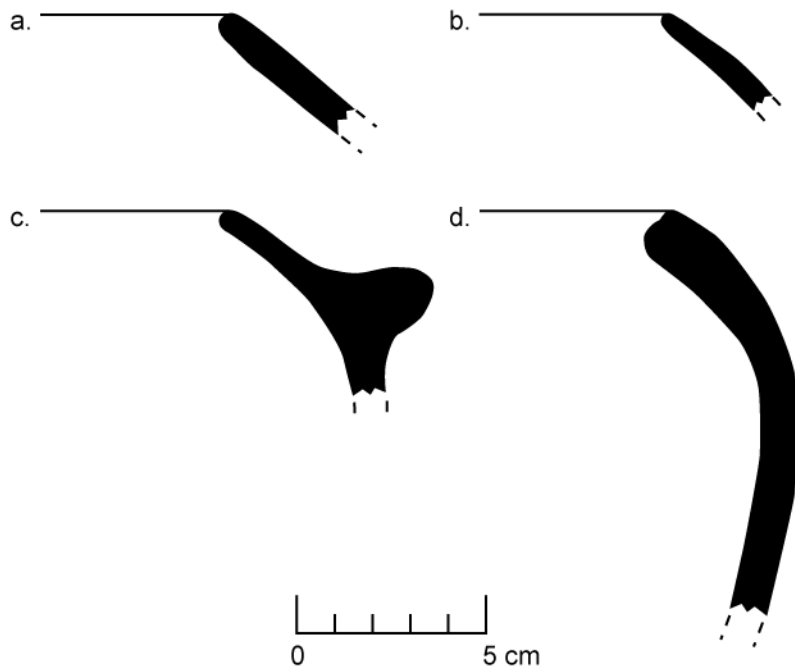


Figure 3.5 Amomoloc Plain fine (a-c) and heavy (d) tecomates, Tzompantepec phase. All sherds are from Feature A46 at Amomoloc.

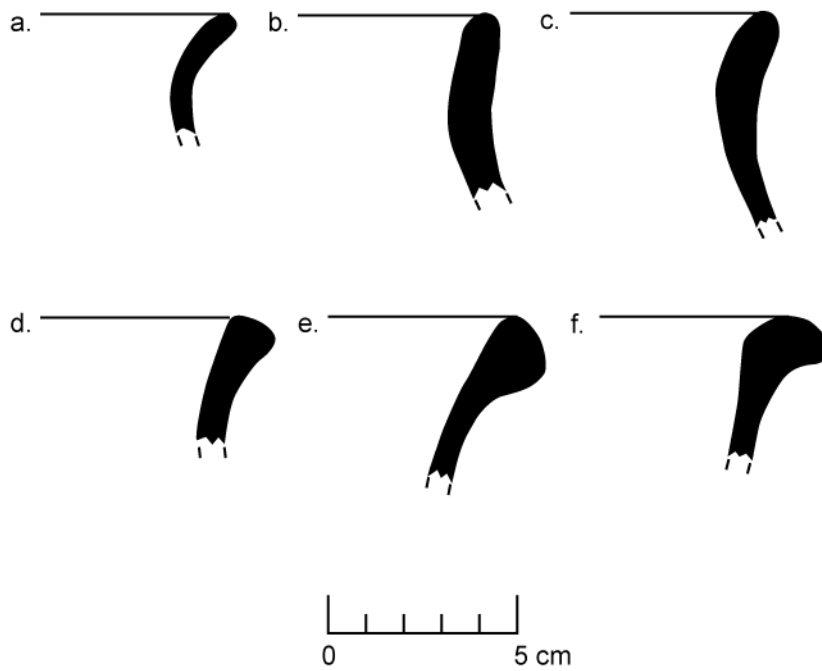


Figure 3.6 Amomoloc Plain jars, Tzompantepec phase. All sherds are from Feature A46 at Amomoloc.

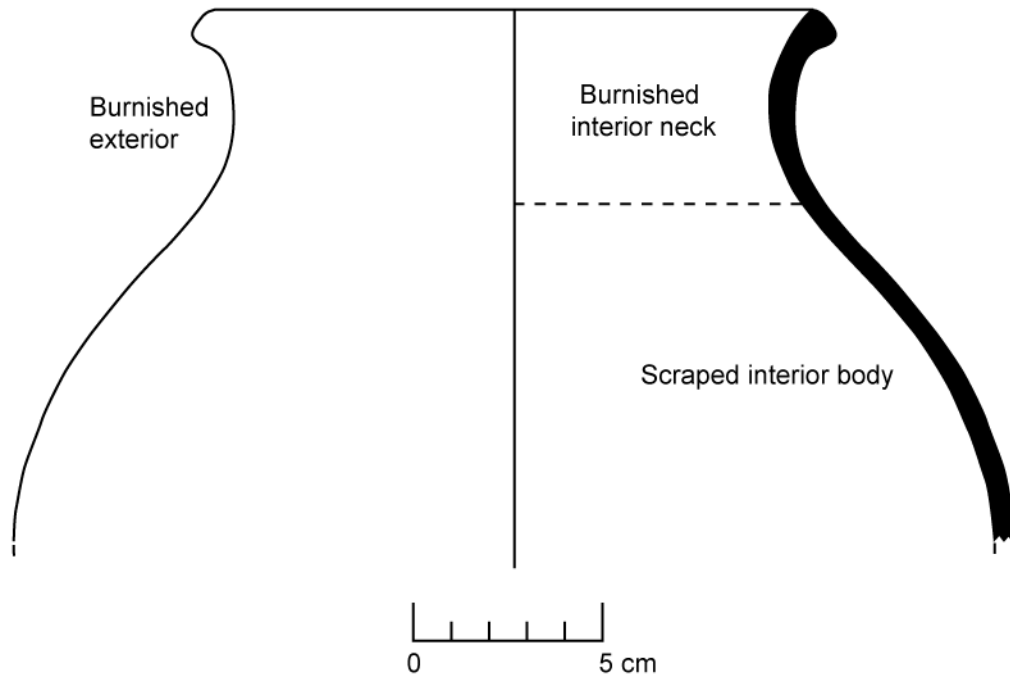


Figure 3.7 Amomoloc Plain jar with downcurving rim, Tzompantepec phase. Vessel is from Feature A46 at Amomoloc.

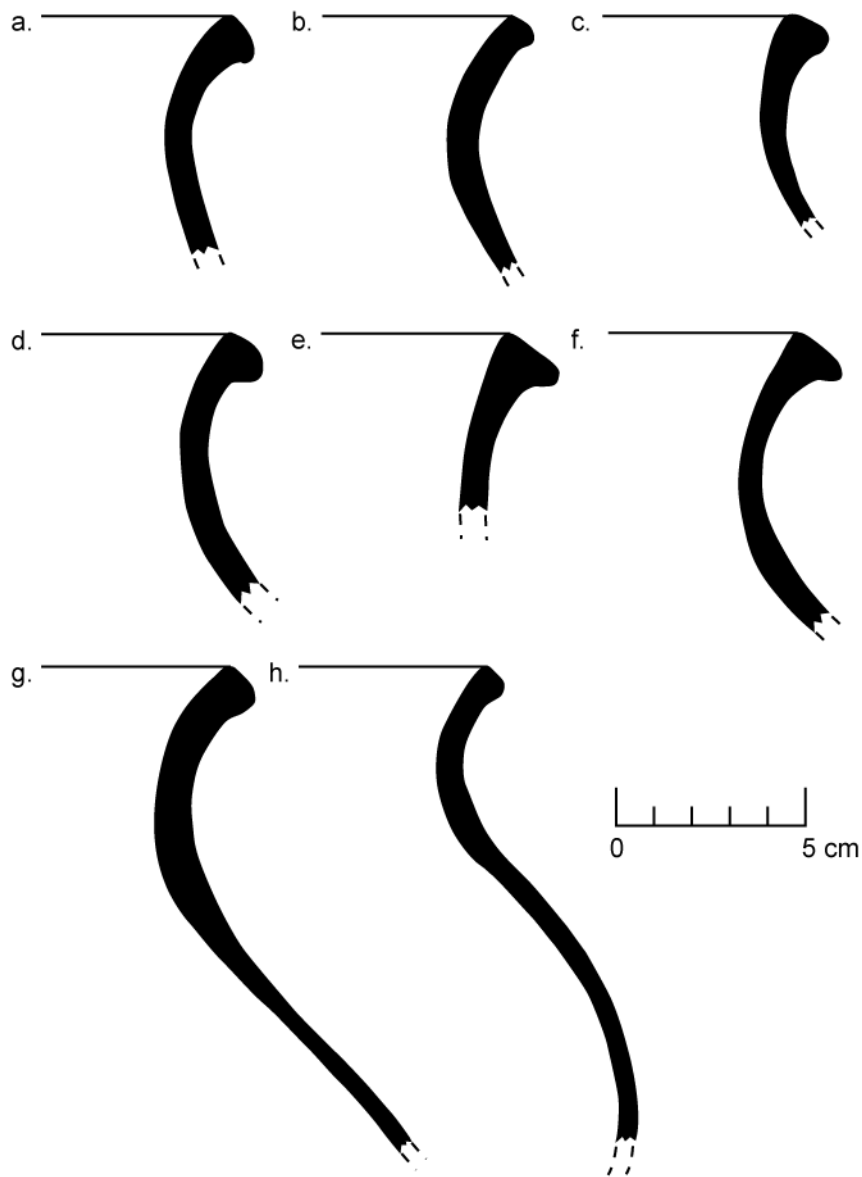


Figure 3.8 Amomoloc Plain jars with downcurving rims, Tzompantepec phase. All sherds are from Feature A46 at Amomoloc.

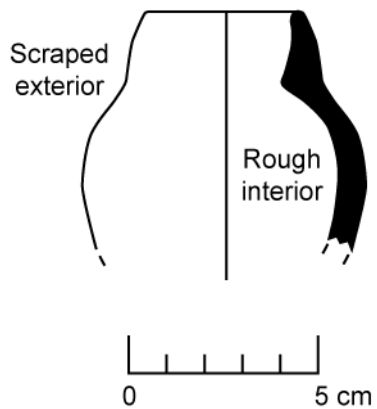


Figure 3.9 Amomoloc Plain small jar with incurving neck, Tzompantepec phase. Vessel is from Feature A46 at Amomoloc.

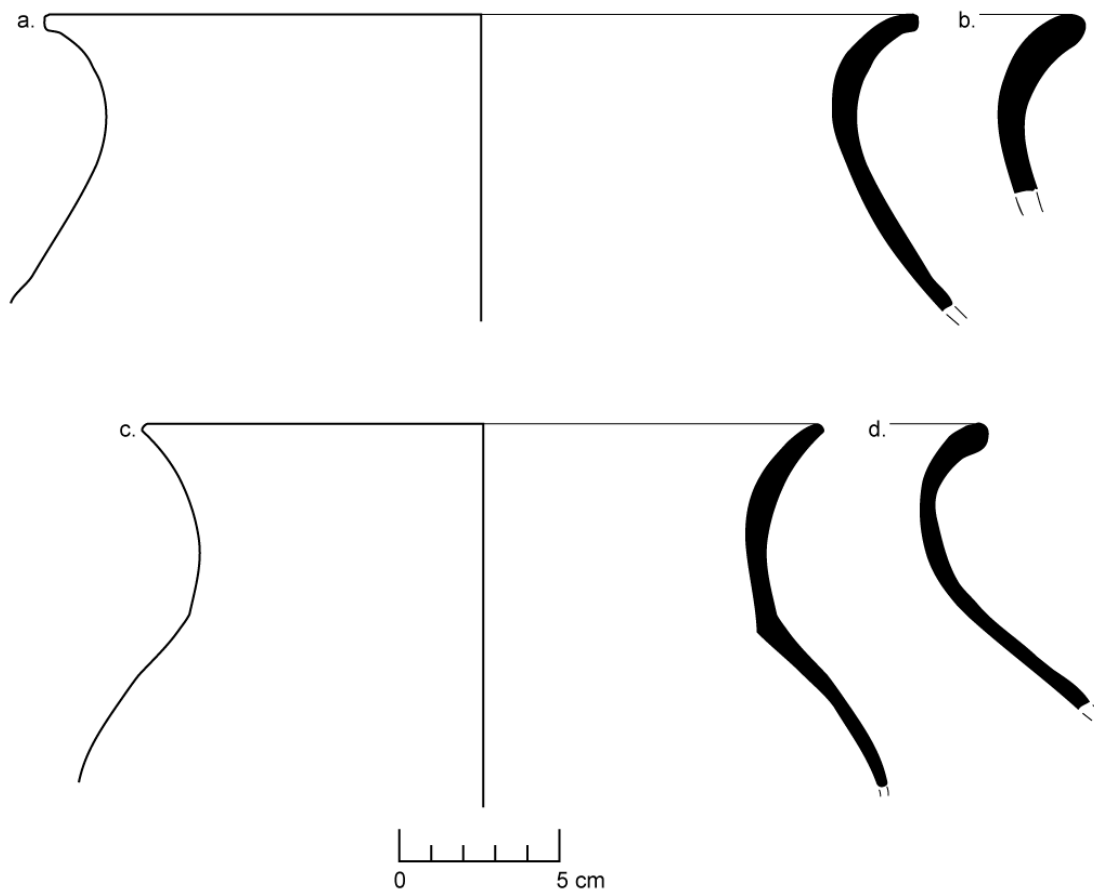


Figure 3.10 Amomoloc Plain jars with outcurving necks, Tlatempa phase. All sherds are from Feature A4 at Tetel.

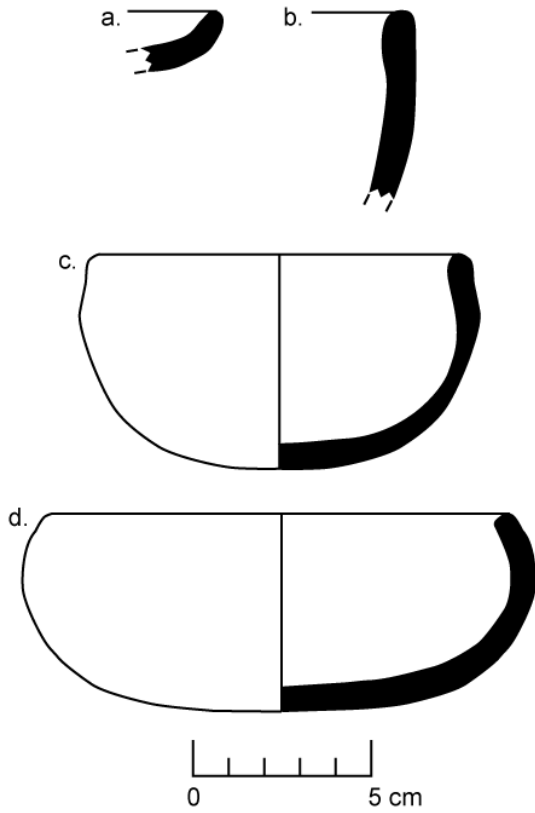


Figure 3.11 Amomoloc Plain simple bowls (a-c) and bowls with slightly incurving walls (d), Tlatempa phase. Sherds (a), (b), and (d) are from Feature A54 and (c) is from Feature A59 at Amomoloc.

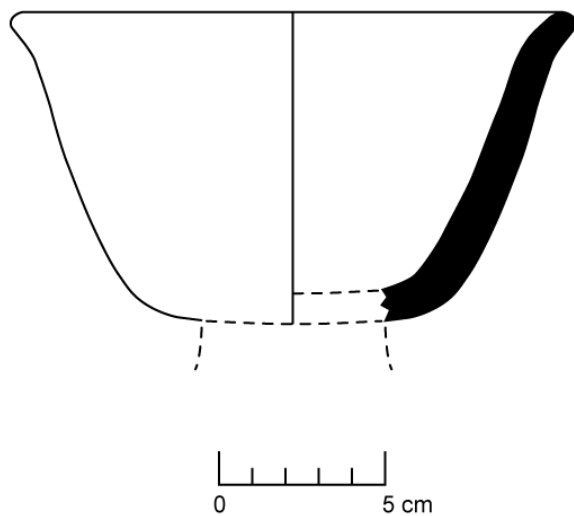


Figure 3.12 Amomoloc Plain brazier with outcurving rim, Tlatempa phase. Vessel is from Feature A78 at Amomoloc.

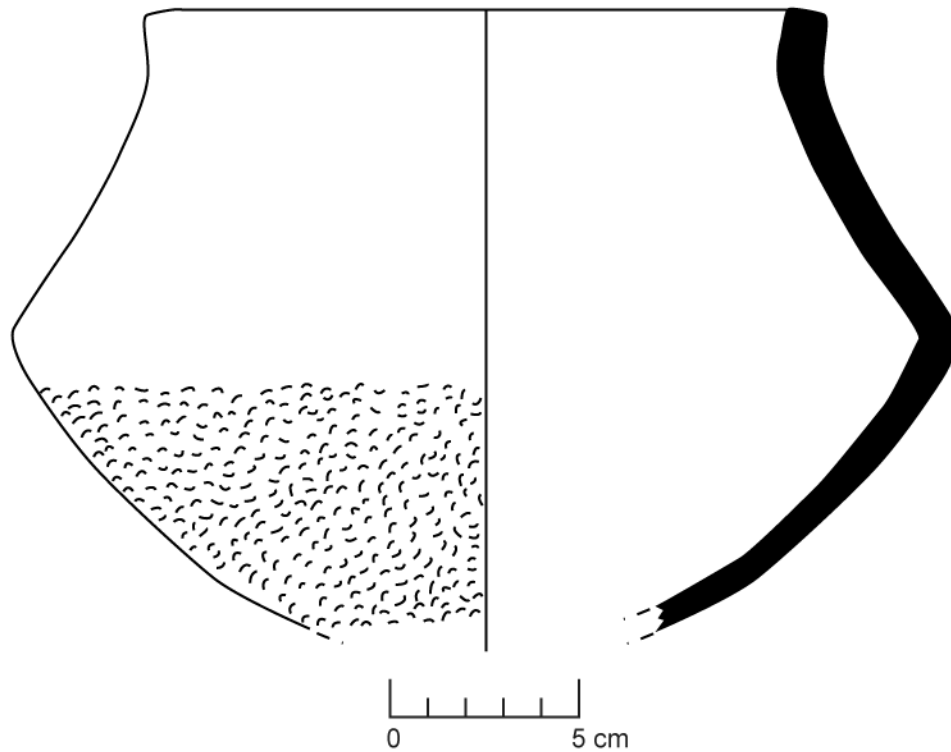


Figure 3.13 Amomoloc Plain closed bowl with incurving wall and vertical rim, Texoloc phase. Note that the base of the vessel is scraped (the exterior base also has excised stamping; Motif 590), while the upper exterior wall is burnished. Vessel is from Feature A11 at Tetel.

WHITE

Ceniza White

Temporal range and distinguishing characteristics. Ceniza White is a rare but readily distinguishable type of the Tzompantepec and Early Tlatempa phases, constituting 2% and <1%, respectively, of rim sherds for those phases in our chronological sample (see Figure 3.14). The inclusion of ash in the paste and shiny, bright white slip are this type's distinguishing characteristics.

Surface treatment. Vessel surfaces are covered with a thick, shiny white slip that varies between pure white and light gray (2.5Y8/1, 10YR8/1, GLEY1:5/N-7/N). Slip is well-burnished, lustrous, and hard. The pure, glossy white of the slip is distinctly different from the usual appearance of Yauhtentzi White and, together with the distinctive paste, merits classification of it as a “type” even with a small sample.

Paste. Paste color varies between gray, light gray, and light brownish-gray (10YR7/1-5/1, 2.5Y6/2, GLEY1:7/N). Temper is crushed rock or tepetate, mixed with volcanic ash. The paste is semi-compact with a porosity of 5% (1 mm). Fracture is irregular to the naked eye, but under magnification the paste composition is plate-like. This paste is extremely rare in the collection, and is confined to the Tzompantepec and Tlatempa phases.

Vessel shapes (refer to Figures 3.1-3.3).

Tzompantepec:

Bowl with outcurving rim and a band of interior thickening along the rim (see Figures 3.1g, 3.14b) (50%); and

Jar with vertical neck and rim (see Figures 3.3s, 3.14a) (50%).

Early Tlatempa:

Jar with vertical neck and rim (see Figure 3.3s) (100%).

Comparisons. None in the immediate region.

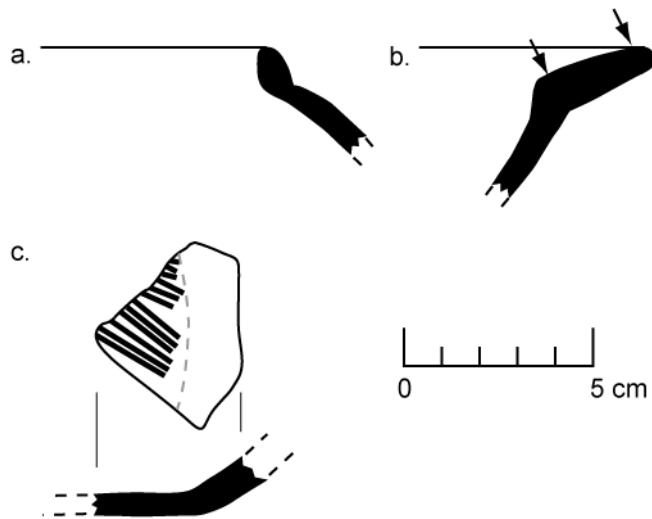


Figure 3.14 Ceniza White vessels, Tzompantepec phase. (a) Jar with vertical neck and rim; (b) bowl with outcurving rim and a band of interior thickening along the rim (note two parallel incised lines on interior rim; Motif 5); and (c) flat base with excised decoration on interior. All sherds are from Feature A46 at Amomoloc.

Yauhtentzi White

Temporal range and distinguishing characteristics. Yauhtentzi White is present from the Tzompantepec phase and forms an important component of the Tzompantepec (31%) and Tlatempa (32%) phase ceramic complexes. The type begins to decline in the following Texoloc (20%) phase. Its white surface tends toward matte, rather than shiny, and the primary distinguishing characteristic during its time of greatest prominence, the Tlatempa phase, is post-slip incising and excising that exposes reddish paste (see Figures 3.15-3.24).

Surface treatment. Vessel surfaces are covered with a generally thick white slip with a matte finish. The surface is burnished and soft to the touch. In some instances the slip

appears thin and powdery but this is the result of post-depositional processes. The slip varies in color between pure white to yellowish-white (10YR8/1-3, 2.5Y8/1-4, 2.5Y7/1). Almost all vessels are slipped on both the interior and exterior, although some restricted rim vessels (jars, tecomates) do not have interior slip.

Vessel shapes (refer to Figures 3.1-3.3).

Tzompantepec:

- Bowls with outleaning walls (see Figures 3.2l, 3.16, 3.17a-b,d-g) (32%);
- Closed bowls with incurving walls and vertical rims (see Figures 3.2p, 3.18a-d) (15%);
- Simple bowls (see Figures 3.1b, 3.15d-g) (12%);
- Bowls with slightly incurving walls (see Figures 3.2k, 3.15a-c) (9%);
- Jars with vertical necks and rims (see Figures 3.3s, 3.19b-c) (9%);
- Jars with outcurving necks and direct rims (see Figures 3.3t, 3.19a) (6%);
- Bowls with beveled rims (see Figures 3.1c, 3.17c) (3%);
- Bowls with outcurving rims (see Figure 3.1f) (3%);
- Bowls with an exterior fold at rim (see Figures 3.1h, 3.18e) (3%);
- Bowls with an interior fold at rim (see Figures 3.1i, 3.18f) (3%);
- Closed bowls with incurving walls and direct rims (see Figure 3.2o) (3%); and
- Jars with incurving necks and direct rims (see Figure 3.3w) (3%).

Early Tlatempa:

- Simple bowls (see Figure 3.1b) (30%);

Bowls with outcurving rims and a band of interior thickening along the rim (see Figure 3.1g) (15%);

Bowls with beveled rims (see Figure 3.1c) (10%);

Bowls with slightly incurving walls (see Figure 3.2k) (10%);

Bowls with an exterior fold at rim (see Figure 3.1h) (8%);

Closed bowls with incurving walls and direct rims (see Figures 3.2o, 3.22a) (5%);

Bowls with horizontal-flat rims (see Figure 3.1d) (3%);

Bowls with outcurving rims (see Figure 3.1f) (3%);

Bowls with an interior fold at rim (see Figure 3.1i) (3%);

Jars with vertical necks and rims (see Figure 3.3s) (3%);

Composite silhouette dishes (see Figures 3.2q, 3.23a,c) (2%);

Jars with outcurving necks and direct rims (see Figure 3.3t) (2%);

Fine tecomates (see Figure 3.3y) (2%);

Bowls with downcurving-everted rims (see Figure 3.1e) (less than 1%);

Bowls with pinched-in walls (see Figure 3.2j) (less than 1%);

Bowls with outleaning walls (see Figure 3.2l) (less than 1%);

Bowls with vertical walls (see Figure 3.2m) (less than 1%);

Cylinders with vertical walls (see Figure 3.2n) (less than 1%);

Closed bowls with incurving walls and vertical rims (see Figure 3.2p) (less than 1%); and

Composite silhouette vases (see Figure 3.2r) (less than 1%).

Late Tlatempa:

Simple bowls (see Figure 3.1b) (25%);

Bowls with outcurving rims and a band of interior thickening along the rim (see Figures 3.1g, 3.21) (20%);

Bowls with beveled rims (see Figures 3.1c, 3.20) (15%);

Bowls with slightly incurving walls (see Figure 3.2k) (7%);

Closed bowls with incurving walls and direct rims (see Figure 3.2o) (6%);

Bowls with horizontal-flat rims (see Figure 3.1d) (5%);

Bowls with an exterior fold at rim (see Figure 3.1h) (5%);

Bowls with outcurving rims (see Figure 3.1f) (4%);

Bowls with an interior fold at rim (see Figure 3.1i) (2%);

Composite silhouette vases (see Figures 3.2r, 3.24) (2%);

Jars with vertical necks and rims (see Figure 3.3s) (2%);

Bowls with pinched-in walls (see Figure 3.2j) (1%);

Bowls with outleaning walls (see Figure 3.2l) (1%);

Closed bowls with incurving walls and vertical rims (see Figure 3.2p) (1%);

Jars with outcurving necks and direct rims (see Figure 3.3t) (1%);

Bowls with downcurving-everted rims (see Figure 3.1e) (less than 1%);

Bowls with vertical walls (see Figures 3.2m, 3.22c) (less than 1%);

Cylinders with vertical walls (see Figure 3.2n) (less than 1%);

Composite silhouette dishes (see Figures 3.2q, 3.23b) (less than 1%);

Jars with incurving necks and direct rims (see Figure 3.3w) (less than 1%); and

Fine tecomates (see Figure 3.3y) (less than 1%).

Texoloc:

Bowls with beveled rims (see Figure 3.1c) (21%);

Composite silhouette dishes (see Figure 3.2q) (16%);
Simple bowls (see Figure 3.1b) (15%);
Bowls with outcurving rims and a band of interior thickening along the rim (see Figure 3.1g) (9%);
Bowls with outleaning walls (see Figure 3.2l) (8%);
Bowls with outcurving rims (see Figure 3.1f) (6%);
Bowls with downcurving-everted rims (see Figure 3.1e) (5%);
Closed bowls with incurving walls and direct rims (see Figure 3.2o) (5%);
Bowls with slightly incurving walls (see Figure 3.2k) (4%);
Jars with outcurving necks and direct rims (see Figure 3.3t) (4%);
Bowls with horizontal-flat rims (see Figure 3.1d) (1%);
Bowls with pinched-in walls (see Figure 3.2j) (1%);
Jars with horizontal-everted rims (see Figure 3.3u) (1%);
Cylinders with vertical walls (see Figure 3.2n) (less than 1%);
Closed bowls with incurving walls and vertical rims (see Figure 3.2p) (less than 1%);
Jars with vertical necks and rims (see Figure 3.3s) (less than 1%); and
Heavy tecomates (see Figure 3.3x) (less than 1%).

Comparisons. Tzompantepec blanco-amarillento, Tlatempa blanco, Tlatempa blanco inciso, Tlatempa blanco excavado, Texoloc blanco (García Cook and Merino Carrión 1997[1988]:162, 164-165, 173); Blanco esgrafiado y/o excavado (Serra Puche et al. 2004:55); Laguna White Incised: Variety 75 (Snow 1966:208).

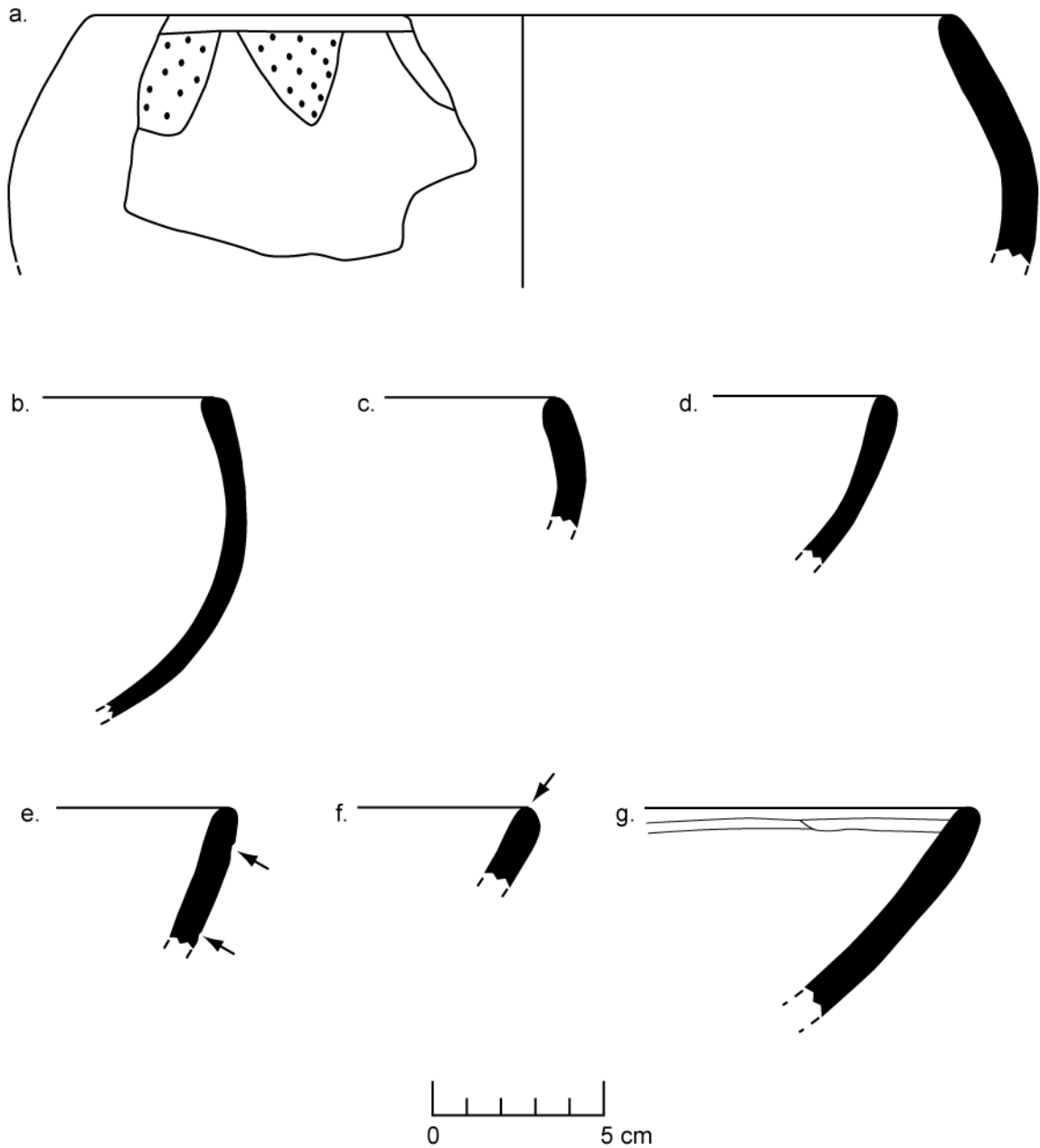


Figure 3.15 Yauhtentzi White bowls with slightly incurving walls (a-c) and simple bowls (d-g), Tzompantepec phase. Note the following decoration: (a) exterior grooved lines and punched dots (Motif 407); (e) pre-slip horizontal fluting on exterior (Motif 449); (f) one faint incised line on lip (Motif 1); and (g) incised interior decoration (Motif 24). All sherds are from Feature A46 at Amomoloc.

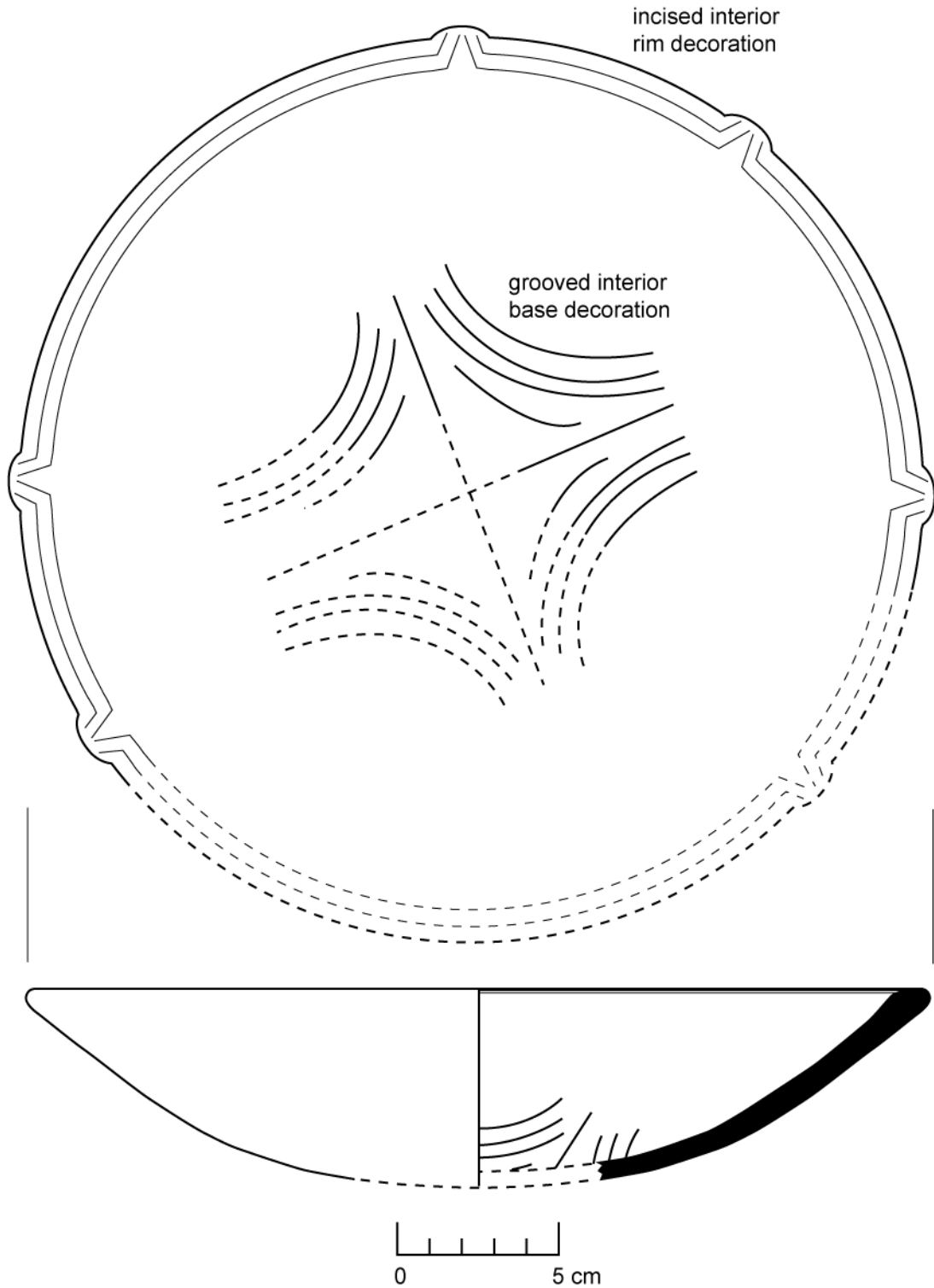


Figure 3.16 Yauhtentzi White bowl with outleaning wall, Tzompantepec phase. Note scalloping and incised decoration on interior rim (Motif 89); and grooved decoration on interior base (Motif 593). Vessel is from Feature A46 at Amomoloc.

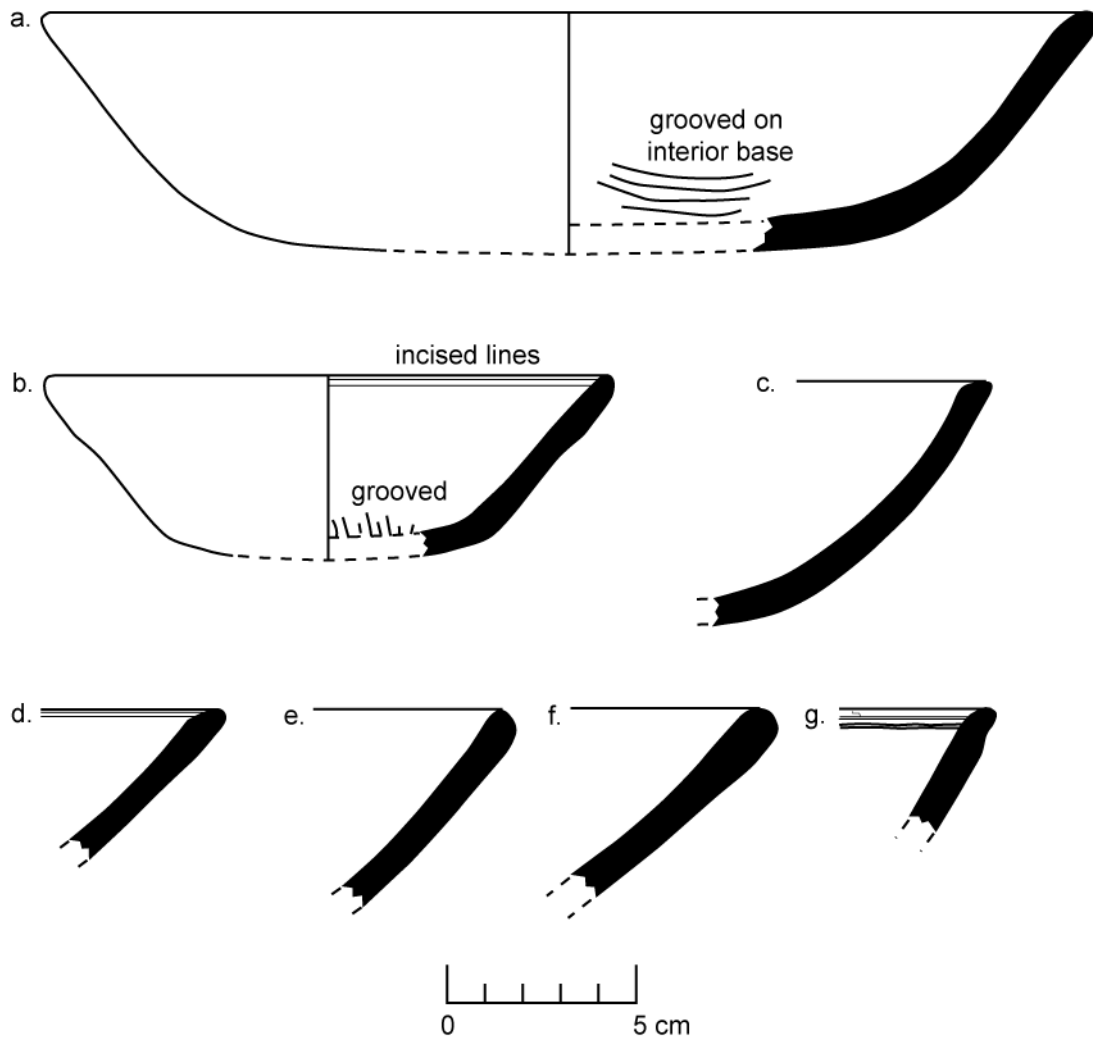


Figure 3.17 Yauhtentzi White bowls with outleaning walls (a-b, d-g) and rounded bowl with beveled rim (c), Tzompantepec phase. Note the following decoration: (a) grooved interior base (Motif 596); (b) two incised lines along interior rim (Motif 4) and grooved interior base (Motif 597); (d) two grooved lines along interior rim (Motif 4); and (g) two lightly incised lines plus two grooved lines along interior rim (Motif 13). All sherds are from Feature A46 at Amomoloc.

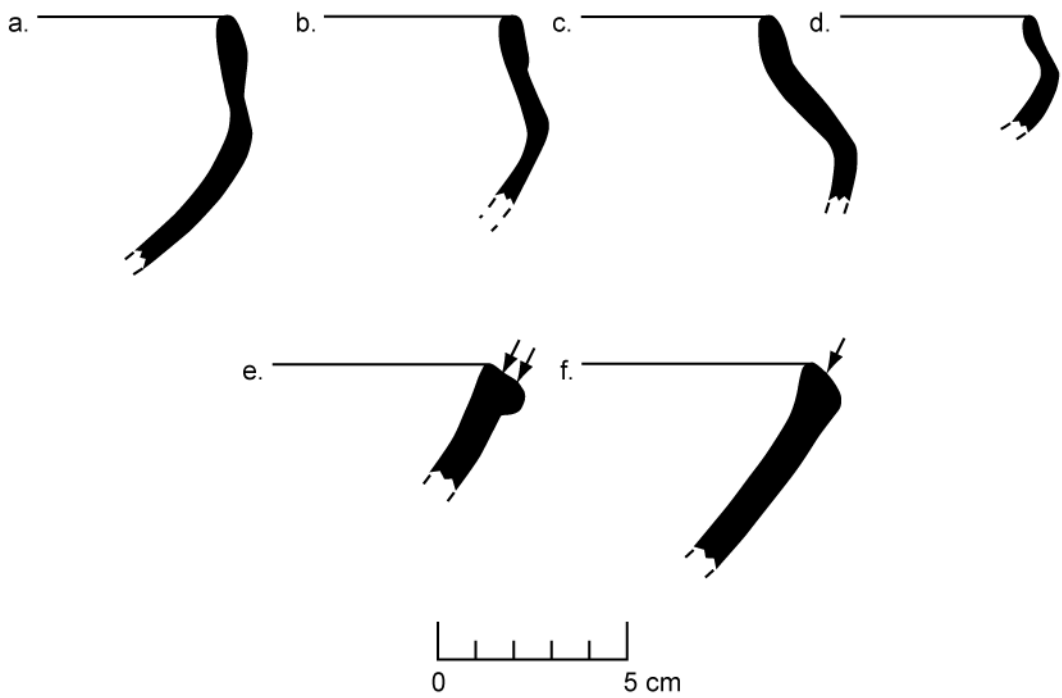


Figure 3.18 Yauhtentzi White bowls, Tzompantepec phase. (a-d) Closed bowls with incurving walls and vertical rims; (e) bowl with an exterior fold at the rim (note two parallel excised lines along the exterior rim; Motif 4); and (f) bowl with an interior fold at the rim (note one incised line along the exterior rim; Motif 1). All sherds are from Feature A46 at Amomoloc.

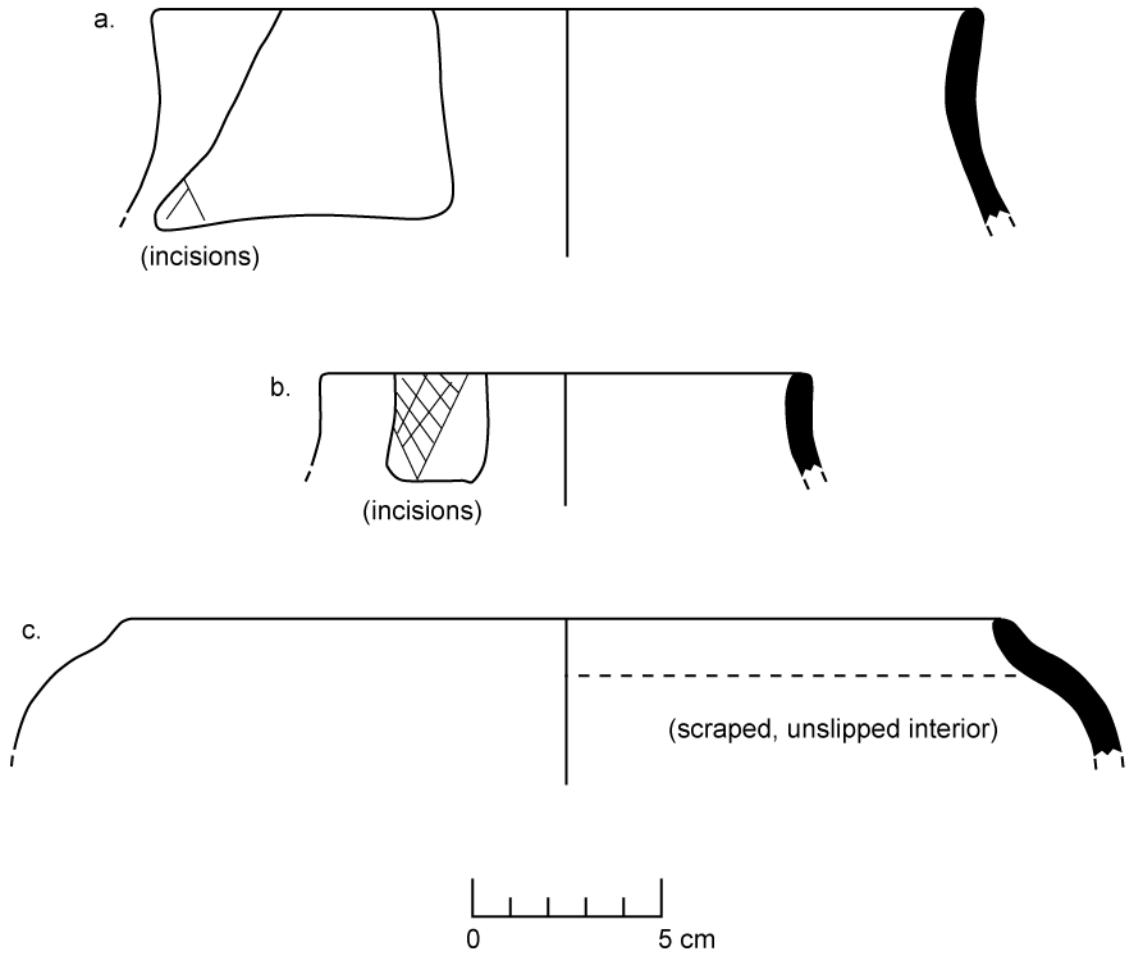


Figure 3.19 Yauhtentzi White jar with an outcurving neck (a) and jars with vertical necks and rims (b-c), Tzompantepec phase. Note the following decoration: (a) Motif 411 and (b) Motif 406, both incised on the exterior of the vessels. All sherds are from Feature A46 at Amomoloc.

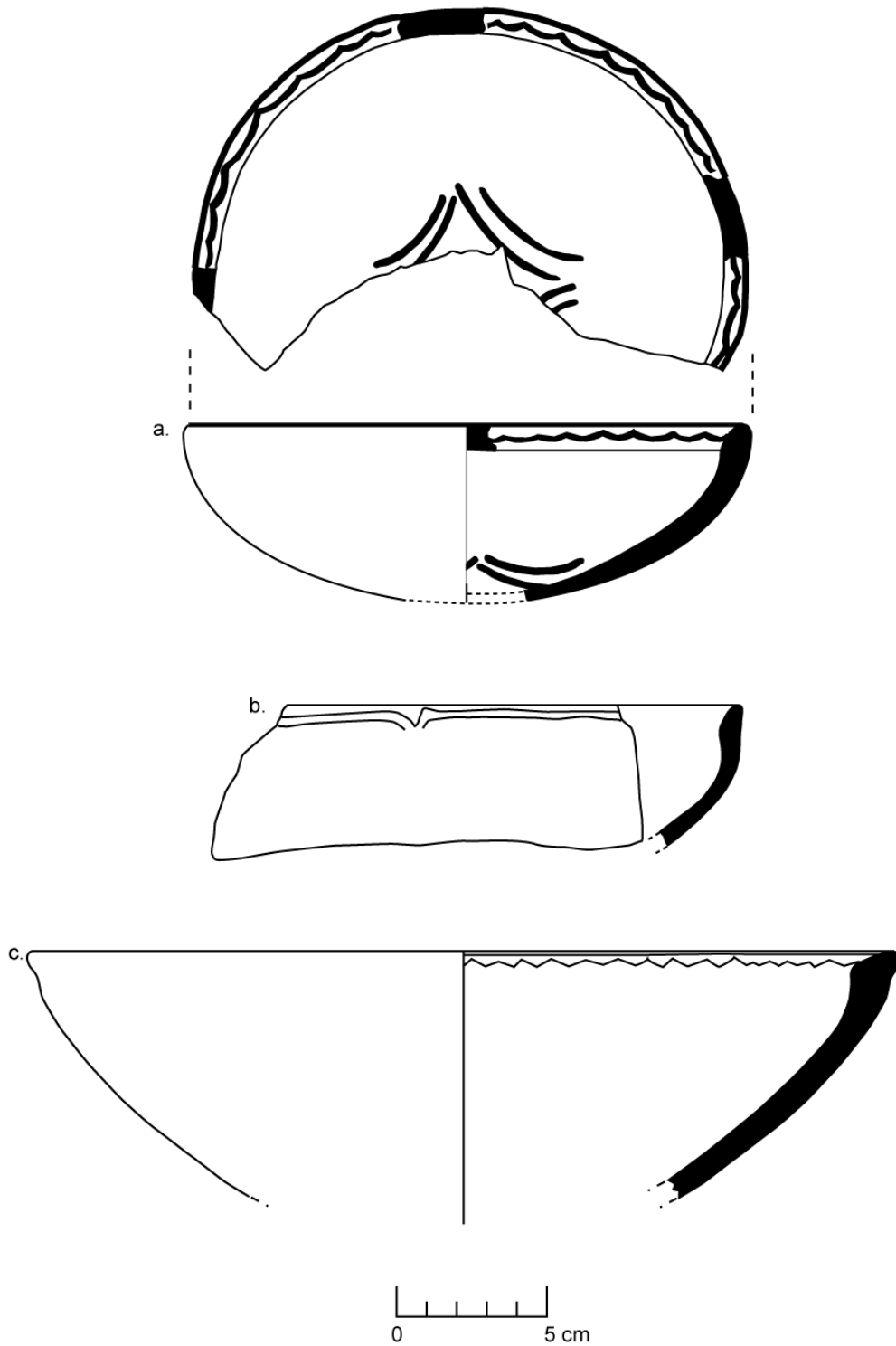


Figure 3.20 Yauhtentzi White bowls with beveled rims, Tlatempa phase. Note the following decoration: (a) Motif 563 excised along interior rim and Motif 591 on the interior base; and (b) Motif 99 and (c) Motif 171 grooved along interior rim. Sherds (a) and (b) are from Feature A4 at Tetel; sherd (c) is from Feature A64 at Amomoloc.

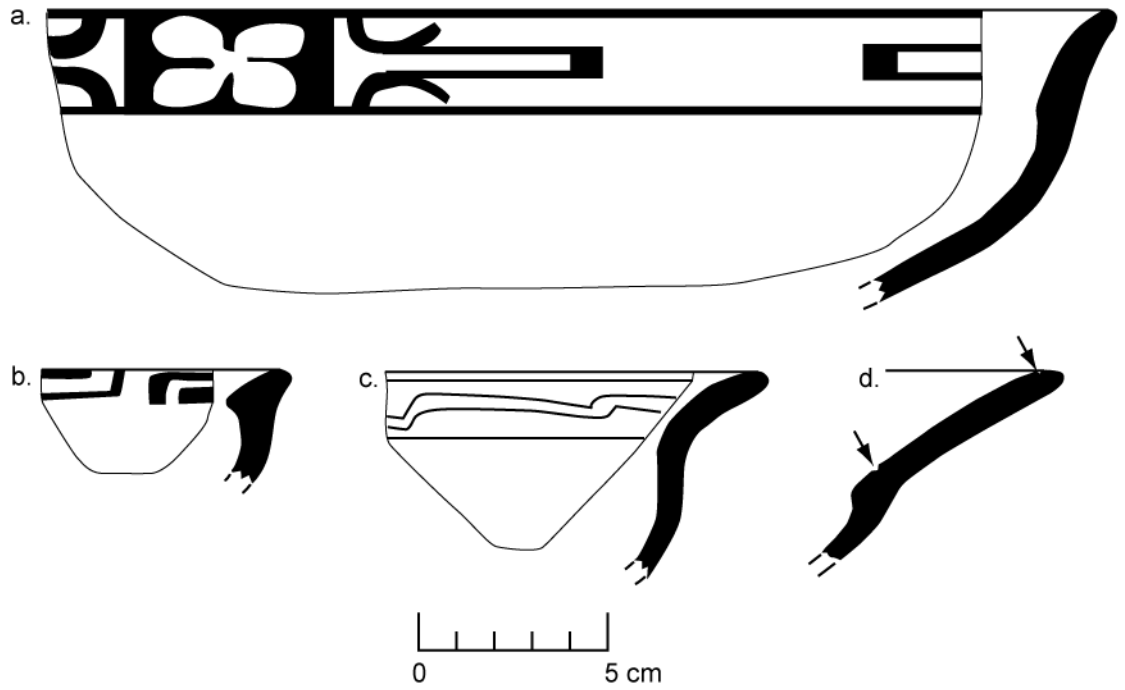


Figure 3.21 Yauhtenzi White bowls with outcurving rims, Tlatempa phase. Note the following decoration on the interior rim of vessels: (a) excised decoration (flower surrounded by curvilinear motifs; Motif 416) repeats twice around rim of bowl; (b) excised decoration (Motif 521); (c) grooved decoration (Motif 128); and (d) grooved decoration (Motif 5). Sherds (a), (b), and (c) are from Feature A68 at Amomoloc; sherd (d) is from Feature A4 at Tetel.

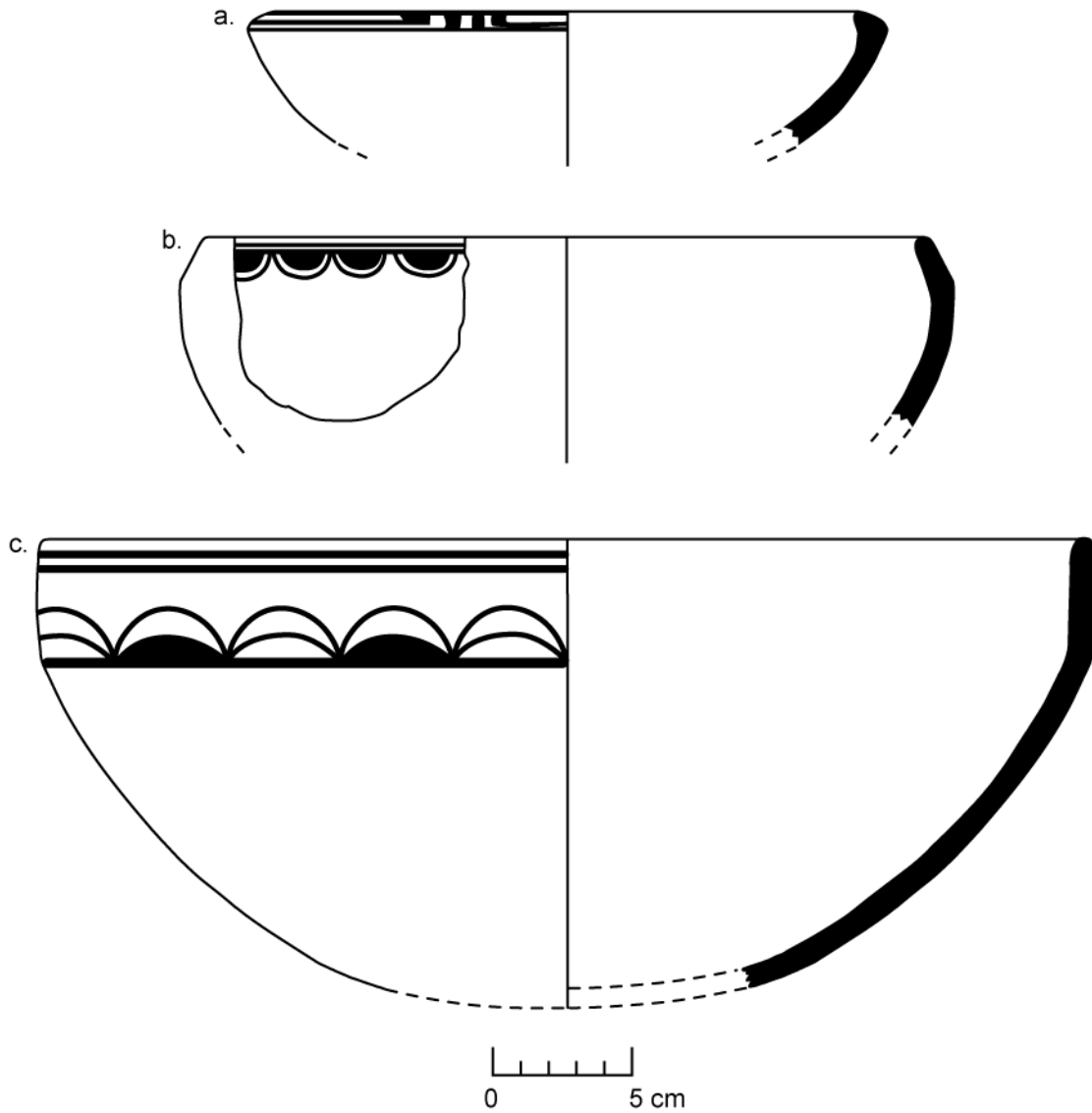


Figure 3.22 Yauhtentzi White closed bowls with incurving walls (a-b) and bowl with vertical wall (c), Tlatempa phase. Note excised exterior decoration on all sherds: (a) Motif 520; (b) no motif number assigned due to nature of excavation context; and (c) Motif 559. Sherd (a) is from Feature A54; sherd (b) is from a non-feature context near Features A48 and A54; and sherd (c) is from Feature A68. All sherds are from Amomoloc.

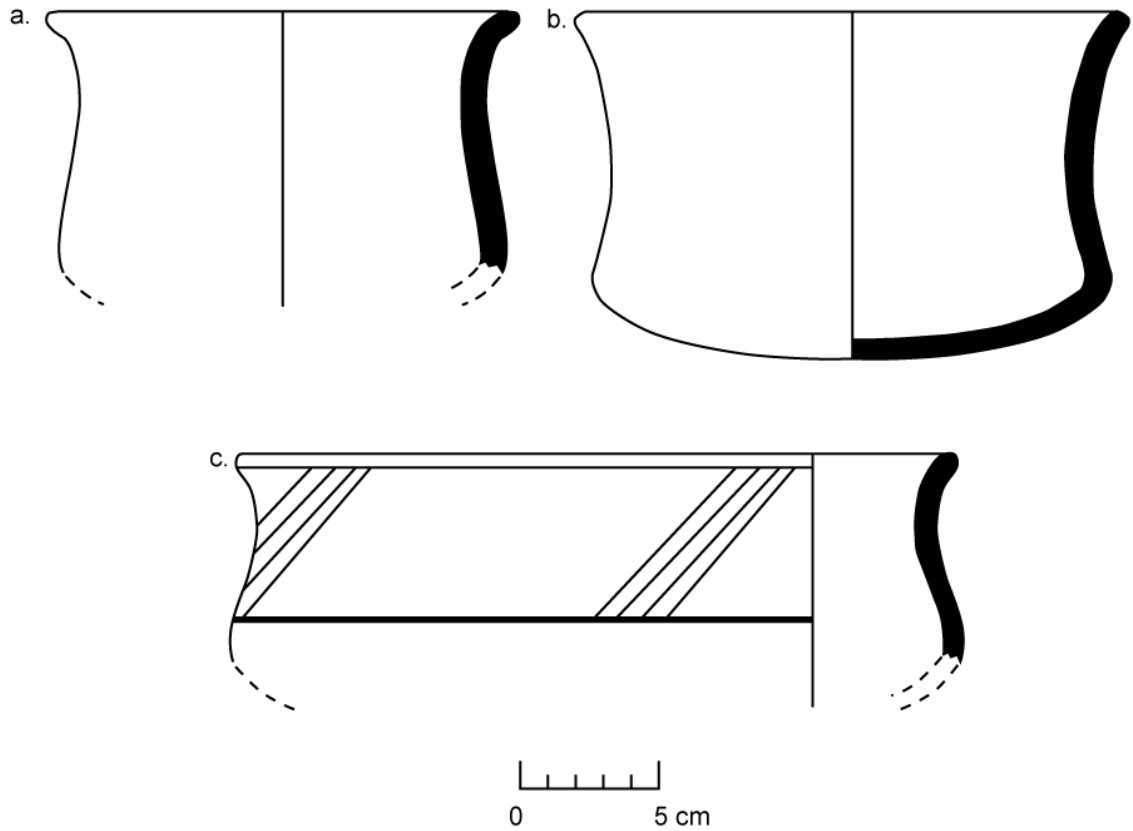


Figure 3.23 Yauhtentzi White composite silhouette bowls, Tlatempa phase. Note exterior grooved decoration (Motif 370) on sherd (c). Sherds (a) and (c) are from Feature A54; and sherd (b) is from Feature A68. All sherds are from Amomoloc.

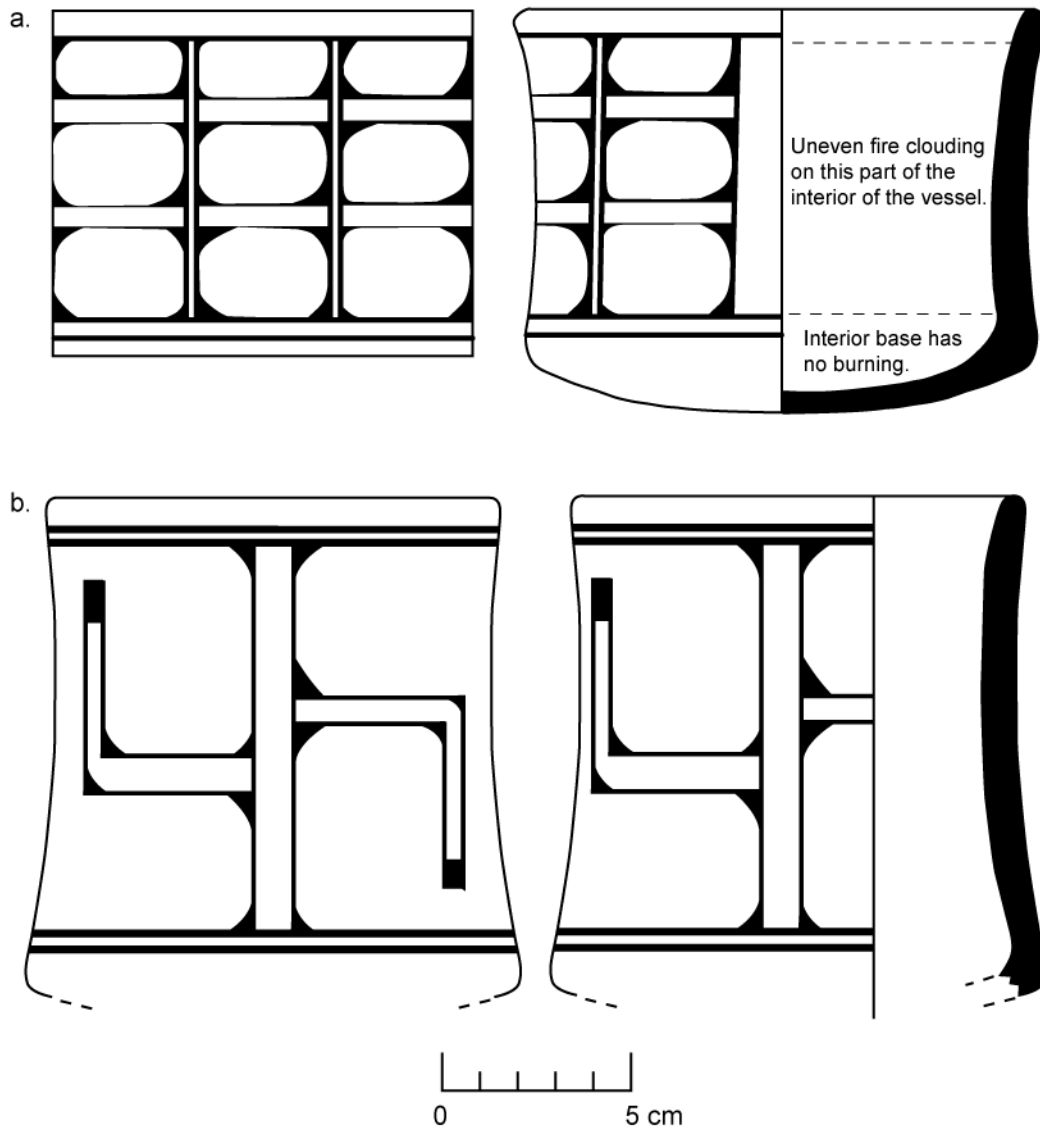


Figure 3.24 Yauhtenzi White composite silhouette vases, Tlatempa phase. (a) Dotted line outlines approximate area of uneven fire clouding on interior. The complete excised design depicted to the left of the profile (Motif 308) repeats twice (on opposing sides) of the vessel. This sherd is from Feature A68 at Amomoloc. (b) The complete excised design depicted to left of the profile repeats twice (on opposing sides) of the vessel (Motif 587). This sherd is from Feature A73 at Amomoloc.

WHITE/RED

Yauhtentzi Red-on-White

Temporal range and distinguishing characteristics. Yauhtentzi Red-on-White is present in the Tzompantepec phase at a low frequency (<1%), and increases considerably with the Early Tlatempa phase (26%). Along with Yauhtentzi White, it is a diagnostic type of the Tlatempa phase, continuing into the Late Tlatempa phase in high frequencies (16%). By the Texoloc phase, it diminishes considerably (7%). The type is essentially Yauhtentzi White but distinguished by a band of red slip applied on top of white slip near the rim, either on the interior or exterior of bowls, dishes, and cylinders, and very often decorated with motifs (see Figures 3.25-3.29).

Surface treatment. Yauhtentzi Red-on-White vessels have areas of red or dark red slip (10R5/4-4/4, 4/3, 10YR5/6-4/6) applied over a white slip (2.5Y8/4-7/4, 8/3, 10YR6/3, 2.5Y8/4-7/4) which covers the entire body of the vessel. In general, the red slip is restricted to areas near the rim of the vessel, usually along the thickened interior rim of dishes, the lip, or the upper portion of bowls when on the exterior.

Vessel shapes (refer to Figures 3.1-3.3).

Tzompantepec:

Bowl with slightly incurving wall (see Figures 3.2k, 3.25) (100%).

Early Tlatempa:

Bowls with beveled rims (see Figures 3.1c, 3.26b) (34%);

Bowls with outcurving rims and a band of interior thickening along the rim (see Figures 3.1g, 3.27) (25%);

Simple bowls (see Figure 3.1b) (13%);

Closed bowls with incurving walls and direct rims (see Figure 3.2o) (12%);

Bowls with pinched-in walls (see Figures 3.2j, 3.28d) (8%);

Bowls with outcurving rims (see Figure 3.1f) (3%);

Bowls with slightly incurving walls (see Figure 3.2k) (2%);

Composite silhouette vases (see Figures 3.2r, 3.29a,b) (1%);

Bowls with downcurving-everted rims (see Figure 3.1e) (less than 1%);

Bowls with an interior fold at rim (see Figure 3.1i) (less than 1%);

Bowls with vertical walls (see Figure 3.2m) (less than 1%);

Composite silhouette dishes (see Figures 3.2q, 3.29d) (less than 1%);

Jars with outcurving necks and direct rims (see Figure 3.3t) (less than 1%); and

Fine tecomates (see Figure 3.3y) (less than 1%).

Late Tlatempa:

Bowls with beveled rims (see Figures 3.1c, 3.26a) (28%);

Bowls with outcurving rims and a band of interior thickening along the rim (see Figure 3.1g) (28%);

Simple bowls (see Figure 3.1b) (17%);

Closed bowls with incurving walls and direct rims (see Figures 3.2o, 3.28a,b) (10%);

Bowls with outcurving rims (see Figure 3.1f) (5%);

Bowls with pinched-in walls (see Figure 3.2j) (5%);

Bowls with slightly incurving walls (see Figure 3.2k) (3%);
Composite silhouette dishes (see Figure 3.2q) (2%);
Bowls with horizontal-flat rims (see Figure 3.1d) (less than 1%);
Bowls with outleaning walls (see Figure 3.2l) (less than 1%);
Closed bowls with incurving walls and vertical rims (see Figure 3.2p) (less than 1%); and
Composite silhouette vases (see Figures 3.2r, 3.29c) (less than 1%).

Texoloc:

Bowls with beveled rims (see Figure 3.1c) (36%);
Bowls with outcurving rims and a band of interior thickening along the rim (see Figure 3.1g) (28%);
Bowls with pinched-in walls (see Figure 3.2j) (16%);
Simple bowls (see Figure 3.1b) (10%);
Bowls with outcurving rims (see Figure 3.1f) (4%);
Closed bowls with incurving walls and direct rims (see Figure 3.2o) (4%); and
Composite silhouette dishes (see Figure 3.2q) (2%).

Comparisons. Tlatempa rojo sobre blanco (García Cook and Merino Carrión 1997[1988]:164-165); Rojo sobre blanco esgrafiado (Zacatón borde pintado) (Serra Puche et al. 2004:66-67).

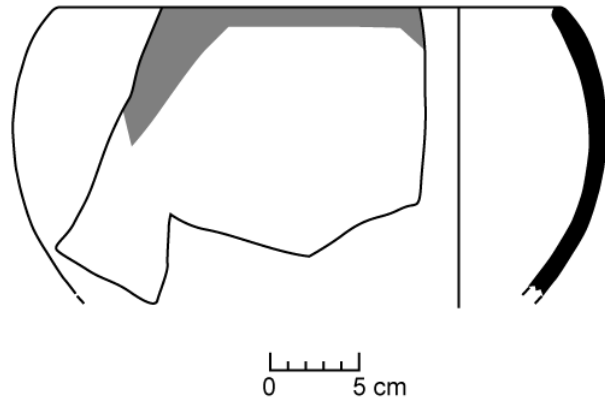


Figure 3.25 Yauhtentzi Red-on-White bowl with slightly incurving wall, Tzompantepec phase. Note Motif 408 on exterior of vessel. Vessel is from Feature A46 at Amomoloc. Gray shading indicates red slip.

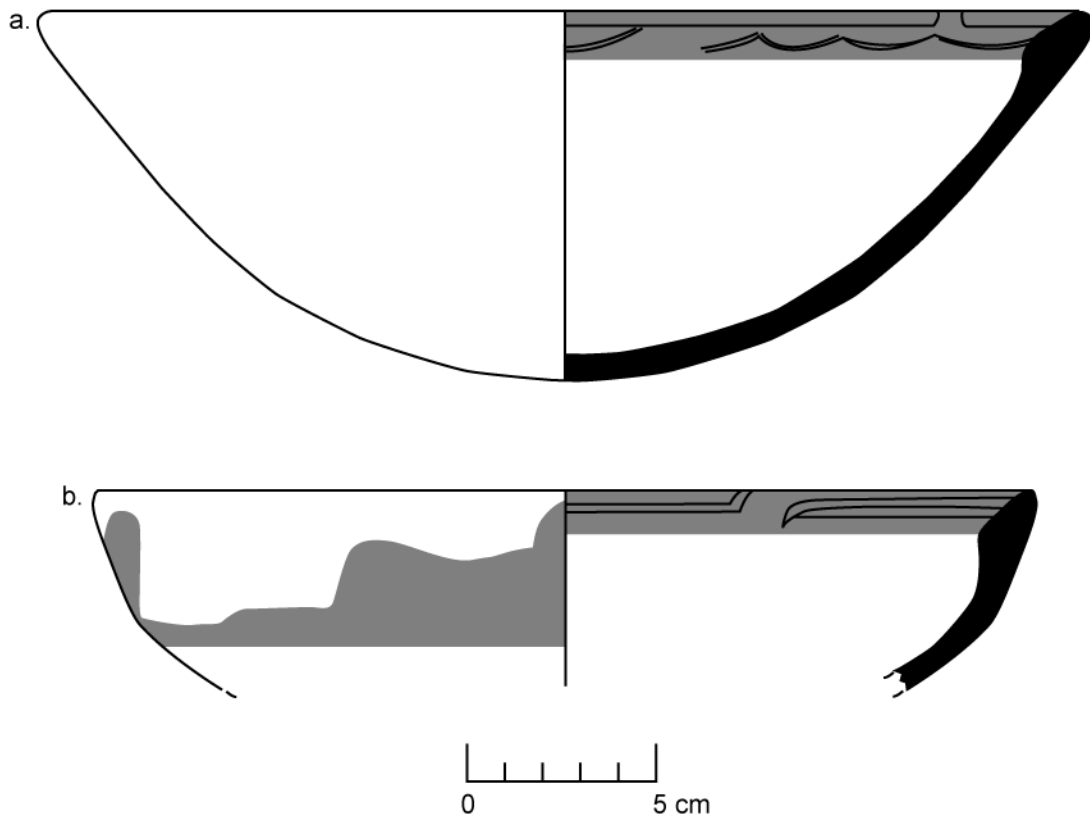


Figure 3.26 Yauhtentzi Red-on-White bowls with beveled rims, Tlatempa phase. Note the following decoration: (a) Motif 512 grooved along interior rim; and (b) Motif 463 incised along interior rim and Motif 153 painted on the exterior. Sherd (a) is from Feature A4 at Tetel; and sherd (b) is from Feature A57 at Amomoloc. Gray shading indicates red slip.

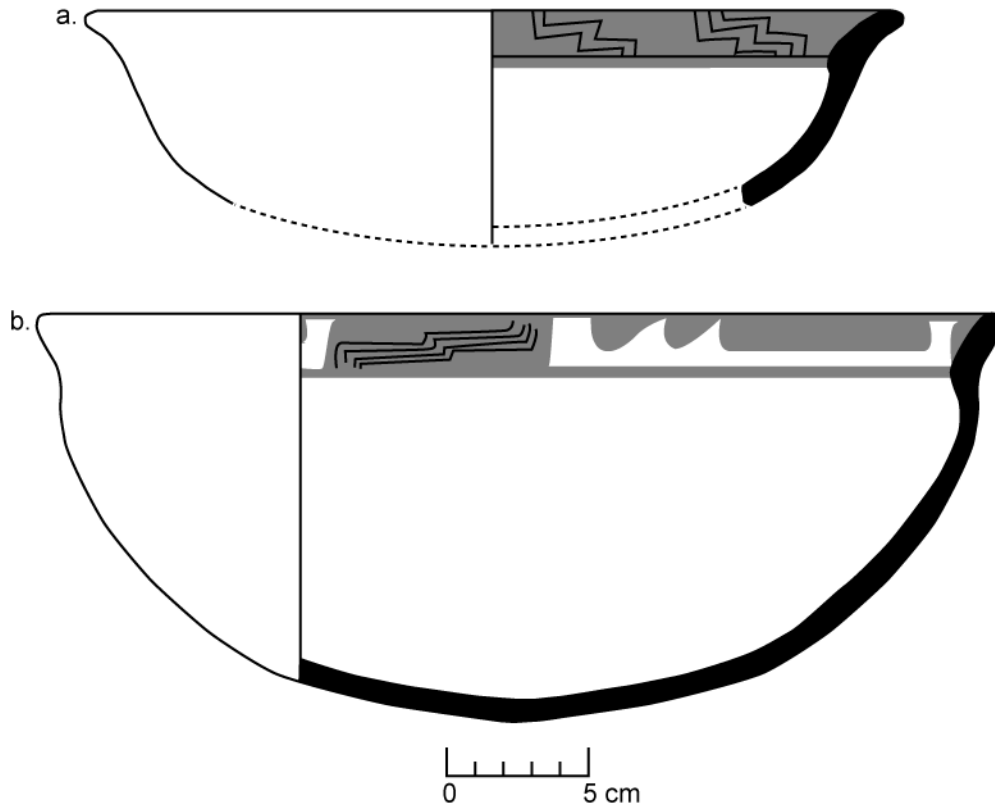


Figure 3.27 Yauhtentzi Red-on-White bowls with outcurving rims and a band of interior thickening along the rim, Tlatempa phase. Note the following incised interior rim decoration: (a) Motif 137; and (b) Motif 533, which repeats three times around the vessel. Sherd (a) is from Feature A23 at Amomoloc; and sherd (b) is from Feature A54 at Amomoloc. Gray shading indicates red slip.

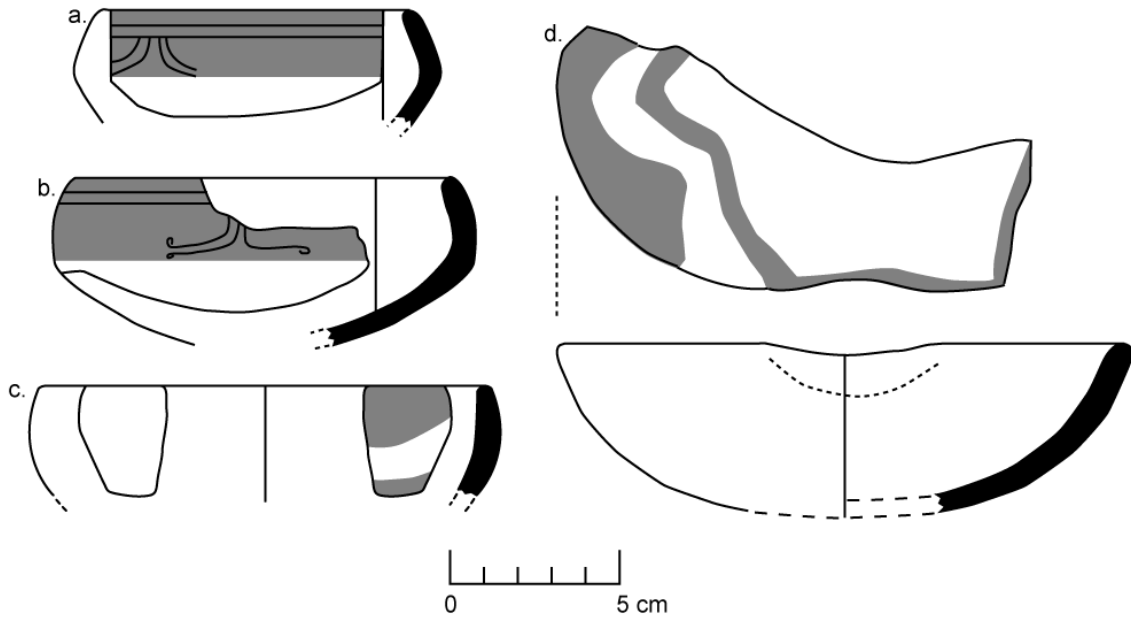


Figure 3.28 Yauhtentzi Red-on-White closed bowls with incurving walls (a,b), simple bowl (c), and bowl with pinched-in walls (d), Tlatempa phase. Note the following decoration: (a) Motif 91 incised on exterior shoulder; (b) Motif 509 incised on exterior shoulder; (c) no motif number assigned due to nature of excavation context; and (d) Motif 202 painted along interior of vessel. Sherds (a) and (b) are from Feature A73 at Amomoloc; sherd (c) is from Feature A13 at Tetel; and sherd (d) is from Feature A23 at Amomoloc. Gray shading indicates red slip.

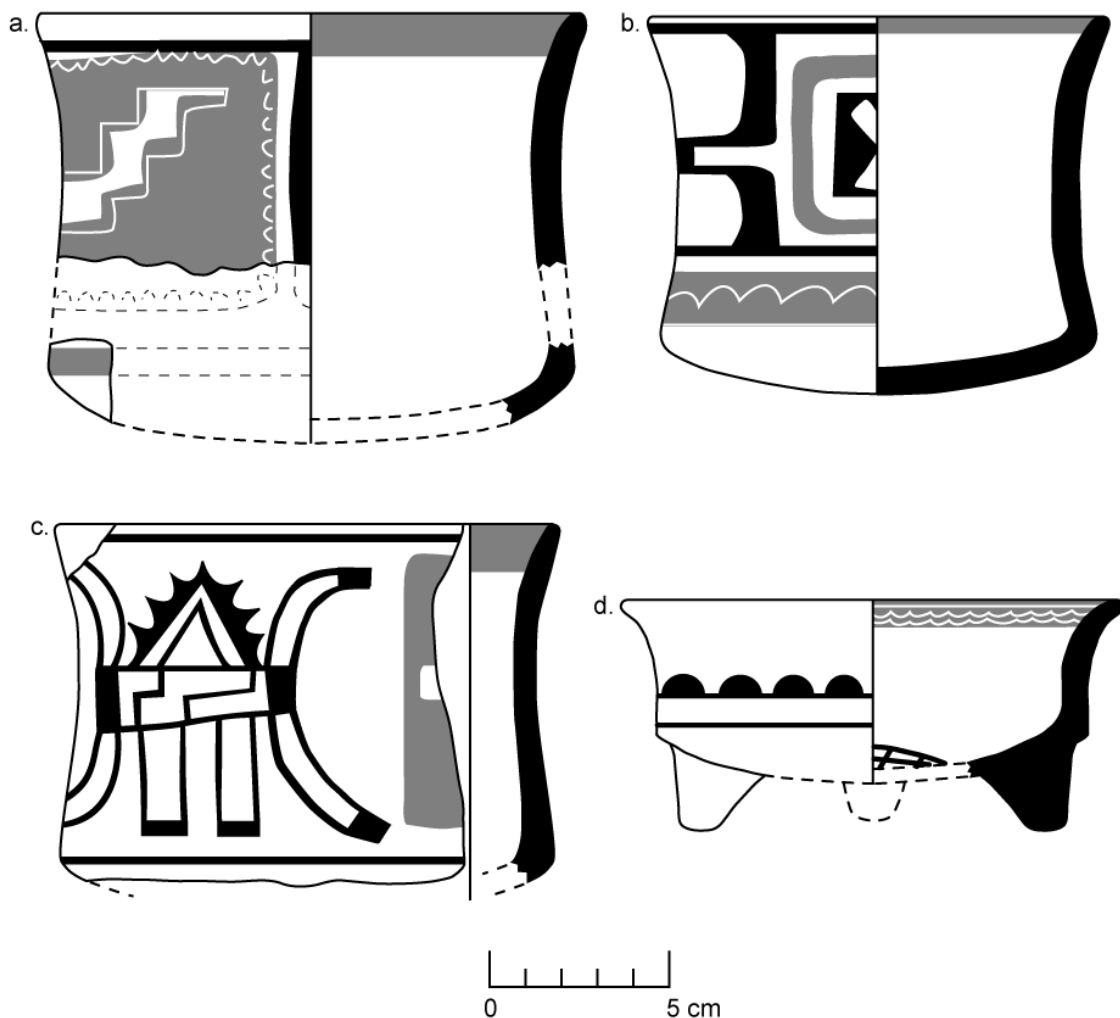


Figure 3.29 Yauhtentzi Red-on-White composite silhouette vases (a-c) and dish (d), Tlatempa phase. Note the following decoration: (a) Motif 539 (also see rollout in Figure 5.25c); (b) Motif 418 (also see Figure 5.25a); (c) Motif 419 (also see Figure 5.25b); and (d) Motif 184 incised along the interior rim, Motif 211 excised on the exterior shoulder, and Motif 412 excised on the interior base (see also Figure 5.27a). Sherds (a) and (b) are from Feature A54; sherd (c) is from Feature A73; and sherd (d) is from Feature A47. All sherds are from Amomoloc. Gray shading indicates red slip.

Gazca Painted White-on-Red

Temporal range and distinguishing characteristics. Gazca Painted White-on-Red is present in low frequencies during the Texoloc phase (2%) and is distinguished by its highly burnished red slip and faint white decorative painting on top of the red slip, which is typically located on the exterior or rim of vessels (see Figure 3.30).

Surface treatment. Vessel surfaces are covered with a light to dark red slip (2.5YR5/8-4/4, 10YR5/4) that is uniformly well burnished. On top of this red slip, a white paint (2.5Y8/1-7/1), which is very powdery and easy to rub off, is applied for the purpose of decoration. In many instances, the white paint has not been well preserved and only faint marks outlining where the paint was originally applied (the red slip appears less well burnished in these zones because of the paint application) remain.

Vessel shapes (refer to Figures 3.1-3.3).

Texoloc:

- Simple bowls (see Figures 3.1b, 3.30a) (45%);
- Composite silhouette dishes (see Figures 3.2q, 3.30b) (18%);
- Bowls with beveled rims (see Figure 3.1c) (9%);
- Bowls with slightly incurving walls (see Figure 3.2k) (9%);
- Bowls with vertical walls (see Figure 3.2m) (9%); and
- Fine tecomates (see Figures 3.3y, 3.30c) (9%).

Comparisons. Tezoquipan-Tezoyuca blanco sobre rojo (García Cook and Merino Carrión 1997[1988]:180); Blanco pintado sobre rojo pulido (Serra Puche et al. 2004:89); Laguna White on Red, Variety 77, possibly 130 (Snow 1966:203).

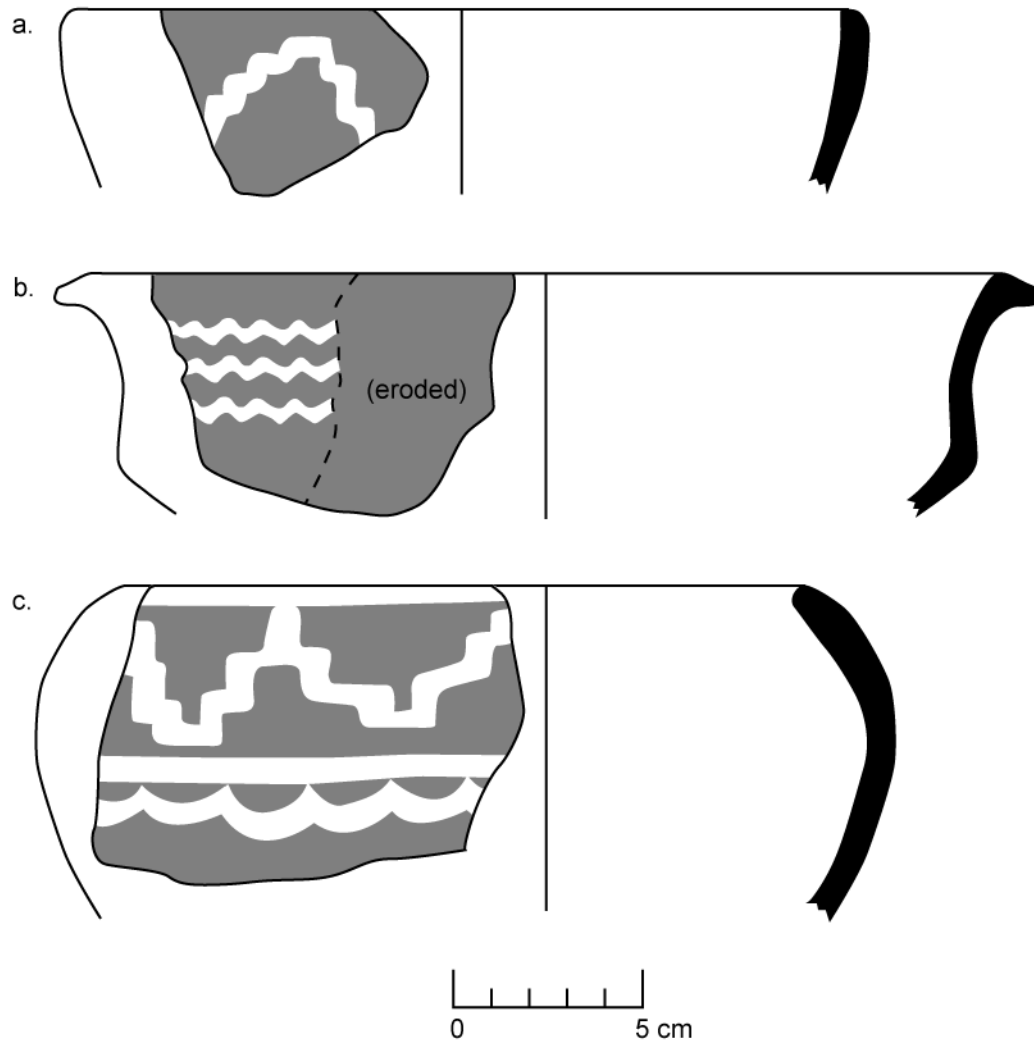


Figure 3.30 Gazca Painted White-on-Red vessels, Texoloc phase. (a) Simple bowl, with Motif 154, from Feature A10 at Tetel; (b) composite silhouette dish, with Motif 190, from Feature A10 at Tetel; and (c) fine tecomate, with Motif 538, from Feature A11 at Tetel. Gray shading indicates red slip.

Xalmonto Red-and-White

Temporal range and distinguishing characteristics. Xalmonto Red-and-White appears during the Tlatempa (<1%) and Texoloc phases (3%), but is more common in subsequent phases. At Amomoloc and Tetel, with one exception (see below), all Xalmonto Red-and-White vessels are slipped red on the interior and rim, and slipped white on the exterior (see Figure 3.31). It is important to note that other varieties of the Xalmonto type exist for later phases in the region, but are not considered here because they are not present at Amomoloc or Tetel.

Surface treatment. The Xalmonto Red-and-White vessels at Amomoloc and Tetel were covered with red slip (varying from weak red to orange-red and darker red tones, 2.5YR5/8, 4/4, 10R5/4, 5/6) on the interior and rim, and with white slip (2.5Y8/2, 8/3) on the exterior. The red slip is well burnished and lighter tones of red are more common; the white slip is matte and appears to be thinner and more easily weathered than that applied to the Yauhtentzi whites. At Tetel during the Texoloc phase, we also have one example of a Xalmonto composite silhouette bowl that was slipped entirely in red, except for a white-slipped area outlined by excised lines on the exterior shoulder (Figure 3.31e). This variety of the Xalmonto type becomes very common during the subsequent Tezoquipan phase.

Vessel shapes (refer to Figures 3.1-3.3).

Early Tlatempa:

Simple bowls (see Figure 3.1b) (50%);

Bowls with pinched-in walls (see Figure 3.2j) (25%); and

Closed bowls with incurving walls and direct rims (see Figure 3.2o) (25%).

Late Tlatempa:

Closed bowls with incurving walls and direct rims (see Figure 3.2o) (67%); and

Bowls with beveled rims (see Figure 3.1c) (33%).

Texoloc:

Composite silhouette dishes (see Figures 3.2q, 3.31b,e) (33%);

Bowls with beveled rims (see Figure 3.1c) (22%);

Simple bowls (see Figures 3.1b, 3.31c-d) (17%);

Bowls with vertical walls (see Figures 3.2m, 3.31a) (17%);

Bowls with downcurving-everted rims (see Figure 3.1e) (6%); and

Jars with vertical necks and rims (see Figure 3.3s) (6%).

Comparisons. Tezoquipan rojo interior-blanco exterior, Tezoquipan rojo interior-blanco inciso exterior, Tezoquipan rojo interior-blanco sobre rojo inciso exterior, Tezoquipan blanco pintado de rojo sobre rojo exterior-rojo interior (García Cook and Merino Carrión 1997[1988]:178); Rojo sobre blanco, Rojo sobre blanco esgrafiado, Blanco sobre rojo, Blanco sobre rojo esgrafiado (Serra Puche et al. 2004:74, 77, 80, 81); Laguna White on Red, Varieties 77, 80, 134, 135, possibly 130 (Snow 1966:203, 205, 211).

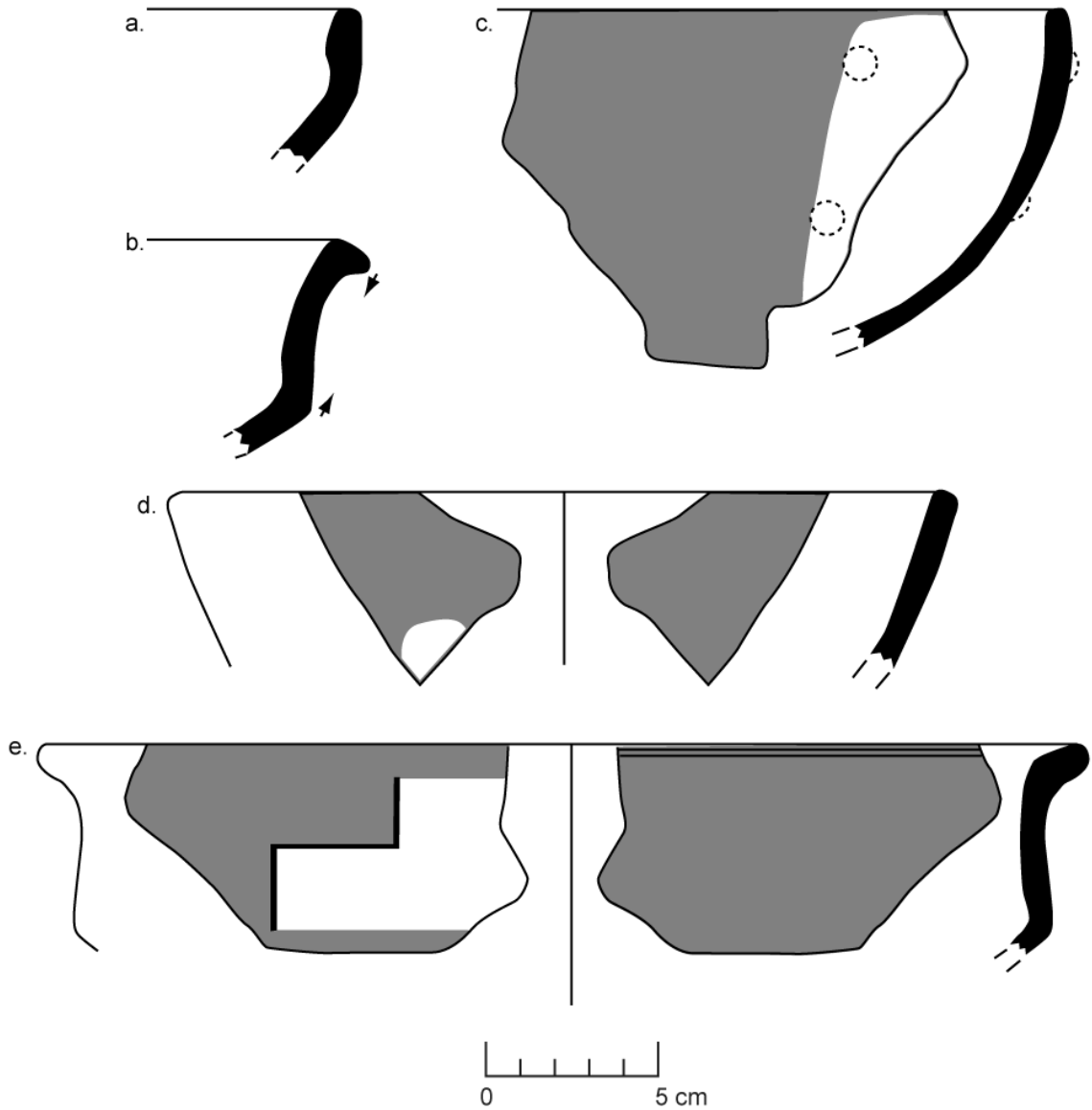


Figure 3.31 Xalmonto Red-and-White vessels, Texoloc phase. (a) Bowl with a vertical wall (with red slip on the interior and lip, and white slip on the exterior) from Feature A11; (b) composite silhouette dish (the entire vessel is covered in red slip except for a white matte slip on the exterior shoulder between the arrows shown above) from Feature A10; (c) simple bowl (note the small bumps on the exterior; this decoration is Motif 445) from Feature A11; (d) simple bowl from Feature A10 (exterior painted decoration is Motif 446); and (e) composite silhouette dish from Feature A10 (grooved interior rim decoration is Motif 4; painted and excised exterior decoration is Motif 146). All sherds are from Tetel. Gray shading indicates red slip.

WHITE/BROWN

San José White-and-Brown

Temporal range and distinguishing characteristics. San José White-and-Brown appears during the Early Tlatempa phase (<1%), is most prevalent during the Late Tlatempa phase (7%), and continues during the Texoloc phase (3%) in lower frequencies. The type is distinguished by its white exterior and rim, and brown to black interior (although the reverse does occur rarely); this pattern of coloring is achieved through surface treatment (slip and burnishing), and not as the result of differential firing (see Figures 3.32-3.35).

Surface treatment. San José White-and-Brown vessels are covered with a thin matte white slip on the exterior and rim (2.5Y8/1, 8/4, 10YR8/2), and a brown to black slip on the interior (10YR3/1, 3/2, 4/1), although sometimes interior coloring is the result of burnishing alone. In general, this type may be considered a mix of Yauhtentzi White and Mesitas Brown, although the vessel shapes tend to be distinct.

Vessel shapes (refer to Figures 3.1-3.3).

Early Tlatempa:

Simple bowls (see Figure 3.1b) (50%);

Bowls with horizontal-flat rims (see Figure 3.1d) (25%); and

Bowls with outcurving rims and a band of interior thickening along the rim (see Figure 3.1g) (25%).

Late Tlatempa:

Simple bowls (see Figures 3.1b, 3.32a, 3.34) (43%);

Bowls with slightly incurving walls (see Figures 3.2k, 3.32b-c, 3.33) (20%);
Bowls with horizontal-flat rims (see Figures 3.1d, 3.32d) (17%);
Bowls with beveled rims (see Figure 3.1c) (5%);
Bowls with an interior fold at rim (see Figures 3.1i, 3.32f) (4%);
Bowls with outcurving rims (see Figure 3.1f) (2%);
Bowls with outcurving rims and a band of interior thickening along the rim (see
Figure 3.1g) (2%);
Bowls with pinched-in walls (see Figures 3.2j, 3.35) (2%);
Closed bowls with incurving walls and direct rims (see Figure 3.2o) (2%);
Bowls with outleaning walls (see Figure 3.2l) (1%); and
Bowls with vertical walls (see Figure 3.2m) (1%).

Texoloc:

Simple bowls (see Figure 3.1b) (30%);
Bowls with horizontal-flat rims (see Figure 3.1d) (30%);
Bowls with slightly incurving walls (see Figure 3.2k) (26%);
Bowls with outcurving rims (see Figure 3.1f) (4%);
Bowls with outcurving rims and a band of interior thickening along the rim (see
Figure 3.1g) (4%); and
Bowls with pinched-in walls (see Figure 3.2j) (4%).

Comparisons. Texoloc blanco exterior-negro interior (García Cook and Merino Carrión 1997[1988]:175).

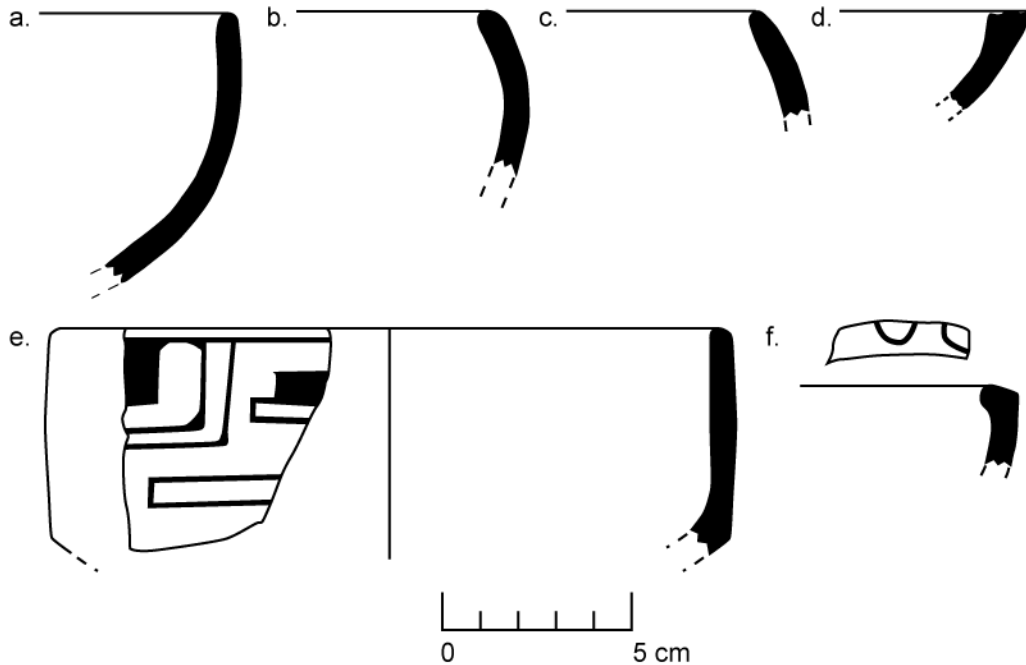


Figure 3.32 San José White-and-Brown bowls, Tlatempa phase. (a) Simple bowl from Feature A68; (b,c) bowls with slightly incurving walls (sherd [b] is from Feature A68 and sherd [c] is from Feature A64); (d) bowl with horizontal-flat rim from Feature A4; (e) bowl with vertical wall from a non-feature context near Features A48 and A54 (no motif number assigned due to excavation context); and (f) bowl with an interior fold at rim from Feature A64 (note excised Motif 156 on the almost flat rim). All sherds are from Amomoloc, except for sherd (d), which is from Tetel.

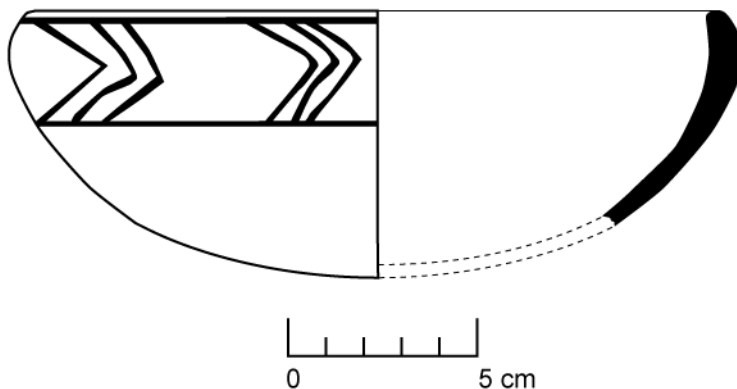


Figure 3.33 San José White-and-Brown bowl with slightly incurving wall, Tlatempa phase. Note excised decoration on exterior of vessel (Motif 354). Vessel is from Feature A4 at Tetel.

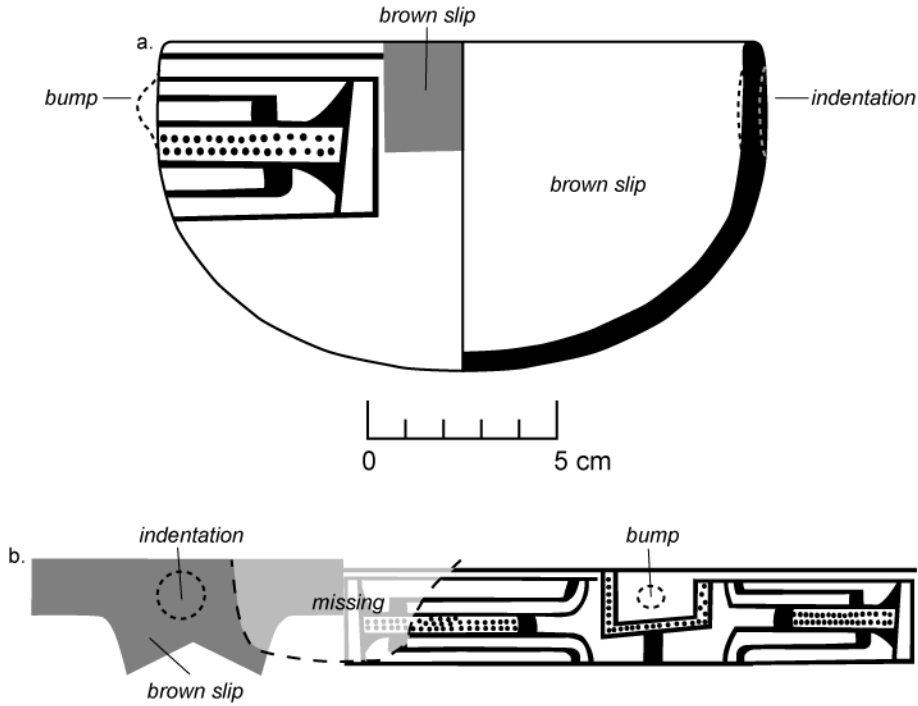


Figure 3.34 San José White-and-Brown simple bowl, Tlatempa phase. Image (b) is a roll-out of the entire design (Motif 260) (note the bump, indentation, and exterior excising). Vessel is from Feature A64 at Amomoloc. Gray shading indicates location of brown slip on exterior of vessel; entire interior is also covered with brown slip.

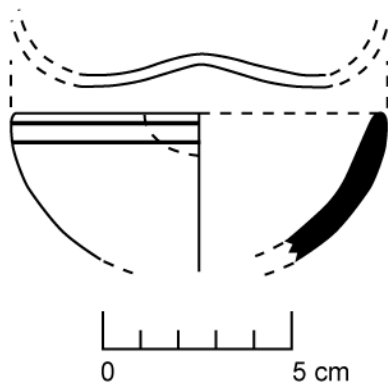


Figure 3.35 San José White-and-Brown bowl with pinched-in walls, Tlatempa phase. Note two excised lines on the exterior near the rim (Motif 4). This vessel is from Feature A68 at Amomoloc.

BROWN

Mesitas Brown

Temporal range and distinguishing characteristics. Mesitas Brown is found in all phases of the chronological sequence. It occurs in small quantities during the Tzompantepec (8%) and Tlatempa (6%) phases, and then reaches its maximum frequency during the Texoloc phase (17%). Mesitas Brown vessels are brown, generally dark in color, and are either slipped or simply burnished. Typically the exteriors of vessels are more roughly burnished (oftentimes lines from scraping are apparent, or the surface is unevenly burnished) than the interiors, whereas other brown types are more finely burnished and have thinner walls. Downcurving rims are particularly diagnostic of Texoloc phase (see Figures 3.36-3.37).

Surface treatment. Vessel surfaces are typically covered with a dark brown slip that may vary from light brown (10YR5/4) to dark gray (10YR3/1), although burnishing without the application of slip appears as well. It is common to find more burnishing on the surface of the interior of bowls and dishes than the exterior.

Vessel shapes (refer to Figures 3.1-3.3).

Tzompantepec:

Simple bowls (see Figures 3.1b, 3.36a-c) (56%);

Bowls with beveled rims (see Figures 3.1c, 3.36f) (11%);

Bowls with an exterior fold at rim (see Figures 3.1h, 3.36e) (11%);

Bowls with slightly incurving walls (see Figures 3.2k, 3.36d) (11%); and

Jars with vertical necks and rims (see Figure 3.3s) (11%).

Early Tlatempa:

Simple bowls (see Figure 3.1b) (26%);

Fine tecomates (see Figure 3.3y) (11%);

Jars with outcurving necks and direct rims (see Figure 3.3t) (10%);

Bowls with an exterior fold at rim (see Figure 3.1h) (8%);

Bowls with horizontal-flat rims (see Figure 3.1d) (7%);

Bowls with slightly incurving walls (see Figure 3.2k) (7%);

Bowls with beveled rims (see Figure 3.1c) (5%);

Bowls with downcurving-everted rims (see Figure 3.1e) (5%);

Bowls with outcurving rims (see Figure 3.1f) (3%);

Heavy tecomates (see Figure 3.3x) (3%);

Jars with vertical necks and rims (see Figure 3.3s) (2%);

Jars with downcurving rims (see Figure 3.3v) (2%);

Bowls with an interior fold at rim (see Figure 3.1i) (1%);

Bowls with pinched-in walls (see Figure 3.2j) (1%);

Bowls with outleaning walls (see Figure 3.2l) (1%);

Bowls with vertical walls (see Figure 3.2m) (1%);

Closed bowls with incurving walls and direct rims (see Figure 3.2o) (1%);

Closed bowls with incurving walls and vertical rims (see Figure 3.2p) (1%);

Composite silhouette dishes (see Figure 3.2q) (1%); and

Composite silhouette vases (see Figure 3.2r) (1%).

Late Tlatempa:

Simple bowls (see Figure 3.1b) (31%);
Jars with outcurving necks and direct rims (see Figure 3.3t) (22%);
Bowls with horizontal-flat rims (see Figure 3.1d) (7%);
Bowls with downcurving-everted rims (see Figure 3.1e) (7%);
Jars with downcurving rims (see Figure 3.3v) (7%);
Bowls with an exterior fold at rim (see Figure 3.1h) (5%);
Bowls with slightly incurving walls (see Figure 3.2k) (5%);
Bowls with outcurving rims (see Figure 3.1f) (3%);
Bowls with outleaning walls (see Figure 3.2l) (3%);
Jars with incurving necks and direct rims (see Figure 3.3w) (3%);
Bowls with beveled rims (see Figure 3.1c) (2%);
Bowls with pinched-in walls (see Figure 3.2j) (2%); and
Closed bowls with incurving walls and direct rims (see Figure 3.2o) (2%).

Texoloc:

Bowls with downcurving-everted rims (see Figures 3.1e, 3.37c-f) (47%);
Composite silhouette dishes (see Figure 3.2q) (13%);
Simple bowls (see Figures 3.1b, 3.37a-b) (8%);
Closed bowls with incurving walls and direct rims (see Figure 3.2o) (8%);
Bowls with slightly incurving walls (see Figure 3.2k) (7%);
Fine tecomates (see Figure 3.3y) (4%);
Bowls with outcurving rims (see Figure 3.1f) (3%);
Jars with vertical necks and rims (see Figure 3.3s) (3%);
Jars with horizontal-everted rims (see Figure 3.3u) (3%);

Bowls with beveled rims (see Figure 3.1c) (2%);

Jars with outcurving necks and direct rims (see Figure 3.3t) (2%);

Heavy tecomates (see Figure 3.3x) (2%);

Bowls with an exterior fold at rim (see Figure 3.1h) (less than 1%); and

Bowls with outleaning walls (see Figure 3.2l) (less than 1%).

Comparisons. Texoloc Café (García Cook and Merino Carrión 1997[1988]:171-173);

Café Esgrafiado, Negro Esgrafiado (Serra Puche et al. 2004:67-71).

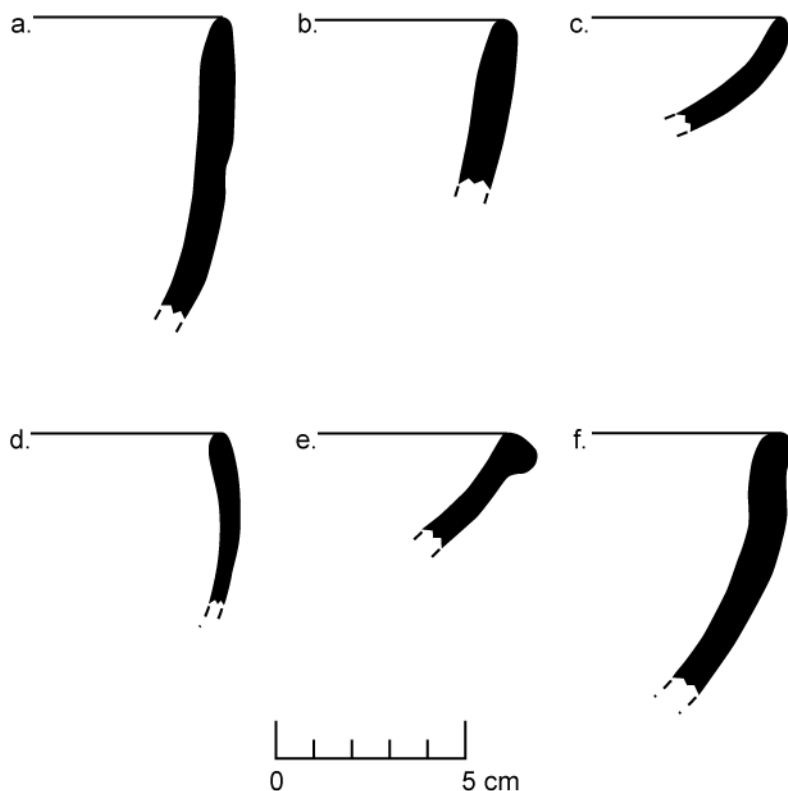


Figure 3.36 Mesitas Brown bowls, Tzompantepec phase. (a-c) Simple bowls; (d) bowl with slightly incurving wall; (e) bowl with an exterior fold at rim; and (f) bowl with beveled rim. Note the following decoration: (a) uneven pre-slip horizontal fluting on exterior (Motif 449). All sherds are from Feature A46 at Amomoloc.

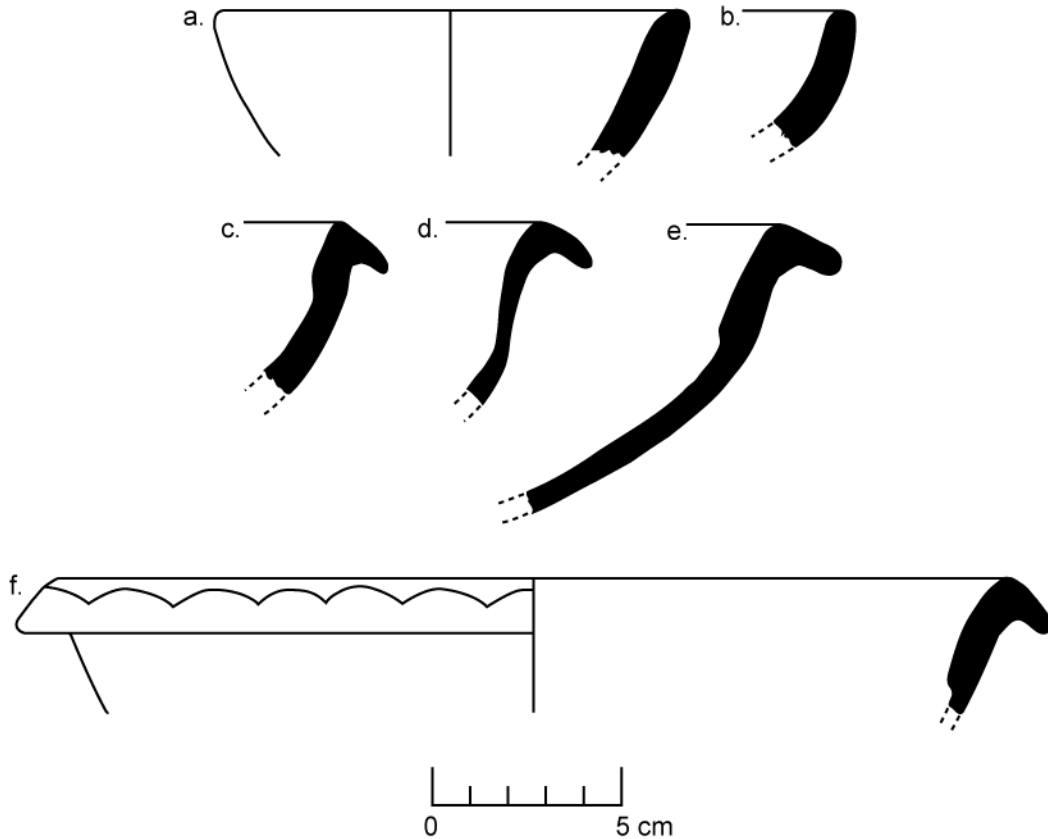


Figure 3.37 Mesitas Brown simple bowls (a-b) and bowls with downcurving-everted rims (c-f), Texoloc phase. Note the grooved decoration (Motif 166) along the exterior rim of sherd (f). All sherds are from Feature A15 at Tetel, except for sherd (e), which is from Feature A10 at Tetel.

BLACK/GRAY

Pascuala Black-and-White

Temporal range and distinguishing characteristics. Pascuala Black-and-White appears in the Tzompantepec phase (4%) and in low frequencies during the Tlatempa (<1%) and Texoloc (<1%) phases. Pascuala Black-and-White vessels are differentially fired. Typically, the interior and rims of vessels are black, with a white exterior, but often coloring is not always separated, so that some vessels have a mix of black, white, and gray coloring on both the interior and exterior (cloudy smudging) (see Figure 3.38).

What differentiates Pascuala Black-and-White from the later Palmas Black-and-White type is that Pascuala Black-and-White is the result of actual differential firing; the profile of a Pascuala sherd reveals a blackened core associated with the black surface of the vessel and a yellowish brown core associated with the white surface of the vessel, while the coloring of Palmas vessels is achieved without differential firing (see Palmas Black-and-White description below).

Surface treatment. Pascuala Black-and-White vessels were covered entirely with white slip and then well burnished. Vessels were differentially fired to achieve the characteristic white and black coloring, generally producing a grayish black tone (10YR4/1, 3/1, 2/1) on the interior and rim of the vessel and a white exterior (10YR8/1), although in some cases both surfaces had areas that were burned or cloudy (2.5Y7/2, 10YR7/2).

Paste. Paste composition is similar to other types. The only difference is that the color of the paste indicates the differential firing technique: the portion of the paste that runs along the white exterior of the vessel is also light in color (yellowish brown, 2.5Y7/4), while the interior portion of the paste is black (10YR3/1).

Vessel shapes (refer to Figures 3.1-3.3).

Tzompantepec:

Simple bowls (see Figure 3.1b) (25%);

Bowls with outcurving rims and a band of interior thickening along the rim (see Figures 3.1g, 3.38b) (25%);

Closed bowls with incurving walls and vertical rims (see Figures 3.2p, 3.38a) (25%); and

Jars with outcurving necks and direct rims (see Figure 3.3t) (25%).

Early Tlatempa:

Simple bowls (see Figure 3.1b) (25%);

Bowls with beveled rims (see Figure 3.1c) (25%);

Bowls with outleaning walls (see Figure 3.2l) (25%); and

Jars with vertical necks and rims (see Figure 3.3s) (25%).

Late Tlatempa:

Simple bowls (see Figure 3.1b) (50%); and

Jars with outcurving necks and direct rims (see Figure 3.3t) (50%).

Texoloc:

Bowl with outcurving rim (see Figure 3.1f) (100%).

Comparisons. Grupo de Cocción Diferencial (Serra Puche et al. 2004:59, 64, 65).

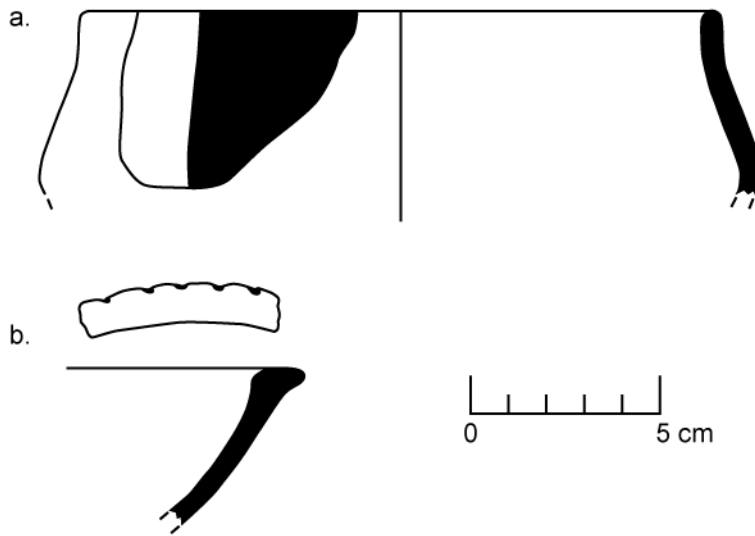


Figure 3.38 Pascuala Black-and-White bowls, Tzompantepec phase. (a) Closed bowl with incurving wall and vertical rim (note zones of white and black on exterior; interior is gray); and (b) bowl with outcurving rim and a band of interior thickening along the rim (note the scalloped rim; exterior is white and interior is grayish-black). Both sherds are from Feature A46 at Amomoloc.

Fermín Fine Gray

Temporal range and distinguishing characteristics. Fermín Fine Gray is present only during the Tlatempa phase in very low quantities (<1%) (see Figure 3.39). This is a highly burnished type that is very smooth and glossy. Its paste, which is gray in color and contains a high proportion of volcanic ash and fine sand, is quite different from the typical paste found at Amomoloc and Tetel. It is possible that these vessels are imports from regions to the south, such as Puebla or Oaxaca. The latter is well known for its gray wares.

Surface treatment. The surface of Fermín Fine Gray vessels is gray (GLE Y1:4/N-5/N), highly burnished, and uniform in color. The color and shine of Fermín Fine Gray vessels may have been produced by careful burnishing rather than the application of slip, as was the case with Delfina Fine Gray from the Valley of Oaxaca (Flannery and Marcus 1994:259-268). Earlier in time than our Fine Gray, Delfina Fine Gray vessels were “self-slipped,” with a metallic sheen produced as fine clay minerals were brought to the surface through burnishing (Flannery and Marcus 1994:266). Occasionally, we noted red pigment, possibly hematite, within the grooved and excised designs of Fine Gray vessels, which is a feature of many Delfina Fine Gray wares as well (Flannery and Marcus 1994:266).

Paste. The paste of Fermín Fine Gray vessels is very fine, with a semi-compact to compact texture and a porosity of 1-5% (1 mm) (see Rice 1987:349). Inclusions include volcanic ash and fine white and gray sand (GLE Y1:5/N), all of which are very similar in color to the surface of the vessel. This paste is quite distinct from the other pastes at Amomoloc and Tetel, and is rare, suggesting that Fine Gray vessels may be imported from another region.

Vessel shapes (refer to Figures 3.1-3.3).

Early Tlatempa:

Composite silhouette dish (see Figures 3.2q, 3.39a) (100%).

Late Tlatempa:

Simple bowls (see Figure 3.1b) (50%);

Closed bowl with incurving wall and vertical rim (see Figures 3.2p, 3.39b) (25%);

and

Jars with outcurving necks and direct rims (see Figure 3.3t) (25%).

Comparisons. Gris Fino (Serra Puche et al. 2004:97).

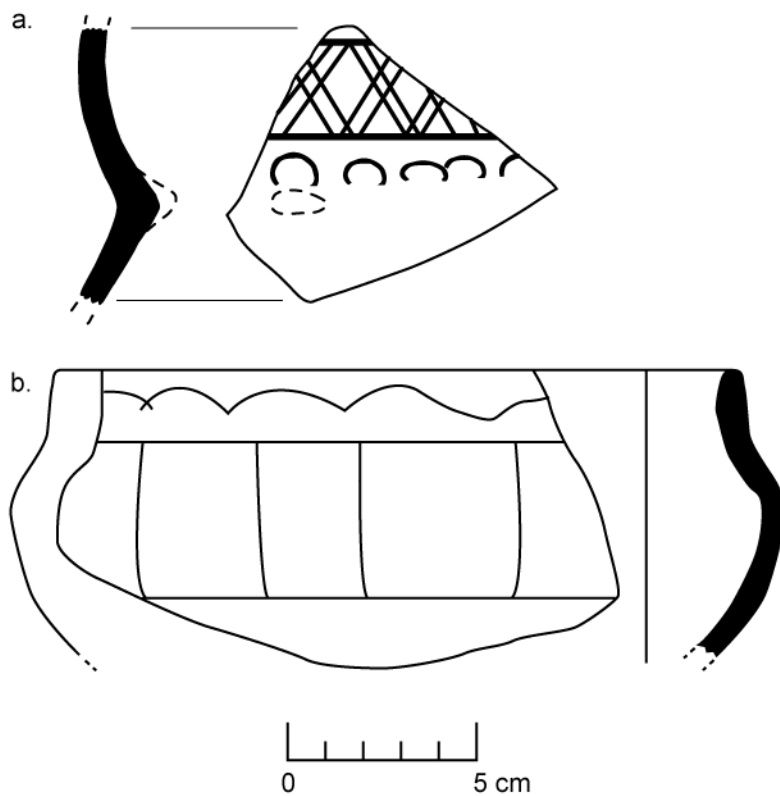


Figure 3.39 Fermín Fine Gray vessels, Tlatempa phase. (a) Composite silhouette bowl with unknown rim (note exterior excising [Motif 577] and small nubbin handle) from Feature A54 at Amomoloc; and (b) closed bowl with incurving wall and vertical rim (note Motif 165 grooved on the exterior neck and Motif 436 grooved on the exterior body) from Feature A19 at Tetel.

Mesitas Fine Brown

Temporal range and distinguishing characteristics. Mesitas Fine Brown is found in low proportions during the Tlatempa (1%) and Texoloc (<1%) phases (see Figure 3.40).

Mesitas Fine Brown vessels are distinguished from Mesitas Brown vessels by their highly burnished, shiny surfaces and finely incised decoration. We believe Mesitas Fine Brown vessels were fired at a high temperature, because their sherds are hard and make a distinct “ring” when struck (see Flannery and Marcus 1994:265). The walls of Mesitas Fine Brown vessels also tend to be thinner (4-6 mm) than those of Mesitas Brown vessels (6-8 mm).

Surface treatment. Mesitas Fine Brown vessels are covered with a blackish-brown slip (10YR3/1, 7.5YR4/1, 10YR2/1, 7.5YR2.5/1). They are highly burnished and shiny, and their walls, both interior and exterior, are very smooth to the touch.

Vessel shapes (refer to Figures 3.1-3.3).

Early Tlatempa:

Jars with outcurving necks and direct rims (see Figure 3.3t) (40%);

Simple bowl (see Figure 3.1b) (20%);

Jar with vertical neck and rim (see Figure 3.3s) (20%); and

Jar with incurving neck and direct rim (see Figure 3.3w) (20%).

Late Tlatempa:

Jars with outcurving necks and direct rims (see Figure 3.3t) (19%);

Simple bowls (see Figure 3.1b) (15%);

Bowls with vertical walls (see Figures 3.2m, 3.40b) (15%);
Composite silhouette dishes (see Figures 3.2q, 3.40c-d) (15%);
Cylinders with vertical walls (see Figures 3.2n, 3.40a) (11%);
Bowls with slightly incurving walls (see Figure 3.2k) (7%);
Composite silhouette vases (see Figure 3.2r) (7%);
Bowl with horizontal-flat rim (see Figure 3.1d) (4%);
Jar with vertical neck and rim (see Figure 3.3s) (4%); and
Jar with incurving neck and direct rim (see Figure 3.3w) (4%).

Texoloc:

Simple bowl (see Figure 3.1b) (33%);
Bowl with pinched-in wall (see Figure 3.2j) (33%); and
Bowl with slightly incurving wall (see Figure 3.2k) (33%).

Comparisons. Negro Esgrafiado (Serra Puche et al. 2004:67).

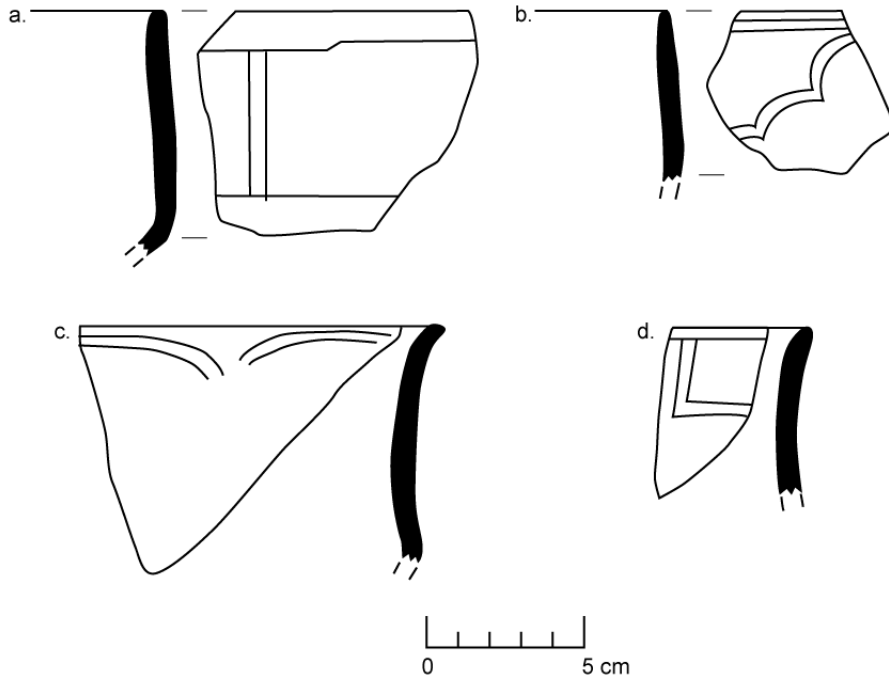


Figure 3.40 Mesitas Fine Brown bowls, Tlatempa phase. (a) Cylinder with vertical wall (note Motif 542 incised on exterior); (b) bowl with vertical wall (note Motif 129 incised on exterior); (c) composite silhouette dish (note Motif 100 incised on interior); and (d) composite silhouette dish (note Motif 35 grooved on interior).. All sherds are from Feature A4 at Tetel.

Palmas Black-and-White

Temporal range and distinguishing characteristics. Palmas Black-and-White begins during the Texoloc phase (2%) at Tetel, and continues at low frequencies during subsequent phases at other sites in the region (see Figures 3.41-3.42). Palmas Black-and-White is distinct from Pascuala Black-and-White in that Palmas vessels receive their characteristic coloring due to the application of black and white slips, rather than differential firing.

Surface treatment. Palmas Black-and-White vessels are covered with white and black slips, and are reasonably well burnished. Typically, the interior of vessels is black (10YR2/1-4/1) and the exterior is white (10YR8/1), although sometimes the black extends to the exterior of the vessel. The separation between black and white zones is often not very clear, so that areas of gray tones (2.5Y7/2, 10YR7/2) appear between the two slips.

Vessel shapes (refer to Figures 3.1-3.3).

Texoloc:

Bowls with beveled rims (see Figures 3.1c, 3.42) (20%);

Bowls with outcurving rims and a band of interior thickening along the rim (see Figure 3.1g) (20%);

Bowls with horizontal-flat rims (see Figures 3.1d, 3.41b) (13%);

Bowls with downcurving-everted rims (see Figure 3.1e) (13%);

Bowls with outcurving rims (see Figure 3.1f) (13%);

Bowls with outleaning walls (see Figures 3.2l, 3.41a) (13%); and

Composite silhouette dishes (see Figure 3.2q) (7%).

Comparisons. Perhaps corresponds to Texoloc blanco exterior-negro interior (García Cook and Merino Carrión 1997[1988]:175); perhaps corresponds to Grupo de cocción diferencial (Serra Puche et al. 2004:59, 64, 65).

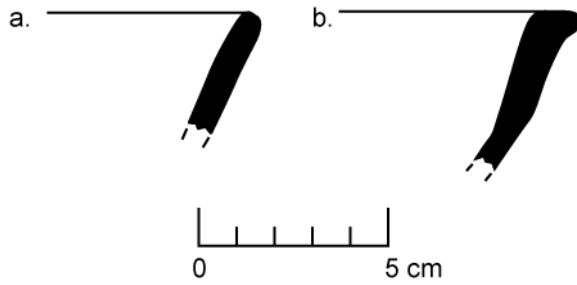


Figure 3.41 Palmas Black-and-White bowls, Texoloc phase. (a) Bowl with outleaning wall (interior and rim are black; exterior is white) from Feature A11 at Tetel; and (b) bowl with horizontal-flat rim (interior and rim are black; exterior is grayish white) from Feature A16 at Tetel.



Figure 3.42 Palmas Black-and-White bowls with beveled rims, Texoloc phase. All sherds are from Feature A11 at Tetel.

RED/BROWN

Potrero Streaky Red-on-Brown

Temporal range and distinguishing characteristics. Potrero Streaky Red-on-Brown is present in low frequencies during the Tzompantepec (4%) and Tlatempa (<1%) phases. This type is rare and not well-defined. The coloring of Potrero Streaky Red-on-Brown is distinct from Laguna Red and Laguna Dark Red types, but it is not clear how this coloring was achieved. Possibly a thin red wash was applied to the vessels and then irregularly burnished to produce the uneven (streaky) alternation between reddish brown and brown tones (see Figures 3.43-3.44).

Surface treatment. The surface of Potrero Streaky Red-on-Brown vessels is irregularly burnished so that it varies in color between red and various tones of brown and reddish brown (10R4/3-4/4, 10R4/2-3/2). The colors are not simply mixed but appear streaky.

Vessel shapes (refer to Figures 3.1-3.3).

Tzompantepec:

Jars with downcurving rims (see Figures 3.3v, 3.44) (50%);

Bowls with an exterior fold at rim (see Figures 3.1h, 3.43b) (25%); and

Bowls with slightly incurving walls (see Figures 3.2k, 3.43a) (25%).

Early Tlatempa:

Bowls with an exterior fold at rim (see Figure 3.1h) (40%);

Simple bowls (see Figure 3.1b) (20%);

Bowls with slightly incurving walls (see Figure 3.2k) (20%); and

Fine tecomates (see Figure 3.3y) (20%).

Late Tlatempa:

Bowls with beveled rims (see Figure 3.1c) (100%).

Comparisons. Tzompantepec rojo (García Cook and Merino Carrión 1997[1988]:162-164).

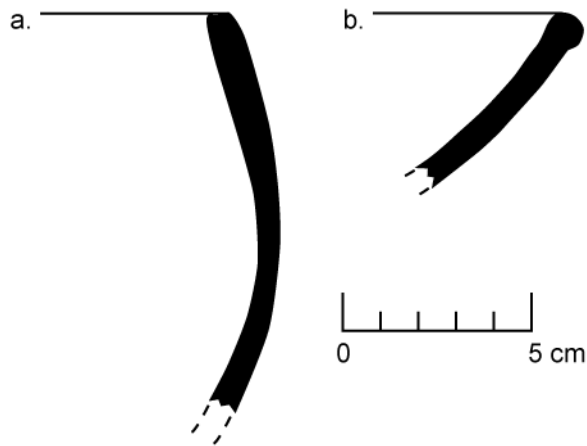


Figure 3.43 Potrero Streaky Red-on-Brown bowl with slightly incurving wall (a) and bowl with an exterior fold at rim (b), Tzompantepec phase. Both sherds are from Feature A46 at Amomoloc.

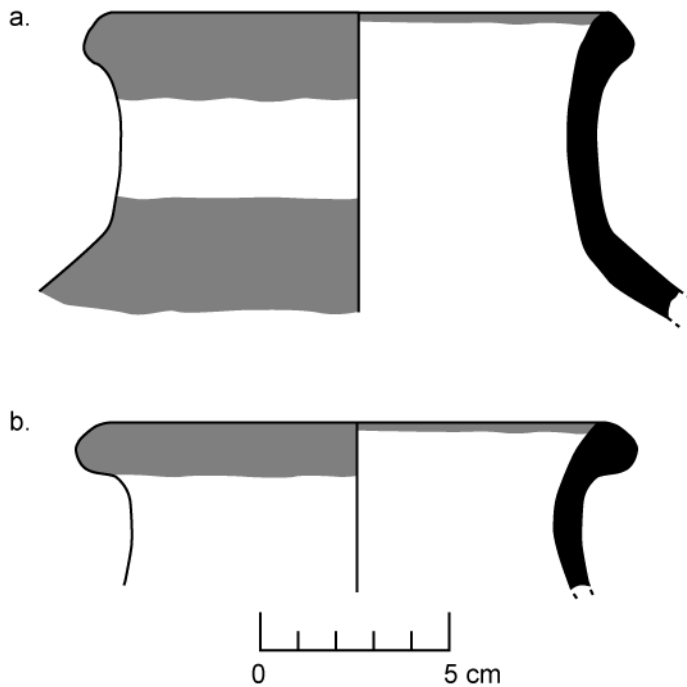


Figure 3.44 Potrero Streaky Red-on-Brown jars with downcurving rims, Tzompantepec phase. Gray shading indicates streaky reddish-brown coloring; exterior necks are burnished to buff color, while interior bodies are scraped. Both sherds are from Feature A46 at Amomoloc.

Laguna Dark Red-on-Buff

Temporal range and distinguishing characteristics. Laguna Dark Red-on-Buff is present during the Tlatempa phase (2%) in low quantities. This type is characterized by dark red banded decoration found on the rim and exterior body of burnished buff jars. When only a red-banded rim is found (and nothing connecting to the body), it is difficult to distinguish between Laguna Dark Red-on-Buff and Laguna Red-and-Scraped jars (see below). Both have red slip along the rim, although the Laguna Dark Red-on-Buff slip is somewhat darker in color than the more orange-red associated with Laguna Red-and-Scraped, and both have scraped necks. It is only the exterior bodies of these types that

are quite different: the Laguna Dark Red-on-Buff jars are buff with a variety of decorative red bands, while the Laguna-Red-and-Scraped jars are slipped entirely in red below the neck (see Figure 3.45).

Surface treatment. The surface is well-burnished with a buff color (7.5YR4/2, 5/4), upon which bands of dark red slip are applied (10R4/3). The necks and interiors of jars are scraped (i.e., unburnished and unslipped) (7.5YR6/4), while the rims and exteriors receive the dark red-on-buff surface treatment. It is likely that this is an early manifestation of the later Laguna Red-and-Scraped type that becomes common for jars during the Texoloc and subsequent phases, and often it is difficult to distinguish between them when rim sherds do not extend below the neck of a vessel. All vessels within this type are decorated in some way by red bands, by definition of the type (otherwise they would be typed as Amomoloc Plain jars). Decoration typically consists of a red band on the jar lip, another band running around the base of the exterior neck, and diagonal red bands on the exterior body. Occasionally the bands on the exterior body meet or cross each other, ending at a separate horizontal band running around the base of the jar.

Vessel shapes (refer to Figures 3.1-3.3).

Tlatempa:

Jars with outcurving necks and direct rims (see Figures 3.3t, 3.45) (100%).

Comparisons. Possibly corresponds to Texoloc rojo y café (García Cook and Merino Carrión 1997[1988]:173, Lámina 6a).

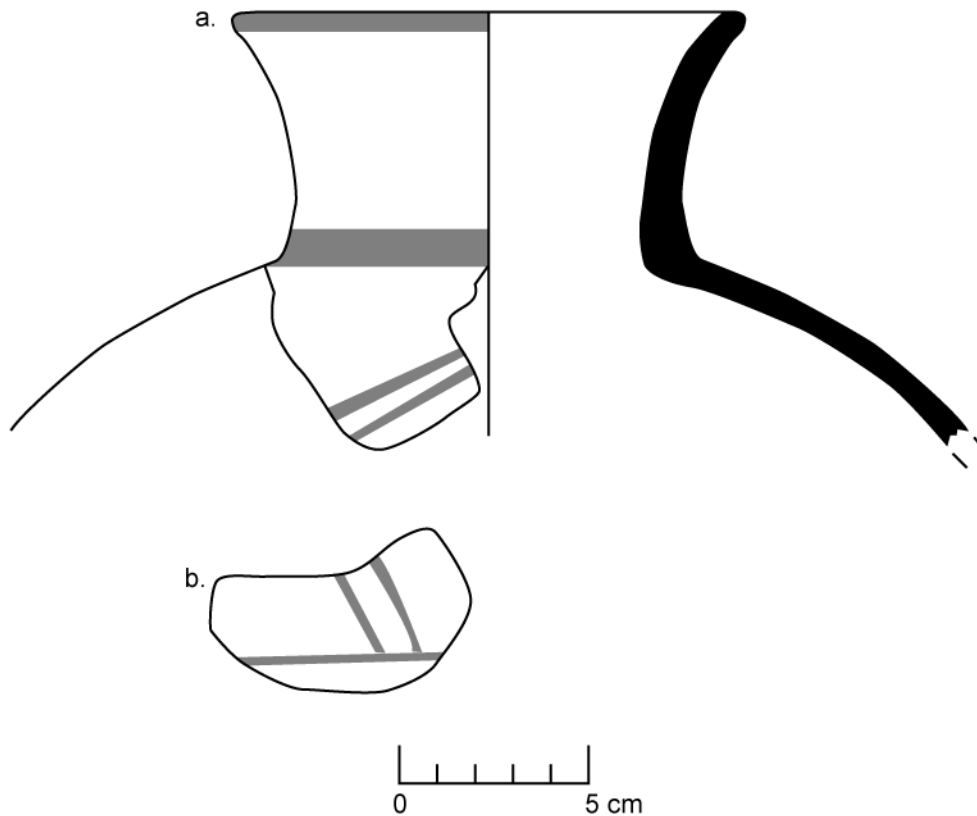


Figure 3.45 Laguna Dark Red-on-Buff jar with outcurving neck and direct rim, Tlatempa phase. Sherd (b) is a body sherd of the same vessel, showing banded decoration near the base of the vessel on its exterior. Both sherds are from Feature A63 at Amomoloc. Gray shading indicates dark red slip.

Potrero Red-on-Brown

Temporal range and distinguishing characteristics. Potrero Red-on-Brown is most abundant during the Texoloc phase (8%), but also present during the Tlatempa phase (1%). Potrero Red-on-Brown vessels are readily identifiable by the thick band of red slip encircling the rim and upper interior of bowls, while the rest of the vessel is a nicely burnished brown (see Figure 3.46). Vessels are often decorated with incised motifs on both the interior and exterior. Potrero Red-on-Brown is a diagnostic type for the Texoloc phase, and in some senses represents the new “aesthetic” for the Texoloc phase,

suggesting a preference for decorated red and brown (often composite silhouette) bowls as opposed to the white wares so prevalent during the Tlatempa phase.

Surface treatment. Potrero Red-on-Brown vessels are characterized by the application of a red slip (10R4/6, 10R5/4-5/6) over a highly burnished brown surface (7.5YR6/3).

Typically, the red color is restricted to the interior and rim of the vessel, and the red slip does not reach all the way to the interior base of the vessel, so that we essentially have a thick band of red covering the upper walls of the vessel. Both interior and exterior surfaces are well-burnished, but generally the interior is more shiny and uniform.

Vessel shapes (refer to Figures 3.1-3.3).

Early Tlatempa:

Simple bowls (see Figure 3.1b) (45%);

Bowls with downcurving-everted rims (see Figure 3.1e) (18%);

Composite silhouette dishes (see Figure 3.2q) (18%);

Bowl with slightly incurving wall (see Figure 3.2k) (9%); and

Bowl with outleaning wall (see Figure 3.2l) (9%).

Late Tlatempa:

Simple bowls (see Figure 3.1b) (42%);

Jars with outcurving necks and direct rims (see Figure 3.3t) (17%);

Bowls with downcurving-everted rims (see Figure 3.1e) (8%);

Bowl with outcurving rim and a band of interior thickening along the rim (see Figure 3.1g) (8%);

Bowl with an exterior fold at rim (see Figure 3.1h) (8%);

Bowl with vertical wall (see Figure 3.2m) (8%); and

Composite silhouette dish (see Figure 3.2q) (8%).

Texoloc:

Bowls with downcurving-everted rims (see Figures 3.1e, 3.46a) (58%);

Composite silhouette dishes (see Figures 3.2q, 3.46b,c) (36%);

Bowl with outcurving rim and a band of interior thickening along the rim (see
Figure 3.1g) (2%);

Bowl with slightly incurving wall (see Figure 3.2k) (2%); and

Closed bowl with incurving wall and direct rim (see Figure 3.2o) (2%).

Comparisons. Texoloc rojo y café (García Cook and Merino Carrión 1997[1988]:173);

Grupo Rojo sobre Café (Serra Puche et al. 2004:84-85).

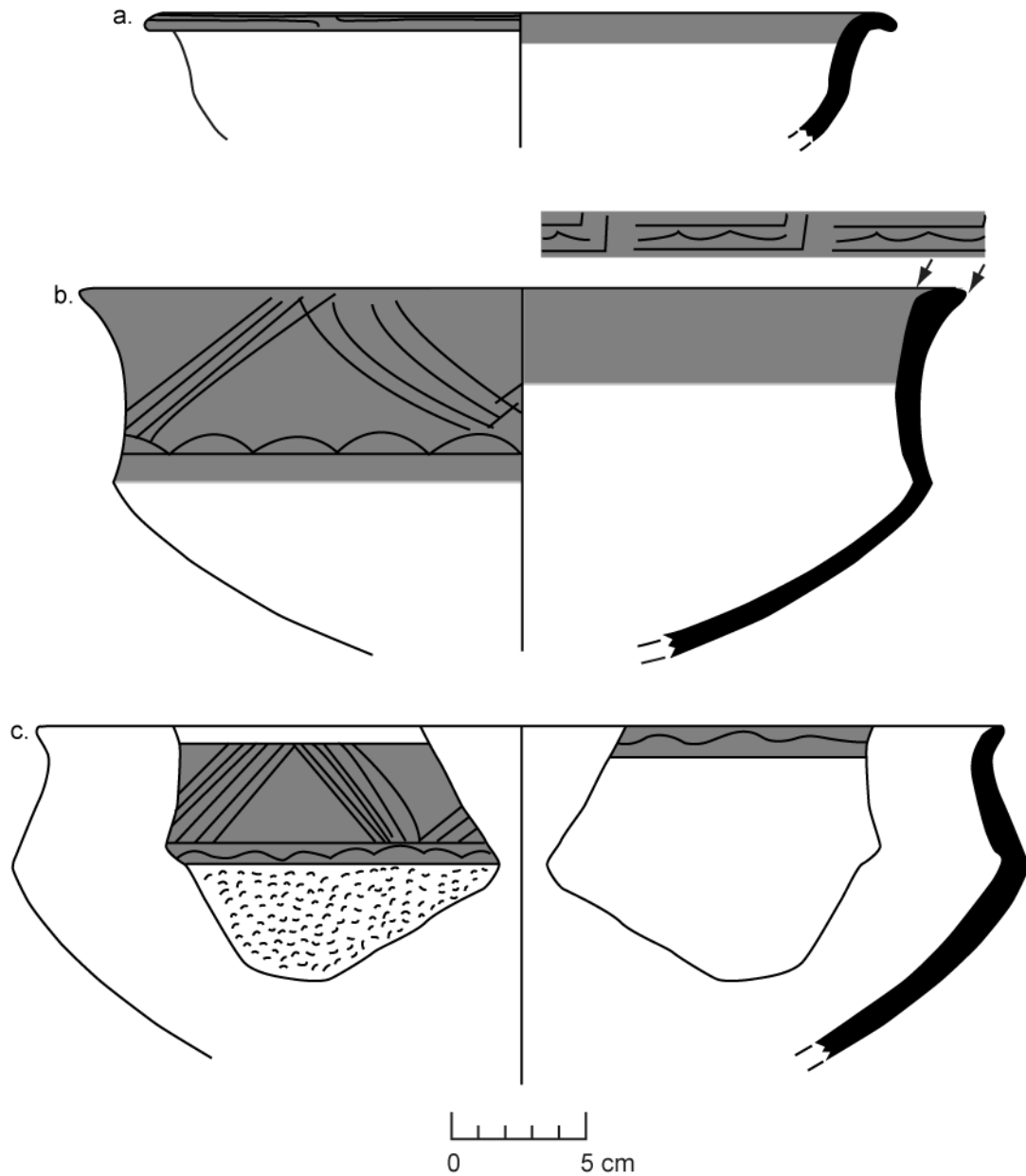


Figure 3.46 Potrero Red-on-Brown bowl with downcurving-everted rim (a) and composite silhouette bowls (b-c), Texoloc phase. Note the following decoration: (a) Motif 109 incised along exterior rim; (b) Motif 464 grooved along interior rim and Motif 572 excised on exterior shoulder; and (c) Motif 172 grooved along interior rim, Motif 394 grooved on exterior shoulder, and Motif 590 stamped on exterior base. Sherd (a) is from Feature 15; sherd (b) is from Feature A11; and sherd (c) is from Feature A16. All sherds are from Tetel. Gray shading indicates red slip.

Laguna Red-and-Scraped

Temporal range and distinguishing characteristics. Laguna Red-and-Scraped appears during the Tlatempa phase (2%), but increases with the Texoloc (15%) and subsequent phases (see Figure 3.47). See Laguna Dark Red-on-Buff above for discussion of difficulty in distinguishing the two types.

Surface treatment. In this type, a highly burnished red slip (10R5/4, 10R5/6-6/6, 2.5Y6/6) is applied to certain zones of the vessel, while some scraped areas are left unburnished and unslipped. Typically, on jars the burnished red slip is found on the rim and exterior body only, the exterior neck is scraped, and the interior is unscraped and rough to the touch. Non-jar examples are not present at Amomoloc and Tetel, but at later sites Laguna Red-and-Scraped is also found on composite silhouette bowls, with the red slipped and scraped areas meeting at the rim of the bowl.

Vessel shapes (refer to Figures 3.1-3.3).

Early Tlatempa:

Jars with outcurving necks and direct rims (see Figure 3.3t) (88%);

Jars with downcurving rims (see Figure 3.3v) (9%); and

Jars with horizontal-everted rims (see Figure 3.3u) (3%).

Late Tlatempa:

Jars with outcurving necks and direct rims (see Figure 3.3t) (100%).

Texoloc:

Jars with outcurving necks and direct rims (see Figures 3.3t, 3.47) (91%); and

Jars with horizontal-everted rims (see Figure 3.3u) (9%).

Comparisons. Texoloc rojo y café (García Cook and Merino Carrión 1997[1988]:173); Grupo Rojo, Grupo Rojo sobre Café (Serra Puche et al. 2004:54-55, 84-85).

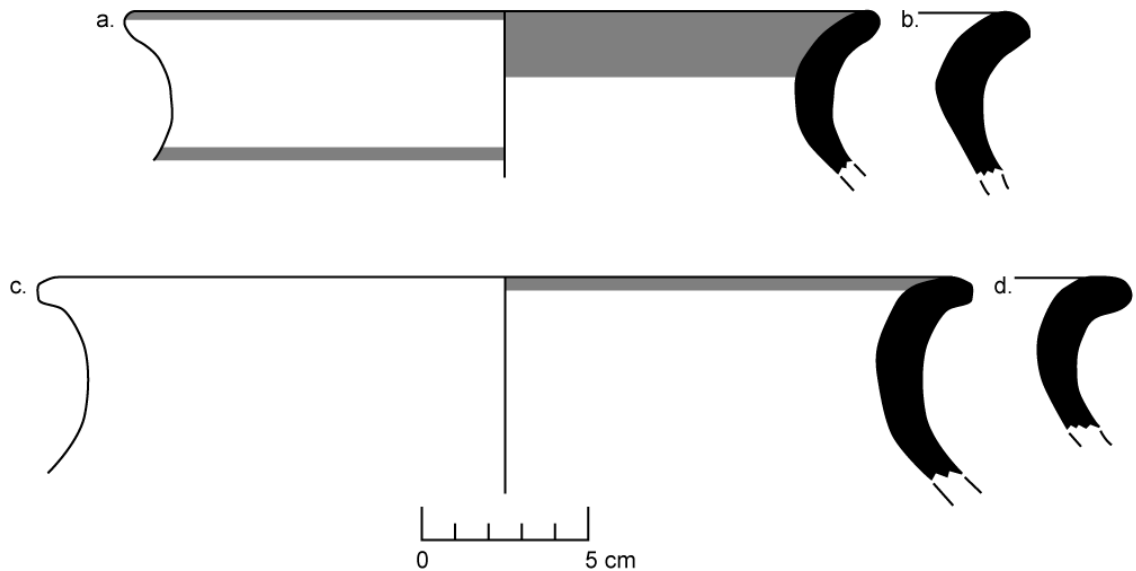


Figure 3.47 Laguna Red-and-Scraped jars with outcurving necks and direct rims, Texoloc phase. All sherds are from Feature A15 at Tetel. Gray shading indicates red slip.

RED

Laguna Dark Red

Temporal range and distinguishing characteristics. Laguna Dark Red is present in low frequencies during the Tlatempa (3%) and Texoloc (3%) phases (see Figures 3.48-3.49).

The difference between Laguna Dark Red and the later Laguna Red is a subtle difference in the red tones, with Laguna Red being more of an orange-red than the deep red of

Laguna Dark Red. Because this difference seems to have chronological significance, we chose to separate the types, though the distinction between them may be difficult to make at times.

Surface treatment. The surfaces of Laguna Dark Red vessels are covered with a dark red slip (10R5/4, 7.5R4/4-5/4) and are highly burnished.

Vessel shapes (refer to Figures 3.1-3.3).

Early Tlatempa:

- Simple bowls (see Figure 3.1b) (26%);
- Jars with outcurving necks and direct rims (see Figure 3.3t) (23%);
- Heavy tecomates (see Figure 3.3x) (17%);
- Fine tecomates (see Figure 3.3y) (17%);
- Bowls with an exterior fold at rim (see Figure 3.1h) (9%);
- Bowls with downcurving-everted rims (see Figure 3.1e) (3%);
- Bowls with slightly incurving walls (see Figure 3.2k) (3%); and
- Bowls with outleaning walls (see Figure 3.2l) (3%).

Late Tlatempa:

- Bowls with slightly incurving walls (see Figure 3.2k) (21%);
- Jars with outcurving necks and direct rims (see Figure 3.3t) (21%);
- Simple bowls (see Figure 3.1b) (18%);
- Heavy tecomates (see Figures 3.3x, 3.48b,c) (15%);
- Fine tecomates (see Figures 3.3y, 3.48a) (12%);

Bowls with an exterior fold at rim (see Figure 3.1h) (6%);

Bowls with outcurving rims (see Figure 3.1f) (3%);

Bowls with vertical walls (see Figure 3.2m) (3%); and

Composite silhouette dishes (see Figure 3.2q) (3%).

Texoloc:

Simple bowls (see Figures 3.1b, 3.49) (45%);

Heavy tecomates (see Figure 3.3x) (14%);

Bowls with downcurving-everted rims (see Figure 3.1e) (9%);

Bowls with outcurving rims (see Figure 3.1f) (9%);

Fine tecomates (see Figure 3.3y) (9%);

Bowls with outcurving rims and a band of interior thickening along the rim (see
Figure 3.1g) (5%);

Bowls with slightly incurving walls (see Figure 3.2k) (5%); and

Jars with vertical necks and rims (see Figure 3.3s) (5%).

Comparisons. Tlatempa roja (García Cook and Merino Carrión 1997[1988]:165).

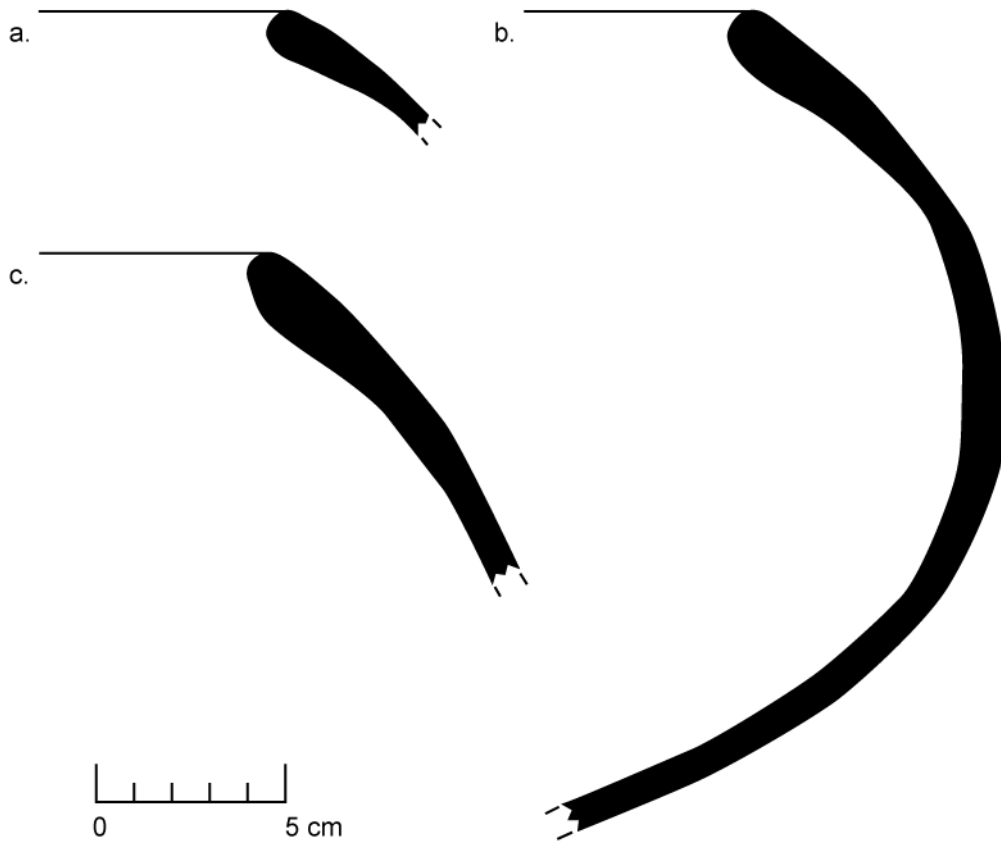


Figure 3.48 Laguna Dark Red fine (a) and heavy (b,c) tecomates, Tlatempa phase. Sherds (a) and (c) are from Feature A68 at Amomoloc, and sherd (b) is from Feature A67 at Amomoloc.

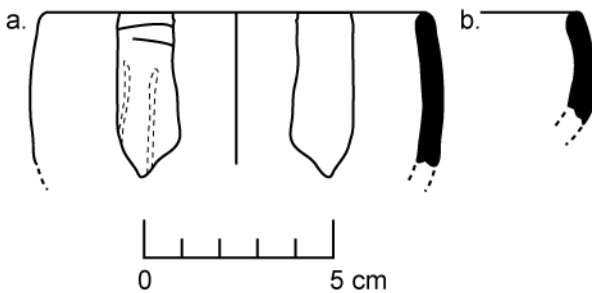


Figure 3.49 Laguna Dark Red simple bowls, Texoloc phase. (a) Note exterior grooved lines and pre-slip vertical fluting (Motif 453). Both sherds are from Feature A15 at Tetel.

Laguna Red

Temporal range and distinguishing characteristics. Laguna Red appears during the Tlatempa phase (1%) and increases during the Texoloc (10%) and subsequent phases (see Figure 3.50). See Laguna Dark Red above for discussion of how to distinguish between the two types.

Surface treatment. Laguna Red vessels are covered with red slip and are highly burnished. The red coloring of Laguna Red vessels varies from light, almost orange tones (2.5YR5/8) to darker reds (2.5YR4/4), though not as dark as that of the Laguna Dark Red type.

Vessel shapes (refer to Figures 3.1-3.3).

Early Tlatempa:

Jars with outcurving necks and direct rims (see Figure 3.3t) (21%);

Simple bowls (see Figure 3.1b) (14%);

Bowls with an interior fold at rim (see Figure 3.1i) (14%);

Jars with downcurving rims (see Figure 3.3v) (14%);

Heavy tecomates (see Figure 3.3x) (14%);

Fine tecomates (see Figure 3.3y) (14%); and

Bowls with an exterior fold at rim (see Figure 3.1h) (7%).

Late Tlatempa:

Jars with outcurving necks and direct rims (see Figure 3.3t) (35%);

Simple bowls (see Figure 3.1b) (29%);

Fine tecomates (see Figure 3.3y) (12%);
Bowls with outcurving rims (see Figure 3.1f) (6%);
Bowls with outcurving rims and a band of interior thickening along the rim (see
Figure 3.1g) (6%);
Composite silhouette vases (see Figure 3.2r) (6%); and
Heavy tecomates (see Figure 3.3x) (6%).

Texoloc:

Fine tecomates (see Figures 3.3y, 3.50d) (26%);
Composite silhouette dishes (see Figures 3.2q, 3.50b) (16%);
Bowls with downcurving-everted rims (see Figure 3.1e) (13%);
Simple bowls (see Figure 3.1b) (12%);
Bowls with outcurving rims (see Figures 3.1f, 3.50a) (7%);
Heavy tecomates (see Figure 3.3x) (7%);
Closed bowls with incurving walls and direct rims (see Figures 3.2o, 3.50c) (4%);
Jars with outcurving necks and direct rims (see Figure 3.3t) (4%);
Bowls with slightly incurving walls (see Figure 3.2k) (3%);
Closed bowls with incurving walls and vertical rims (see Figure 3.2p) (3%);
Bowls with pinched-in walls (see Figure 3.2j) (1%);
Jars with vertical necks and rims (see Figure 3.3s) (1%); and
Jars with horizontal-everted rims (see Figure 3.3u) (1%).

Comparisons. Tezoquipan rojo interior y exterior (García Cook and Merino Carrión 1997[1988]:178); Grupo Rojo, Rojo esgrafiado (Serra Puche et al. 2004:54, 85); Laguna Red, Varieties 76, 78, 82, 128 (Snow 1966:201).

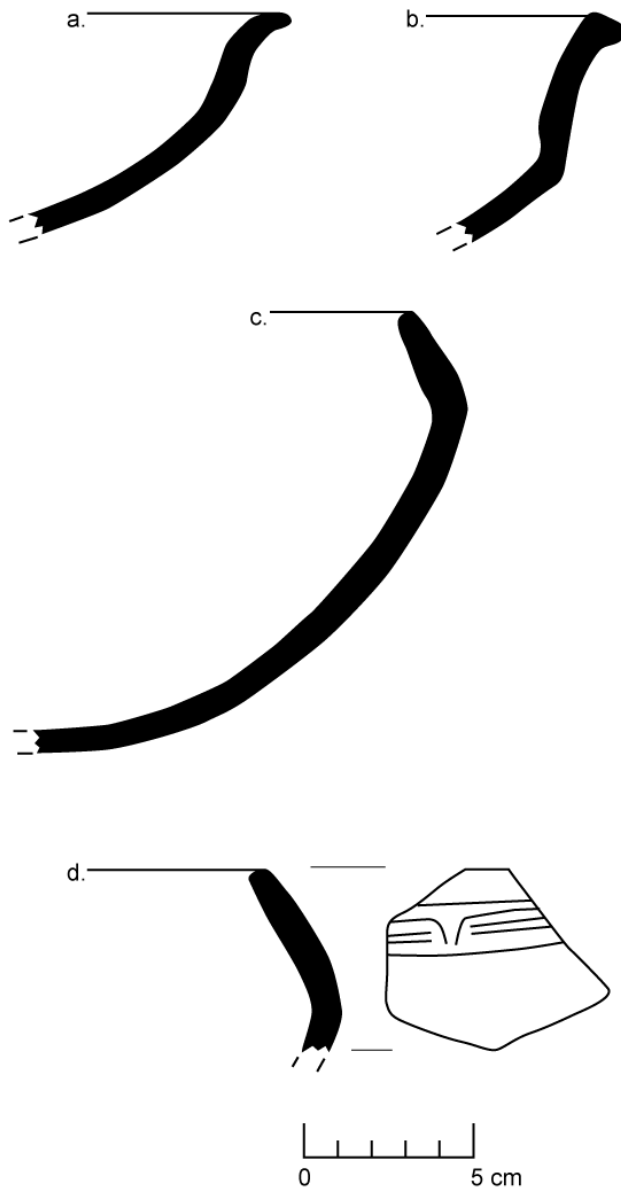


Figure 3.50 Laguna Red vessels, Texoloc phase. (a) Bowl with outcurving rim from Feature A16; (b) composite silhouette dish from Feature A11; (c) closed bowl with incurving wall and direct rim from Feature A11; and (d) fine tecomate (note Motif 98 grooved on exterior) from Feature A15. All sherds are from Tetel.

CHAPTER 4

Chronology and Village Layout at Amomoloc and Tetel

In this chapter, I summarize the differences between the ceramic complexes at Amomoloc and Tetel, and discuss the procedure followed to divide the Tlatempa phase into two subphases (Early and Late Tlatempa). My approach was to combine correspondence analysis and group average (or average linkage) cluster analysis to assign the various secure excavation contexts at Amomoloc and Tetel to chronological phases. The results of the seriation are then used to create maps of the locations of features at the sites for these different subphases, for the purpose of identifying possible households and assessing variation in the distribution of ceramic motifs.

Tzompantepec Complex (900-800 B.C.)

The collection of ceramics dating to the Tzompantepec Complex is small, just 108 rim sherds from one large bell-shaped pit feature (Feature A46) at Amomoloc. The diagnostic characteristics of the complex are:

- Scraped and/or burnished plain wares (50% of rims) and white slips (33%) are the predominant surface treatments.
- The bases of bowls are either flat or rounded.

- Simple hemispherical bowls (Figure 3.1b,k) and bowls with outleaning walls (Figure 3.2l) are the predominant bowl shapes.
- Some Yauhtentzi White bowls are decorated with incised motifs in a manner similar to that seen in the subsequent Tlatempa Complex; excised decoration is less common than in the Tlatempa Complex.
- Jars are common (43% of rims), in comparison to the later Tlatempa (29%) or Texoloc (25%) Complexes.
- Jars generally have outcurving necks and downcurving rims that thicken towards the exterior of the vessel (Figure 3.3v).
- Figurines vary, but crude figurines with coffee bean eyes predominate, and one C1 body fragment was present (Lesure et al. 2006:479).

The types identified for the complex are:

- Amomoloc Plain (50%)
- Yauhtentzi White (31%)
- Mesitas Brown (8%)
- Pascuala Black-and-White (4%)
- Potrero Streaky Red-on-Brown (4%)
- Ceniza White (2%)
- Yauhtentzi Red-on-White (less than 1%)

The following vessels shapes were identified:

- Jars with downcurving rims (see Figure 3.3v) (31%)
- Simple bowls (see Figure 3.1b) (19%)
- Bowls with outleaning walls (see Figure 3.2l) (10%)

- Bowls with slightly incurving walls (see Figure 3.2k) (9%)
- Jars with vertical necks and rims (see Figure 3.3s) (6%)
- Closed bowls with incurving walls and vertical rims (see Figure 3.2p) (6%)
- Jars with outcurving necks and direct rims (see Figure 3.3t) (5%)
- Fine tecomates (see Figure 3.3y) (4%)
- Bowls with an exterior fold at rim (see Figure 3.1h) (3%)
- Jars with incurving necks and direct rims (see Figure 3.3w) (2%)
- Bowls with outcurving rims and a band of interior thickening along the rim (see Figure 3.1g) (2%)
- Bowls with beveled rims (see Figure 3.1c) (2%)
- Heavy tecomates (see Figure 3.3x) (less than 1%)
- Closed bowls with incurving walls and direct rims (see Figure 3.2o) (less than 1%)
- Bowls with an interior fold at rim (see Figure 3.1i) (less than 1%)
- Bowls with outcurving rims (see Figure 3.1f) (less than 1%)

Tlatempa Complex (800-650 B.C)

The collection dating to the Tlatempa Complex is large, with 2,494 rims from several features from both Amomoloc and Tetel, many of which are bell-shaped pits.

The diagnostic attributes of the complex are:

- White slips (32% of rims), scraped and/or burnished plain wares (26%), and red-on-white slips (21%) are the most common surface treatments.
- The bases of bowls are rounded.

- The most diagnostic vessel shape is a bowl with an outcurving rim and a band of thickening along the interior rim of the bowl (Figure 3.1g).
- Post-slip incised and excised designs appear along this thickened ledge on the interiors of Yauhtentzi White and Yauhtentzi Red-on-White bowls (Figures 3.21, 3.27).
- Jars generally have outcurving necks and direct rims that do not change from the neck (Figure 3.3t). At times there is slight thickening of the neck toward the rim.
- The most common figurine is C1. There are also local equivalents of C10 figurines (Lesure et al. 2006:480).

The types identified for the complex are:

- Yauhtentzi White (32%)
- Amomoloc Plain (26%)
- Yauhtentzi Red-on-White (21%)
- Mesitas Brown (6%)
- San José White-and-Brown (4%)
- Laguna Dark Red (3%)
- Laguna Dark Red-on-Buff (2%)
- Laguna Red-and-Scraped (2%)
- Mesitas Fine Brown (1%)
- Laguna Red (1%)
- Ceniza White (less than 1%)
- Fermín Fine Gray (less than 1%)
- Pascuala Black-and-White (less than 1%)

- Potrero Streaky Red-on-Brown (less than 1%)
- Potrero Red-on-Brown (less than 1%)
- Xalmonto Red-and-White (less than 1%)

The following vessels shapes were identified:

- Jars with outcurving necks and direct rims (see Figure 3.3t) (26%)
- Simple bowls (see Figure 3.1b) (20%)
- Bowls with outcurving rims and a band of interior thickening along the rim (see Figure 3.1g) (11%)
- Bowls with beveled rims (see Figure 3.1c) (11%)
- Bowls with slightly incurving walls (see Figure 3.2k) (5%)
- Closed bowls with incurving walls and direct rims (see Figure 3.2o) (4%)
- Bowls with horizontal-flat rims (see Figure 3.1d) (3%)
- Bowls with an exterior fold at rim (see Figure 3.1h) (3%)
- Bowls with outcurving rims (see Figure 3.1f) (2%)
- Bowls with pinched-in walls (see Figure 3.2j) (2%)
- Fine tecomates (see Figure 3.3y) (2%)
- Bowls with an interior fold at rim (see Figure 3.1i) (1%)
- Jars with vertical necks and rims (see Figure 3.3s) (1%)
- Jars with downcurving rims (see Figure 3.3v) (1%)
- Heavy tecomates (see Figure 3.3x) (1%)
- Bowls with outleaning walls (see Figure 3.2l) (1%)
- Composite silhouette dishes (see Figure 3.2q) (1%)
- Bowls with downcurving-everted rims (see Figure 3.1e) (less than 1%)

- Bowls with vertical walls (see Figure 3.2m) (less than 1%)
- Cylinders with vertical walls (see Figure 3.2n) (less than 1%)
- Closed bowls with incurving walls and vertical rims (see Figure 3.2p) (less than 1%)
- Composite silhouette vases (see Figure 3.2r) (less than 1%)
- Jars with horizontal-everted rims (see Figure 3.3u) (less than 1%)
- Jars with incurving necks and direct rims (see Figure 3.3w) (less than 1%)

Texoloc Complex (650-500 B.C.)

The Texoloc Complex collection consists of 706 rim sherds from Tetel. The diagnostic characteristics of the complex are:

- White slips (20% of rims) and scraped and/or burnished plain wares (10%) are still present, but the Texoloc Complex is marked by the increased importance of brown (17%) and red, red-on-brown, and red-on-scraped (36%) surface treatments.
- Gazca Painted White-on-Red vessels appear, and Xalmonto Red-and-White vessels become more common.
- Bowls with rounded bases are predominant.
- The characteristic vessel shape is a bowl with a rounded base and a sharply downcurving rim (Figure 3.1e), and composite silhouette bowls are more common than in the Tlatempa Complex.
- Red-slipped jars increase in frequency during the Texoloc Complex. During the Tlatempa Complex, red-slipped jars tend to have a band of red along the rim and a

few red bands on a buff exterior body. During the Texoloc Complex, jars continue to have red bands along the rim but generally the exterior body is slipped almost entirely in red.

- Beginning in the Texoloc Complex, red slips are more orangish (2.5YR5/6) than the darker red slips of the Tlatempa Complex (10R4/4).
- Grooved decoration along the interior and exterior rims of bowls is common (Figures 3.37, 3.46), and excised designs diminish in importance after the end of the Tlatempa Complex.
- The predominant figurine form is E2 (Lesure et al. 2006:481).

The types identified for the complex are:

- Yauhtentzi White (20%)
- Mesitas Brown (17%)
- Laguna Red-and-Scraped (15%)
- Amomoloc Plain (10%)
- Laguna Red (10%)
- Potrero Red-on-Brown (8%)
- Yauhtentzi Red-on-White (7%)
- San José White-and-Brown (3%)
- Laguna Dark Red (3%)
- Xalmonto Red-and-White (3%)
- Palmas Black-and-White (2%)
- Gazca Painted White-on-Red (2%)
- Mesitas Fine Brown (less than 1%)

- Pascuala Black-and-White (less than 1%)

The following vessels shapes were identified:

- Jars with outcurving necks and direct rims (see Figure 3.3t) (21%)
- Bowls with downcurving-everted rims (see Figure 3.1e) (15%)
- Simple bowls (see Figure 3.1b) (13%)
- Composite silhouette dishes (see Figure 3.2q) (11%)
- Bowls with beveled rims (see Figure 3.1c) (8%)
- Bowls with outcurving rims and a band of interior thickening along the rim (see Figure 3.1g) (5%)
- Bowls with slightly incurving walls (see Figure 3.2k) (4%)
- Fine tecomates (see Figure 3.3y) (4%)
- Bowls with outcurving rims (see Figure 3.1f) (4%)
- Closed bowls with incurving walls and direct rims (see Figure 3.2o) (3%)
- Jars with horizontal-everted rims (see Figure 3.3u) (3%)
- Bowls with horizontal-flat rims (see Figure 3.1d) (2%)
- Bowls with pinched-in walls (see Figure 3.2j) (2%)
- Bowls with outleaning walls (see Figure 3.2l) (2%)
- Heavy tecomates (see Figure 3.3x) (2%)
- Bowls with an exterior fold at rim (see Figure 3.1h) (less than 1%)
- Bowls with vertical walls (see Figure 3.2m) (less than 1%)
- Cylinders with vertical walls (see Figure 3.2n) (less than 1%)
- Closed bowls with incurving walls and vertical rims (see Figure 3.2p) (less than 1%)

- Jars with vertical necks and rims (see Figure 3.3s) (less than 1%)

Subdividing the Tlatempa Complex

The three earliest ceramic complexes (Tzompantepec, Tlatempa, and Texoloc), outlined by García Cook and Merino Carrión (1997[1988]) and summarized above, were easy to identify among the collections at Amomoloc and Tetel. Yet during our many hours of analyzing ceramics, we began to suspect that the Tlatempa phase could be divided into two subphases (earlier and later), a trend also noted with figurine attributes (Richard Lesure, personal communication 2009). I decided to conduct a statistical seriation of features for more precise chronological control, in the hopes of subdividing the period of approximately 150 years spanned by the Tlatempa Complex (800-650 B.C.).

The model provided by Drennan's (1976b) non-metric multidimensional scaling of samples from Middle Formative Fábrica San José in Oaxaca was particularly useful in developing my approach to ceramic analysis. In the end, however, I decided to employ other multivariate statistical techniques not readily available in the 1970s, namely correspondence analysis and cluster analysis.

One significant issue that I needed to deal with in the development of the seriation was the fact that few features uncovered at Amomoloc or Tetel were interrelated stratigraphically with other features. The majority of proveniences containing adequate ceramic samples appeared to represent short time periods and perhaps even single episodes in the past, so I did not have chronologically meaningful superimposed layers within features. The few features that bisected other features often had unclear

stratigraphic relationships or contained too few rim sherds to constitute a proper sample for dating. Nevertheless since our samples correspond to various “moments” within a four hundred year period (900-500 B.C.) dating both before and after the Tlatempa phase, it was possible to tease out which ceramic characteristics were representative of the earlier and later Tlatempa occupations at Amomoloc and Tetel.

My approach was to combine correspondence analysis and group average (or average linkage) cluster analysis to evaluate the patterning derived from each procedure. My approach was similar to the steps outlined by Duff (1996) in his micro-seriation of ceramic wares from Pueblo de los Muertos in New Mexico, though Duff employs k-means cluster analyses (for detailed explanations of correspondence analysis, see Madsen 1988, Shennan 1997:308-341, Smith and Neiman 2007:55-58; for group average cluster analysis, see Drennan 2009:313-315, Shennan 1997:239-240; also see Garraty 2009 for a similar approach). Correspondence analysis is well suited to non-numeric data, such as counts or presence/absence data, and its graphic display of variability in the patterning of data can be useful for capturing change over time. Group average cluster analysis is helpful in this study in placing boundaries between subphases once the chronological ordering of features is determined. I view these techniques as an additional step in traditional frequency seriation, and a way of corroborating the patterns Lesure noted in the figurines of Amomoloc and Tetel.

A pilot seriation was carried out on 2,693 rim sherds from five Tetel features (A4, A10, A11, A15, and A16) and nine Amomoloc features (A23, A46, A47, A54, A57, A60, A68, A71, and A73), as these features constituted our best proveniences due to their large sample sizes (all over 100 rim sherds) and purity, representing short time periods and

unmixed contexts (see Drennan 1976a:45). The pilot seriation was used in combination with comparisons to ceramic reports from the area (particularly García Cook and Merino Carrión [1997(1988)] and Serra Puche et al. [2004]) to select appropriate units of observation (see discussion in Drennan 2009; Duff 1996; Shennan 1997) and to determine which attributes were common and reflected diachronic change. While as many as 24 observations were recorded for each rim, only the attribute of ware was considered in distinguishing the ceramic complexes, because I discovered that ware was more sensitive to the passage of time in our sample than was shape or decoration.

The seriation methods were then applied to all secure features from Amomoloc and Tetel with more than 25 rim sherds (totaling 3,300 rim sherds from 25 features), the results of which are summarized in Figures 4.1 and 4.2, and Table 4.1.

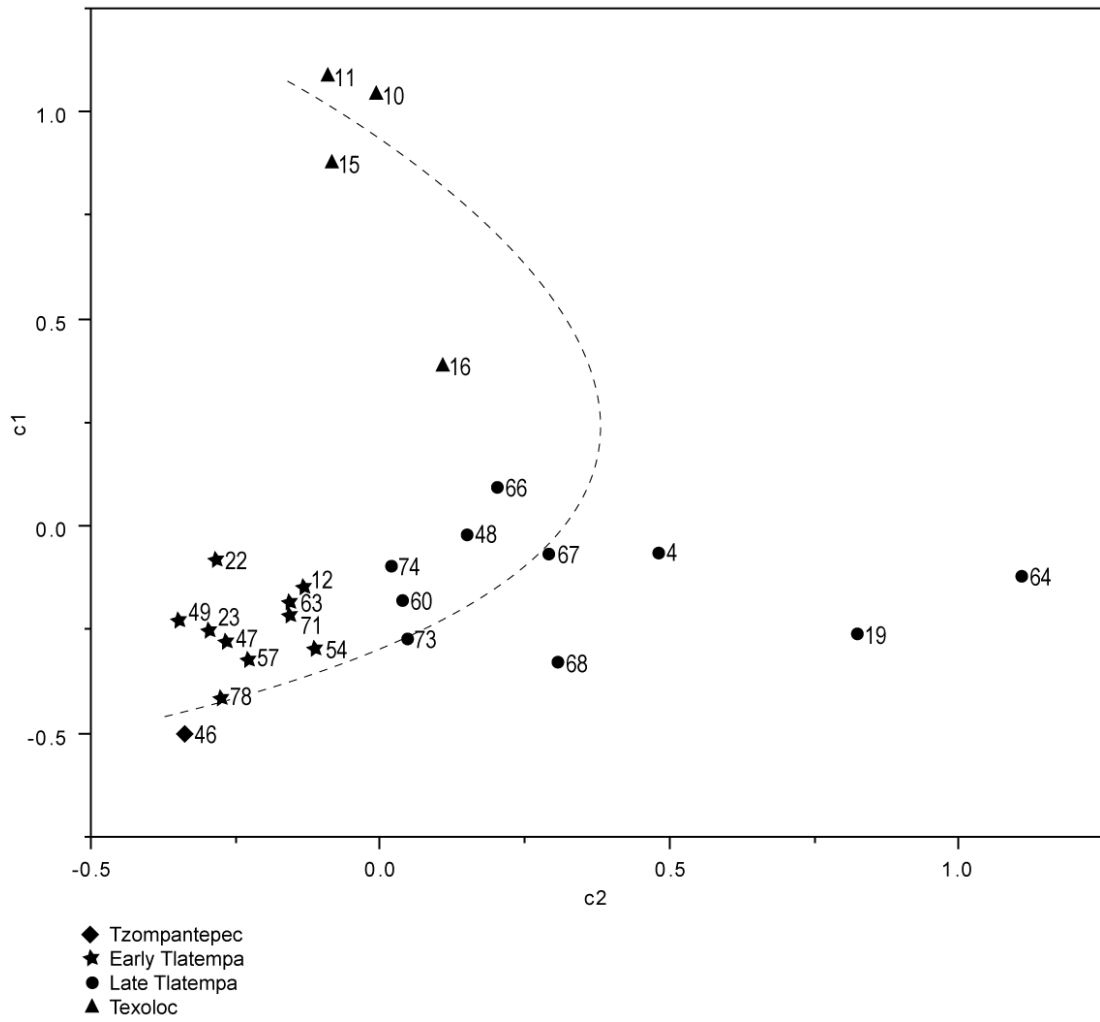


Figure 4.1 Plotting the first two principal axes from the correspondence analysis of all the features in Table 4.1.

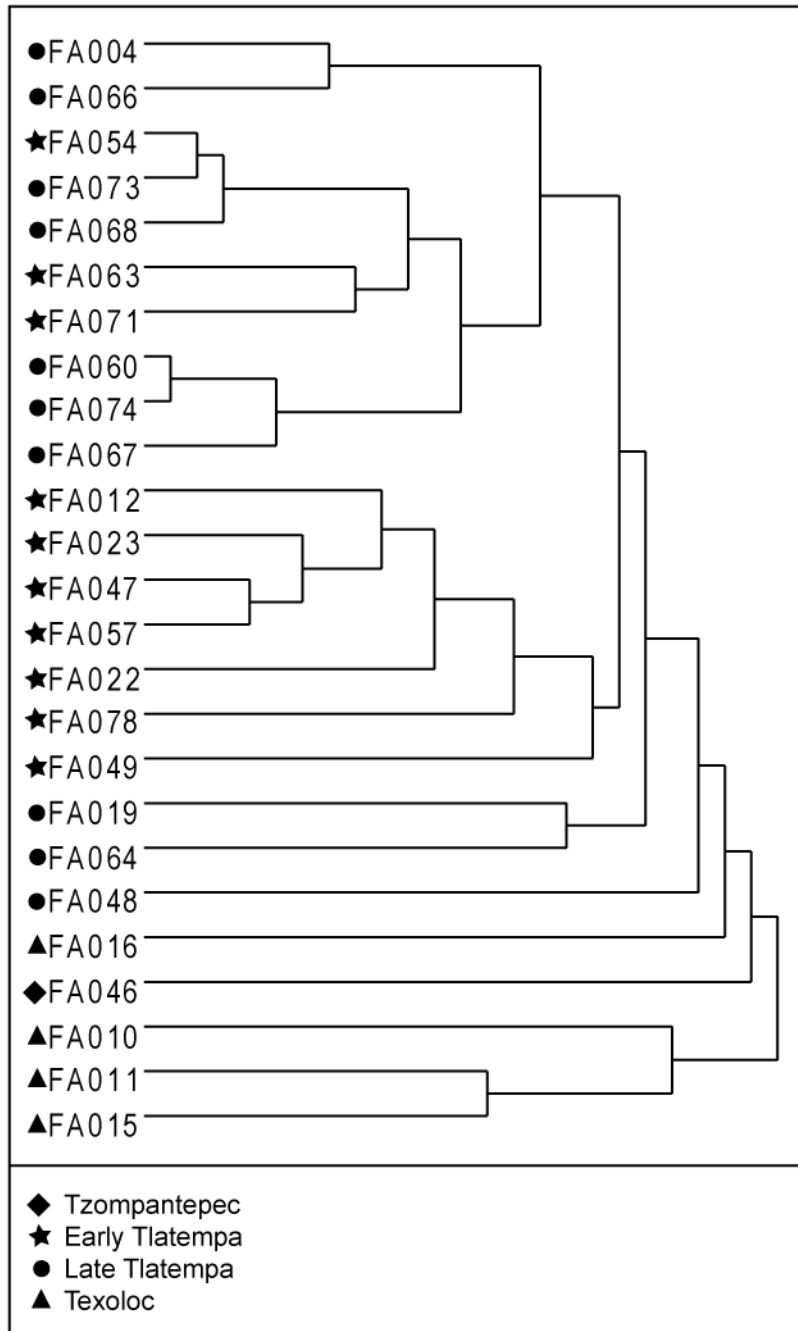


Figure 4.2 Group average cluster analysis for all features in Table 4.1.

Table 4.1 Rim sherd counts for features by ceramic type. (See notes below table for explanation of abbreviations.)

Feat.	Site	Ga	Lag	MB	Pl	Ps	AP	R/B	R+B	RB	SJ	Xal	YR	YW	Total	Phase
A4	T	0	12	18	0	0	46	2	8	0	25	1	25	56	193	LT
A10	T	6	19	21	0	0	9	9	15	0	5	5	9	19	117	TX
A11	T	4	30	31	5	1	14	14	46	0	7	7	17	26	202	TX
A12	T	0	2	11	0	0	15	2	6	0	2	0	36	24	98	ET
A15	T	1	30	42	3	0	23	23	39	0	4	5	10	51	231	TX
A16	T	0	12	29	7	0	25	7	9	0	7	1	14	45	156	TX
A19	T	0	1	0	0	0	8	1	0	0	6	0	4	11	31	LT
A22	A	0	7	16	0	1	27	2	3	1	0	0	23	18	98	ET
A23	A	0	4	24	0	1	62	0	11	0	0	1	69	36	208	ET
A46	A	0	0	9	0	4	54	0	0	4	0	0	1	34	106	TZ
A47	A	0	12	22	0	1	97	1	13	3	0	2	83	76	310	ET
A48	A	0	4	1	0	1	7	0	1	0	2	0	2	6	24	LT
A49	A	0	1	2	0	1	12	0	3	0	0	0	7	6	32	ET
A54	A	0	3	10	0	0	46	2	6	0	2	0	38	52	159	ET
A57	A	0	5	6	0	0	30	0	3	0	0	0	32	26	102	ET
A60	A	0	9	9	0	0	33	2	5	0	2	0	18	77	155	LT
A63	A	0	6	1	0	0	18	1	2	0	0	0	11	19	58	ET
A64	A	0	3	11	0	0	17	0	1	0	23	0	13	19	87	LT
A66	A	0	3	3	0	0	8	1	1	0	2	0	2	6	26	LT
A67	A	0	2	6	0	0	5	1	2	0	3	0	6	29	54	LT
A68	A	0	4	6	0	0	57	0	8	0	20	0	44	89	228	LT
A71	A	0	7	8	0	0	44	3	2	1	0	1	14	42	122	ET
A73	A	0	9	26	0	1	91	4	11	1	15	2	89	155	404	LT
A74	A	0	4	5	0	0	14	1	4	0	0	0	4	39	71	LT
A78	A	0	2	1	0	0	13	0	0	0	0	0	7	5	28	ET
Total		11	191	318	15	11	775	76	199	10	125	25	578	966	3300	

Notes: Site: A = Amomoloc, T = Tetel; Ga = Gazca Painted White-on-Red; Lag = Laguna Red and Laguna Dark Red; MB = Mesitas Brown and Mesitas Fine Brown; Pl = Palmas Black-and-White; Ps = Pascuala Black-and-White; AP = Amomoloc Plain; R/B = Potrero Red-on-Brown; R+B= Laguna Red-and-Scraped and Laguna Dark Red-on-Buff; RB = Potrero Streaky Red-on-Brown; SJ = San José White-and-Brown; Xal = Xalmonto; YR = Yauhtentzi Red-on-White; YW = Yauhtentzi White; Phase: ET = Early Tlatempa, LT = Late Tlatempa, TX = Texoloc, TZ = Tzompantepec.

Interpretation of the Results

Both correspondence analysis and group average cluster analysis arrange Amomoloc and Tetel's features in a similar manner, with a few exceptions. The advantage of correspondence analysis is that we are not only presented with the sequence of features but also with a scaling that shows the patterning of data visually, so that we

can see which features cluster together as well as where there is continuity or breaks in the sequence (Bech 1988:33). The later features, all from Tetel (A11, A10, and A15), which we were able to attribute to the Texoloc phase (ca. 650-500 B.C.) without much difficulty prior to seriation, clearly cluster together at one end of the horseshoe-shaped curve produced by plotting the first two principal axes from the correspondence analysis of the data in Table 4.1 (Figure 4.1). These three features are also, not surprisingly, grouped in the group average cluster analysis (Figure 4.2). Interestingly, Feature A16 of Tetel, which we are inclined to identify as pertaining to the Texoloc phase, emerges as equally distinct from both the Texoloc cluster of features and the Late Tlatempa features; perhaps an additional subphase designation would be appropriate for Feature A16. While I classify Feature A16 as Texoloc, I do keep the possibility of an additional subphase in mind as I consider differences at the sites and across time.

The break between Feature A16 and the remaining Tlatempa features from Tetel and Amomoloc is clear in both the correspondence analysis and the group average cluster analysis, but the subdivisions within Tlatempa are less clear. First, Features A19 (Tetel) and A64 (Amomoloc) seem to fall outside of the horseshoe curve in the plot of the correspondence analysis (Figure 4.1). Although a Late Tlatempa subphase designation is reasonable based on the results of the cluster analysis (Figure 4.2), it is possible that the ceramics of these two features were also somehow functionally distinct from the other Tlatempa features.

Also, in reviewing the correspondence analysis (Figure 4.1), it seems reasonable to place Features A12, A54, A63, and A71 within the Early Tlatempa subphase. Yet, the cluster analysis suggests that Features A54, A63, and A71 are less similar to the Early

Tlatempa features (Figure 4.2). In addition, preliminary analyses of select ceramic shapes and figurine types along with ceramic wares suggest that Features A12 and A54 may belong to the Late Tlatempa subphase (Richard Lesure, personal communication 2011). We can therefore keep in mind that Features A12, A54, A63, and A71 may be transitional between the Early and Late Tlatempa subphases. And finally, there is a clear break between the Tlatempa features and the single Tzompantepec feature (Feature A46) at Amomoloc.

The interpreted results of the seriation were then used to create maps with the locations of features at Amomoloc and Tetel shaded to indicate different subphases throughout their occupations (Figures 4.3-4.6). Some features we simply could not categorize into a more precise subphase than “Tlatempa,” due to a lack of an adequate sample size. These features were included in both the Early and Late Tlatempa maps, unshaded, so their layout could be taken into consideration for both subphases.

During the earliest occupation of Amomoloc, the Tzompantepec phase (ca. 900-800 B.C.), we have one possible household (Figure 4.3). Feature A46, uncovered in the Terrace 2 excavations prior to the 2004 sampling season, seems to be an isolated feature, as no other Tzompantepec features were found nearby. It is possible that subsurface features were not as common during this phase of occupation at Amomoloc as they were in later phases, leaving fewer traces of past activities for us to discover after the erosion of the Formative living surface. Yet it seems more plausible that our lack of Tzompantepec features simply reflects a light density of house-yards at Amomoloc at this time, since subsurface features are quite common at other earlier sites in Mesoamerica (e.g., Flannery ed. 1976; Flannery and Marcus 2005; Whalen 1981; Winter 1972).

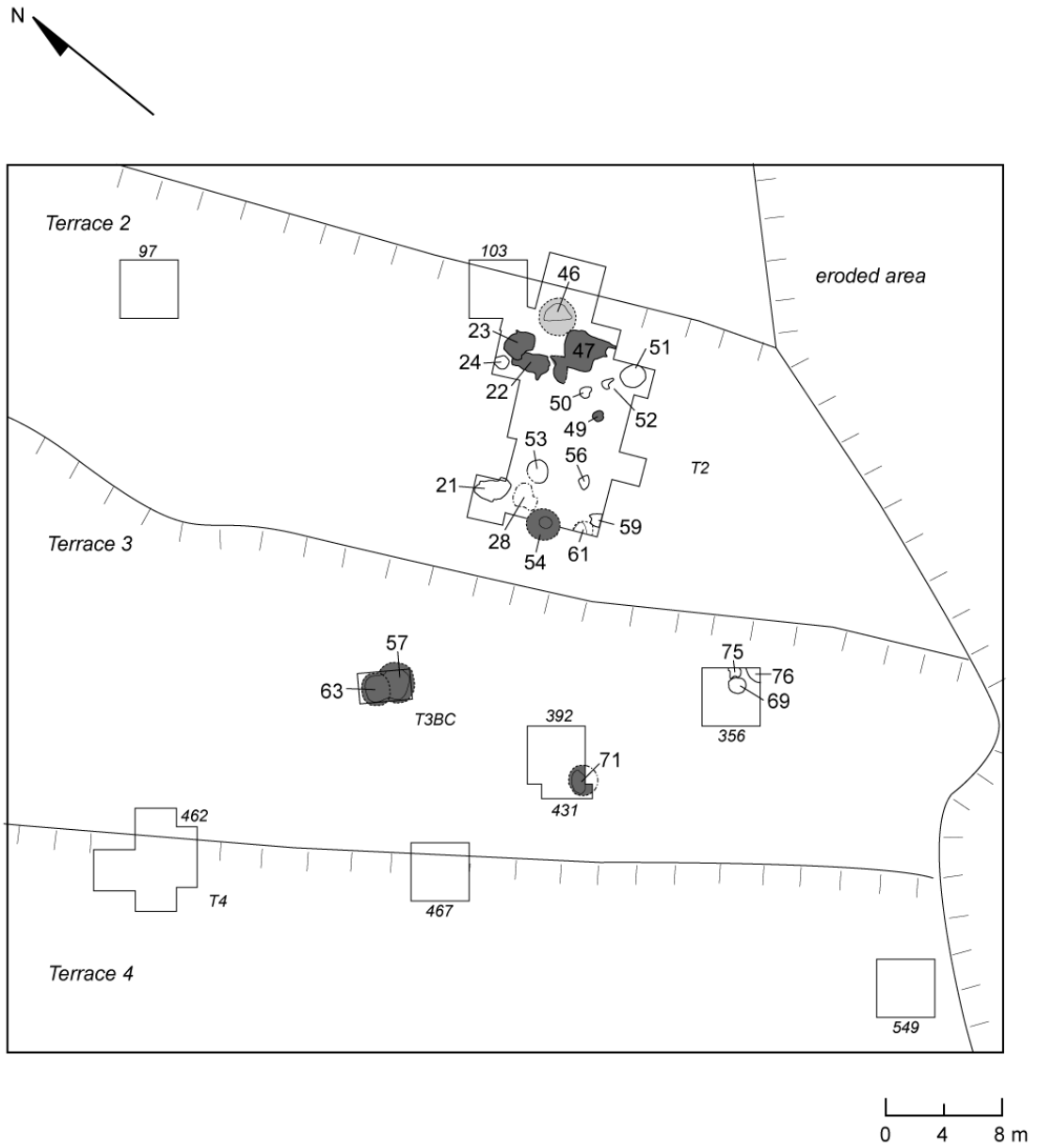


Figure 4.3 Distribution of Tzompantepec (light gray) and Early Tlatempa (dark gray) features in the southern portion of Amomoloc; general Tlatempa features are left unshaded.

During the subsequent Early Tlatempa subphase (ca. 800-725 B.C.), there is evidence for three likely house-yards at Amomoloc (Figure 4.3). The first is located within the Terrace 2 excavations (the cluster of Features A22, A23, A47, A49, and A54), almost on top of the Tzompantepec occupation. The second is located approximately 25 m away (Features A57, A63, and A71). The distance between these two possible household units is less than that noted at Early Formative villages in Oaxaca, where the centers of adjacent household units tended to be about 40 m apart and included an open, featureless, area between them (Winter 1976:25; see also Whalen 1981). We also have evidence for a third household unit in the northern portion of the site (Features A78 in Unit 220 and A27 in Unit T3A less than 4 m west of Unit 220) (see Figure 2.9), located about 75 m away from the two households identified in the southern portion of the site. It is important to note that Feature A27, a roasting pit, had so few artifacts associated with it that we cannot assign it to a subphase, and it is possible that Feature A27 corresponds to a later occupation. Three possible households during the Early Tlatempa subphase at Amomoloc suggest a moderate packing of house-yards.

During the Late Tlatempa subphase (ca. 725-650 B.C.), the site of Amomoloc experienced continued growth, with at least three to six possible household units and suggesting a high density of packing of households at this time (Figure 4.4). The first house-yard, suggested by Features A48 and A64, is located within the Terrace 2 excavations, not far from the Tzompantepec and Early Tlatempa features in this area, and may represent continuous occupation by the same family or kin group. In his study at Fábrica San José, Drennan (1976a:109) found that households with longer occupations (such as those occupied continuously from the Early to Late Guadalupe phases) tended to

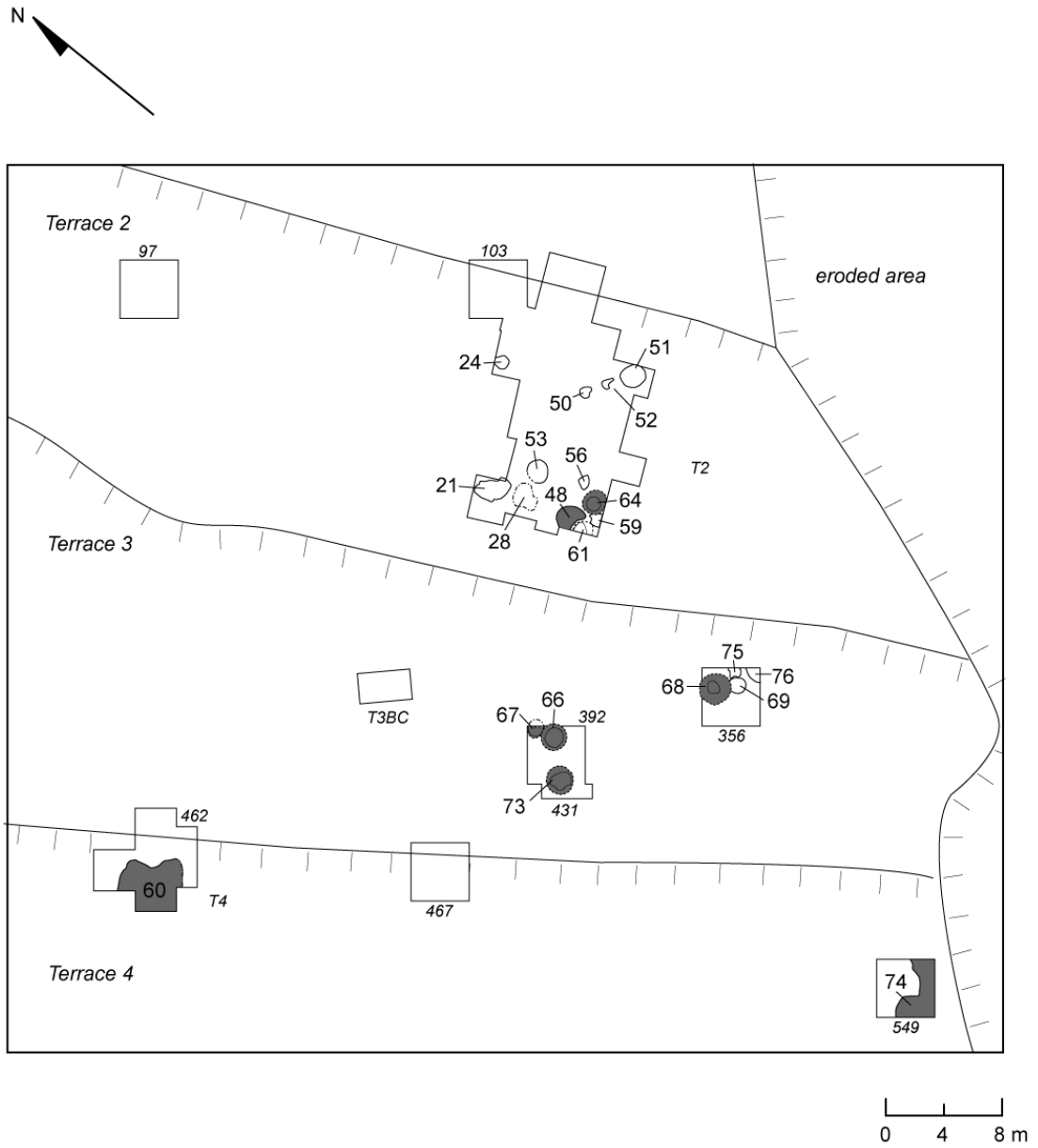


Figure 4.4 Distribution of Late Tlatempa (dark gray) features in the southern portion of Amomoloc; general Tlatempa features are left unshaded.

have a higher status than more recently established households, perhaps because older households could accumulate more goods over several generations. This proposition is revisited in Chapter 6, as I consider whether similar processes were occurring at Amomoloc.

The features in excavation units 356 (Feature A68), 431 (Features A66, A67, and A73), 462 (Feature A60), and 549 (Feature A74) may constitute four separate household units (the distances between units vary from 13-29 m), though it is possible that the features in Units 356 and 431 pertain to the same house-yard due to their proximity (Figure 4.4). It is also possible that Feature A27 in the northern portion of the site dates to the Late Tlatempa phase (see discussion of Early Tlatempa village layout above), and forms part of a sixth household unit for this time period. Therefore, we have evidence for increasing density of households and thus population at Amomoloc from 900-650 B.C.

At Tetel, no Tzompantepec features were recovered. During the initial occupation of the site during the Early Tlatempa subphase (ca. 800-725 B.C.), there is evidence for one to three house-yards (Figure 4.5). The first household unit is associated with Feature A12, which penetrates the fill of Platform 1. Platform 1 may have originally been about 50 cm high and approximately 5 m by 6 m, though we recovered the fill of this platform in only a few areas. Feature A13 is likely associated with the Platform 1 household, although we do not know if Feature A13 dates to the Early or Late Tlatempa subphase. The two other possible households (suggested by Features A1 and A17) are assigned to the Tlatempa phase in general, so we do not know if they can be classified as early or late.

There is little change in the density of house-yards at Tetel during the Late Tlatempa subphase (ca. 725-650 B.C.) (Figure 4.5), with evidence for two to four households. The first household unit is suggested by Feature A4, located in close proximity to Platform 1 (along with Feature A13), suggesting continued occupation of this area of the site. Feature A19, about 27 m to the north of Platform 1, suggests the existence of a second house-yard. Feature A1 may pertain to the same house-yard as Feature A19 (as it is located just 10 m west of Feature A19), although it is possible that it belongs to a third, separate household unit, while Feature A17 represents our fourth possible household. Since we are not able to differentiate between Early and Late Tlatempa for Features A1, A13, and A17, it may be more accurate, when considering the density of house-yards at Tetel, to note simply a total of three to four house-yards for the Tlatempa phase as a whole.

During the subsequent Texoloc phase (ca. 650-500 B.C.), there is evidence for two possible household units at Tetel (Figure 4.6). The first household unit is suggested by Features A10, A11, A14, and A15, and all are associated with Platform 1 (which was occupied during the Early and Late Tlatempa subphases as well). Feature A10 cut into Feature A12, providing stratigraphic evidence that the Early Tlatempa Complex is earlier than the Texoloc Complex. The second household unit is associated with Features A16 and A18, which penetrate a platform of unknown size (Platform 2). We did not find evidence for Texoloc occupation in Areas C or D, although our excavations in these areas were quite limited. Thus, we may have evidence for a decrease in household units over time at Tetel from 800-500 B.C., but it is important to remember that our unsystematic excavation strategy at Tetel makes this conclusion rather tentative.

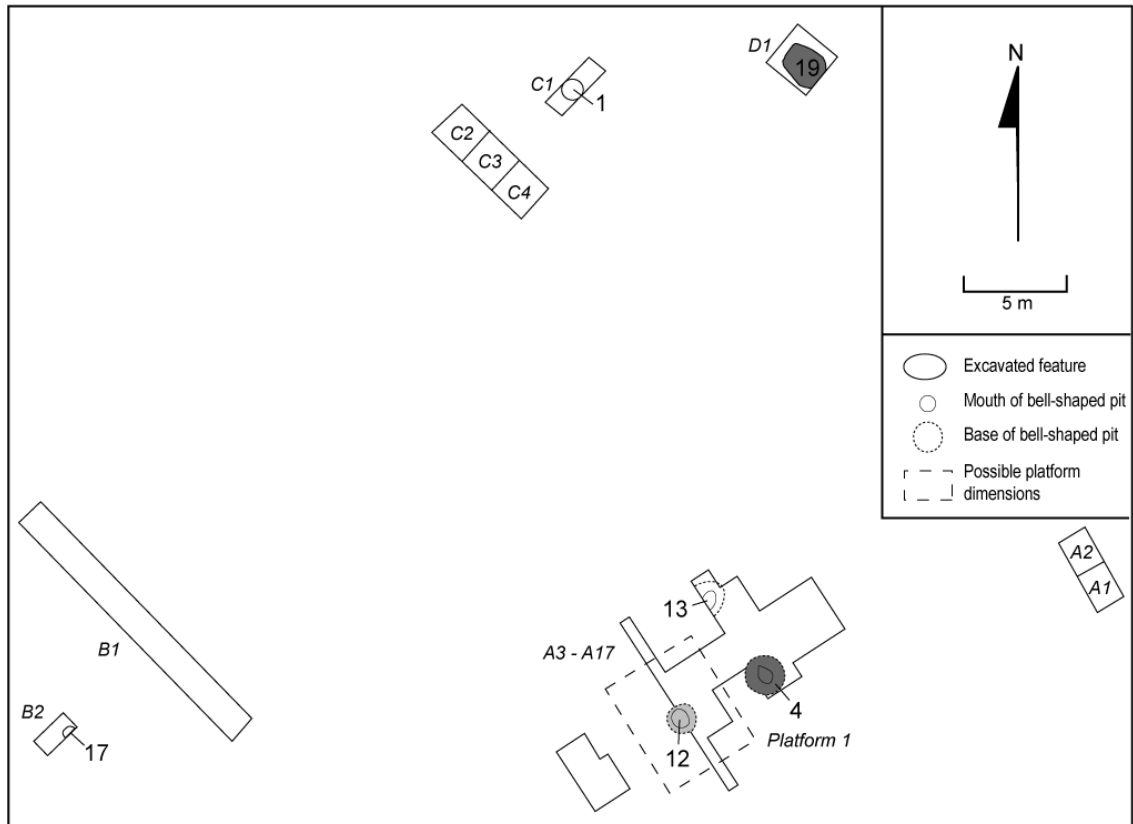


Figure 4.5 Distribution of Early Tlatempa (light gray) and Late Tlatempa (dark gray) features at Tetel; general Tlatempa features are left unshaded.

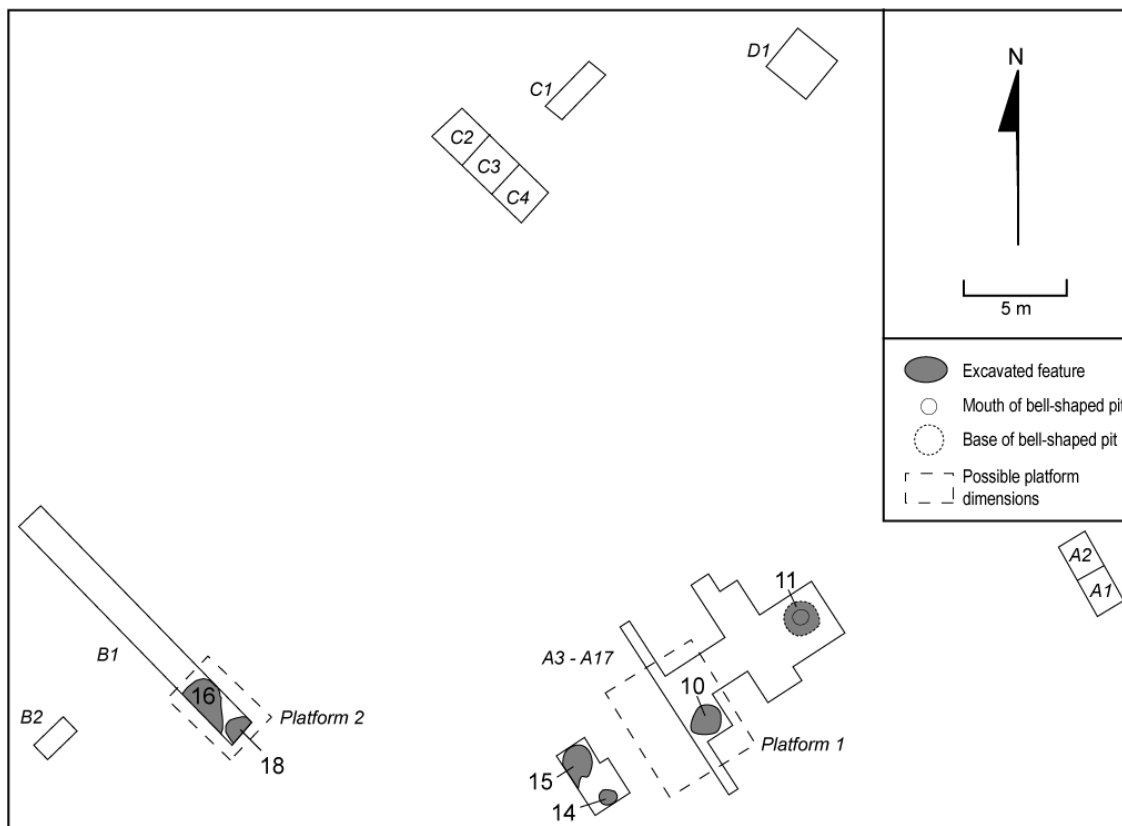


Figure 4.6 Distribution of Texoloc (dark gray) features at Tetel; general Tlatempa features are left unshaded.

Throughout the occupations at Amomoloc and Tetel, we find bell-shaped pits, roasting pits, and other shallow or irregularly shaped pits in close association with each other, indicative of the different kinds of activities taking place in Formative house-yards (see Tables 4.2 and 4.3). Bell-shaped pits were likely used for food storage and varied in volume between 1.32-2.84 m³ at Amomoloc and 1.25-1.85 m³ at Tetel. During the Early Formative in the Valley of Oaxaca, similarly shaped storage pits at Tierras Largas and San José Mogote could have held up to a metric ton of shelled corn, and the largest storage pits at San José Mogote had a volume range of 0.72-1.08 m³, smaller than those

Table 4.2 Description of pit features at Amomoloc.

Feat.	Bell-shaped ¹	Shallow	Roasting	Other	Phase ²	Household Unit
A21			X		(TL)	
A22				Boot-shaped	ET	Amom-ET-1
A23		X			ET	Amom-ET-1
A24		X			(TL)	
A27			X		(TL)	Amom-ET-3 or Amom-LT-6
A28		X			(TL)	
A46	X (2.84 m ³)				TZ	Amom-TZ-1
A47		X			ET	Amom-ET-1
A48		X			LT	Amom-LT-1
A49		X			ET	Amom-ET-1
A50		X			(TL)	
A51			X		(TL)	
A52		X			(TL)	
A53		X			(TL)	
A54	X (1.75 m ³)				ET	Amom-ET-1
A56		X			(TL)	
A57	X (2.54 m ³)				ET	Amom-ET-2
A59			X		(TL)	
A60		X			LT	Amom-LT-4
A61				Boot-shaped	(TL)	
A63	X (1.42 m ³)				ET	Amom-ET-2
A64	X (1.32 m ³)				LT	Amom-LT-1
A66		X			LT	Amom-LT-3
A67		X			LT	Amom-LT-3
A68	X (2.75 m ³)				LT	Amom-LT-2
A69			X		(TL)	
A71		X			ET	Amom-ET-2
A73	X (2.30 m ³)				LT	Amom-LT-3
A74		X			LT	Amom-LT-5
A75		X			(TL)	
A76		X			(TL)	
A78		X			ET	Amom-ET-3

Notes: (1) Number in parentheses is volume of bell-shaped pit; (2) Phase abbreviations: ET = Early Tlatempa, LT = Late Tlatempa, (TL) = Tlatempa, TX = Texoloc, TZ = Tzompantepec.

Table 4.3 Description of features at Tetel.

Feat.	Bell-shaped ¹	Shallow	Other	Phase ²	Household Unit
A01		X		(TL)	Tetel-ET-2 or Tetel-LT-2
A02			Platform 1	ET—TX	Tetel-ET-1, Tetel-LT-1, Tetel-TX-1
A03			Platform 2	TX	Tetel-TX-2
A04	X (1.85 m ³)			LT	Tetel-LT-1
A10		X		TX	Tetel-TX-1
A11	X (1.85 m ³)			TX	Tetel-TX-1
A12	X (1.25 m ³)			ET	Tetel-ET-1
A13	X (1.85 m ³)			(TL)	Tetel-ET-1 or Tetel-LT-1
A14		X		TX	Tetel-TX-1
A15		X		TX	Tetel-TX-1
A16		X		TX	Tetel-TX-2
A17		X		(TL)	Tetel-ET-3 or Tetel-LT-4
A18			Deep pit	TX	Tetel-TX-2
A19			Deep pit	LT	Tetel-LT-2 or Tetel-LT-3

Notes: (1) Number in parentheses is volume of bell-shaped pit; (2) Phase abbreviations: ET = Early Tlatempa, LT = Late Tlatempa, (TL) = Tlatempa, TX = Texoloc.

found at Amomoloc (Flannery and Marcus 2005:59; Marcus and Flannery 1996:73). It is also possible that bell-shaped pits and other irregularly shaped pits were “borrow” pits, for the procurement of clay for the manufacture of daub, pottery, and other clay artifacts. Once the bell-shaped pits at Amomoloc and Tetel were no longer usable due to deterioration over time, they were filled with household trash and dirt (perhaps from the excavation of a new storage pit nearby); we can imagine how it would be dangerous to leave such deep pits open in a busy house-yard, and the homogeneous stratigraphic layers detected in the majority of our bell-shaped pits suggest they were filled in quickly.

At Amomoloc, the burial of an adult male, about 44 years old at death, was found at the base of one bell-shaped pit dating to the Late Tlatempa subphase (Feature A68), and disarticulated human remains were found at two other features in separate areas of the site (Features A48 and A78). Similarly, at Tetel, a burial was found at the base of a

Late Tlatempa subphase bell-shaped pit (Feature A4), and poorly preserved deposits of human bone were found associated with Features A11 and A17. These finds suggest that it was important to keep some individuals close to the living areas of certain households even in death.

At Amomoloc, in nearly every area of the site where we find bell-shaped pits, we also find circular roasting pits nearby, with hardened clay bases lined with rocks and evidence for burning (see Figure 2.8). Roasting pits were used for cooking a variety of foods at San José Mogote and were typically found outside the house in the house-yard (Flannery and Marcus 2005:60). At other sites in Tlaxcala, similar pits have been associated with maguey processing (Carballo 2009:9; Serra Puche et al. 2000). All the remnants of roasting pits at Amomoloc (Features A21, A27, A51, A59, and A69) were quite shallow and had few artifacts in secure association with the pits themselves, making it difficult to date them beyond the general Tlatempa phase. We did not recover any roasting pits at Tetel, perhaps due to our limited excavations as it is unlikely that Tetel's inhabitants were eating different foods than the people at Amomoloc. Preliminary botanical and faunal analyses indicate that the inhabitants at both Amomoloc and Tetel during the Tzompantepec through Texoloc phases were consuming a typical maize-focused diet that also included beans, squash, wild plants, deer, rabbit, and dog (Lesure et al. 2006:489).

At the sites, other shallow or irregularly shaped pits were found in close association with the bell-shaped pits and roasting pits, all of which were filled with domestic trash. These pits were also located close to the main activity areas of house-yards, where daily trash was swept or thrown away. Like the secondary trash deposited

in bell-shaped pits, it is common to find in these pits a variety of broken cooking vessels, serving vessels (many decorated with the motifs that I present in the following chapter), carbonized plant remains, animal bones, figurines, chipped stone, grinding stones, and burned daub or other household construction materials.

Although severe erosion has destroyed all traces of the Formative living surfaces at Amomoloc and Tetel, the investigation of subsurface features through random sampling and seriation can provide substantive information on Middle Formative community organization and social structure. After I present the inventory of motifs on pottery at Amomoloc and Tetel, the analyses in Chapter 6 elucidate the practices taking place within individual households, the relationships between households, as well as broader regional trends, by focusing on patterns in the use of ceramic motifs over time.

CHAPTER 5

Inventory and Classification of Motifs at Amomoloc and Tetel

In this chapter, I present the complete inventory of design motifs depicted on rim sherds from the 25 datable features listed in Table 4.1. First, I provide an illustrated catalog of approximately 600 different motifs found on the subset of 1,200 decorated rim sherds, representing a variety of ceramic types, from secure contexts at Amomoloc and Tetel (Figures 5.1-5.27). These data are followed by a table providing provenience data for each motif (Table 5.1). I then describe the methodology I used to classify the motifs into broader categories, which are then used for the intra- and inter-site comparisons presented in Chapter 6.

Presentation of Motifs

Each individual design motif was assigned a motif number (M001 through M605) and illustrated in Figures 5.1-5.19. The motifs found on different parts of a single vessel were recorded separately, as other design studies have suggested that different decorative fields on a single vessel may be decorated with different kinds of designs (see discussion in Plog 1980:17-19). Therefore, a motif located on the rim of a single vessel received one motif number, while a motif located on the exterior of the same vessel received a separate motif number. The combinations of motifs that appear on single vessels are

considered in the analyses presented in Chapter 6. A table recording where each motif was located on a vessel (exterior, exterior rim, lip, interior rim, and/or interior) is included in Appendix B.

The order of the motifs is not random, as I grouped similar motifs (though this was not always possible to accomplish). In general, simpler motifs appear at the beginning of the catalog (e.g., Motif 16), while motifs comprising multiple design elements are recorded later in the catalog (e.g., Motif 458).

The inventory includes incised, grooved, excised, and/or painted design motifs. I define the various decorative techniques recorded for the motifs at Amomoloc and Tetel as follows:

- Incising: “Freehand decoration by pressing or cutting lines” into the leather-hard vessel surface, a pre-firing decorative technique (Cyphers Guillén 1987:250, following Shepard 1963:195-203).
- Grooving: “Wide incising, here used to indicate a form of incising slightly deeper and wider” than the typically fine scratching associated with incising (Cyphers Guillén 1987:250).
- Excising: “Decorating a ware by carving out a portion of the surface,” a pre-firing decorative technique (Flannery and Marcus 1994:17).
- Fluting: “A technique of modeling used to achieve shallow canals or low ridges on a vessel” (Cyphers Guillén 1987:250). This technique produces vessels that appear to resemble gourds.
- Painting: The use of contrasting paint or slip to achieve a design motif. I do not consider simple red band decoration, such as that found along the rims of

Laguna Red-and-Scraped jars or Yauhtentzi Red-on-White bowls (e.g., Figure 3.47), to be design motifs for the purposes of this study. Rather, this kind of decorative information was recorded along with ceramic type and is considered in the Chapter 6 analyses.

The catalog of motifs depicts lines of varying thickness to approximate the weight of the incised, grooved, and excised lines composing the motifs, but it was often difficult to differentiate between these techniques in the illustrations. Therefore, this information is also recorded in Appendix B. Slip or background color is not depicted in the catalog, unless contrasting color is part of the design. In these instances, gray shading is used to depict painted designs (generally red paint, unless otherwise noted).

The images in Figures 5.1-5.19 are not drawn to scale for the sake of comparison, though the general proportions of the designs are maintained. In some instances, due to the shape of a rim sherd, it was more accurate to depict the motif at a smaller scale; these motifs are outlined by a dotted line (e.g., see Motif 23 in Figure 5.1). For similar reasons, some larger rim sherds are illustrated in separate figures (Figures 5.20-5.27, and various figures in Chapter 3).

In general, the illustrated motifs are oriented according to the way an individual looking at a complete vessel would view the motif. For example, I assumed that motifs on the exterior of vessels would be viewed from the side of a vessel, and motifs on the rim or interior of a vessel would be viewed from the top, while looking down at a vessel.

Catalog of Motifs

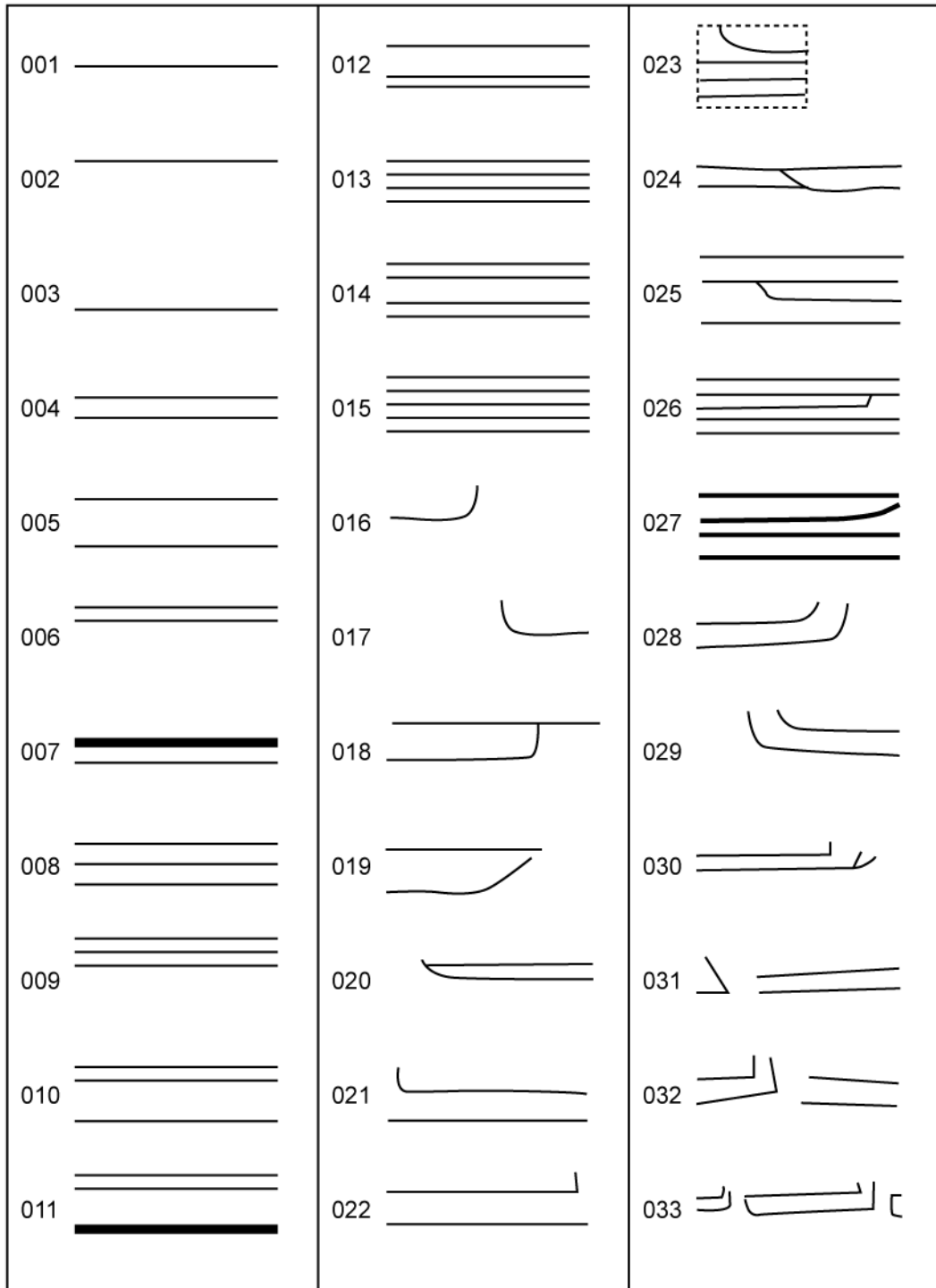


Figure 5.1 Motifs 1-33.

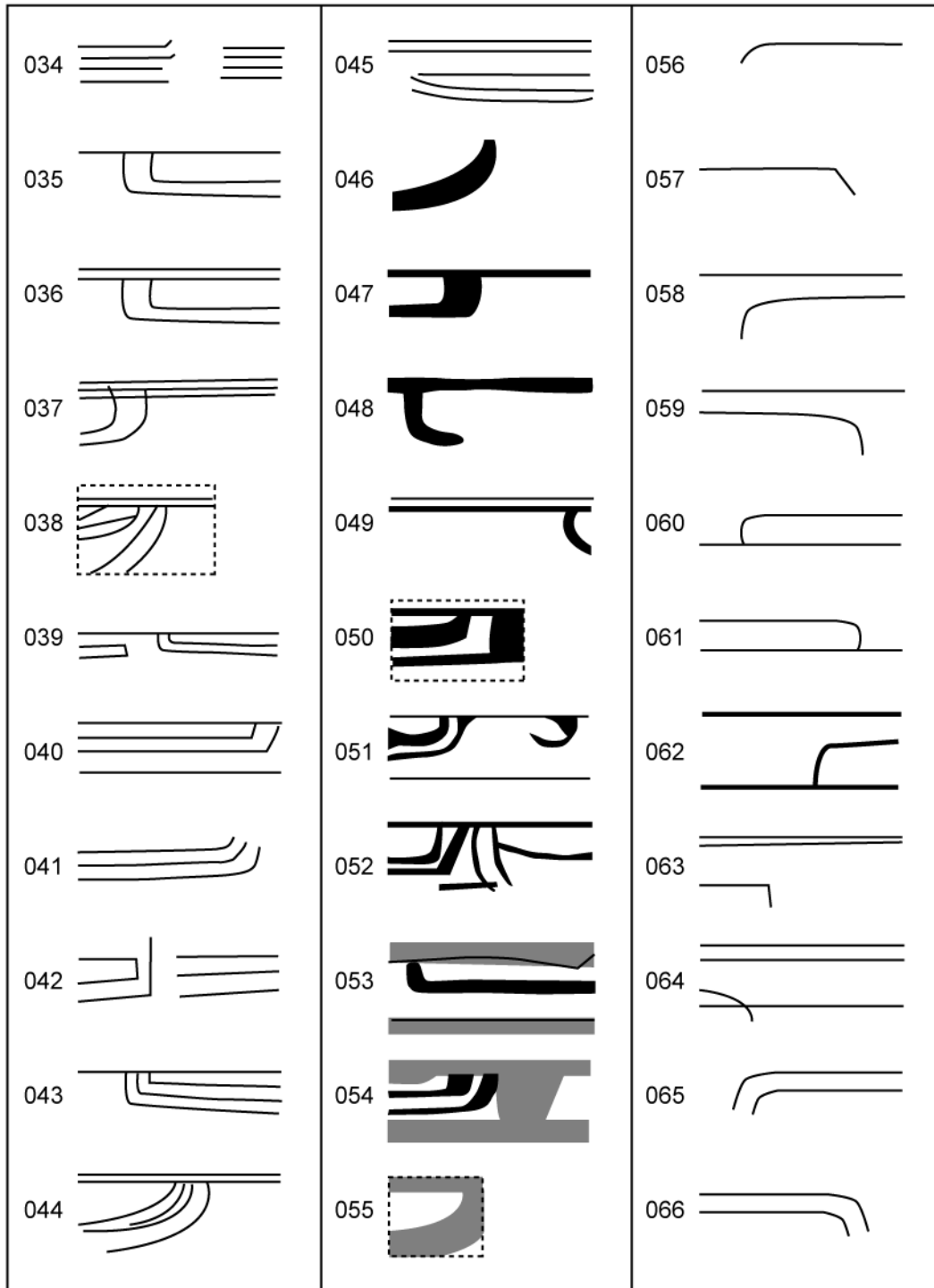


Figure 5.2 Motifs 34-66.

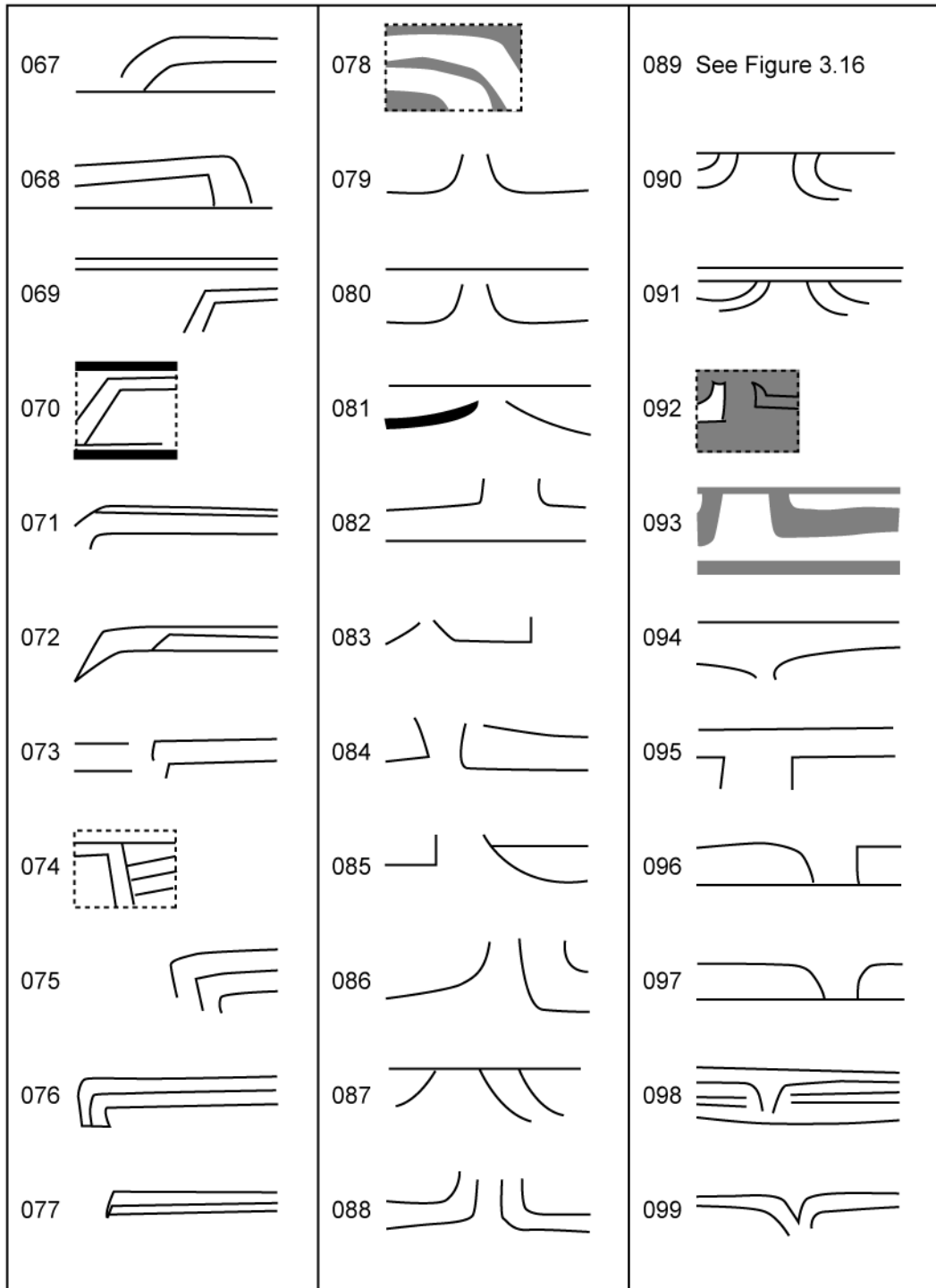


Figure 5.3 Motifs 67-99.

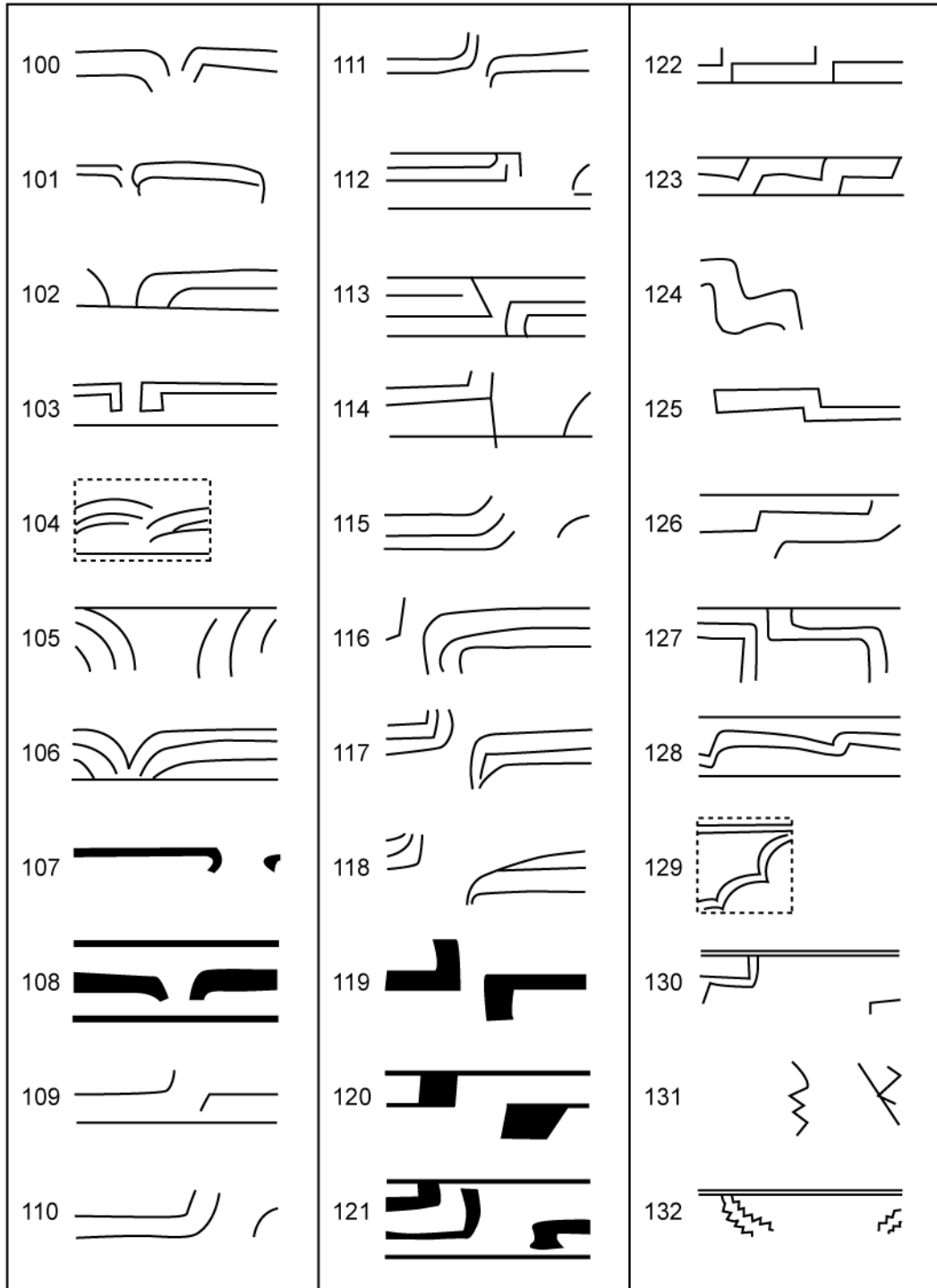


Figure 5.4 Motifs 100-132.

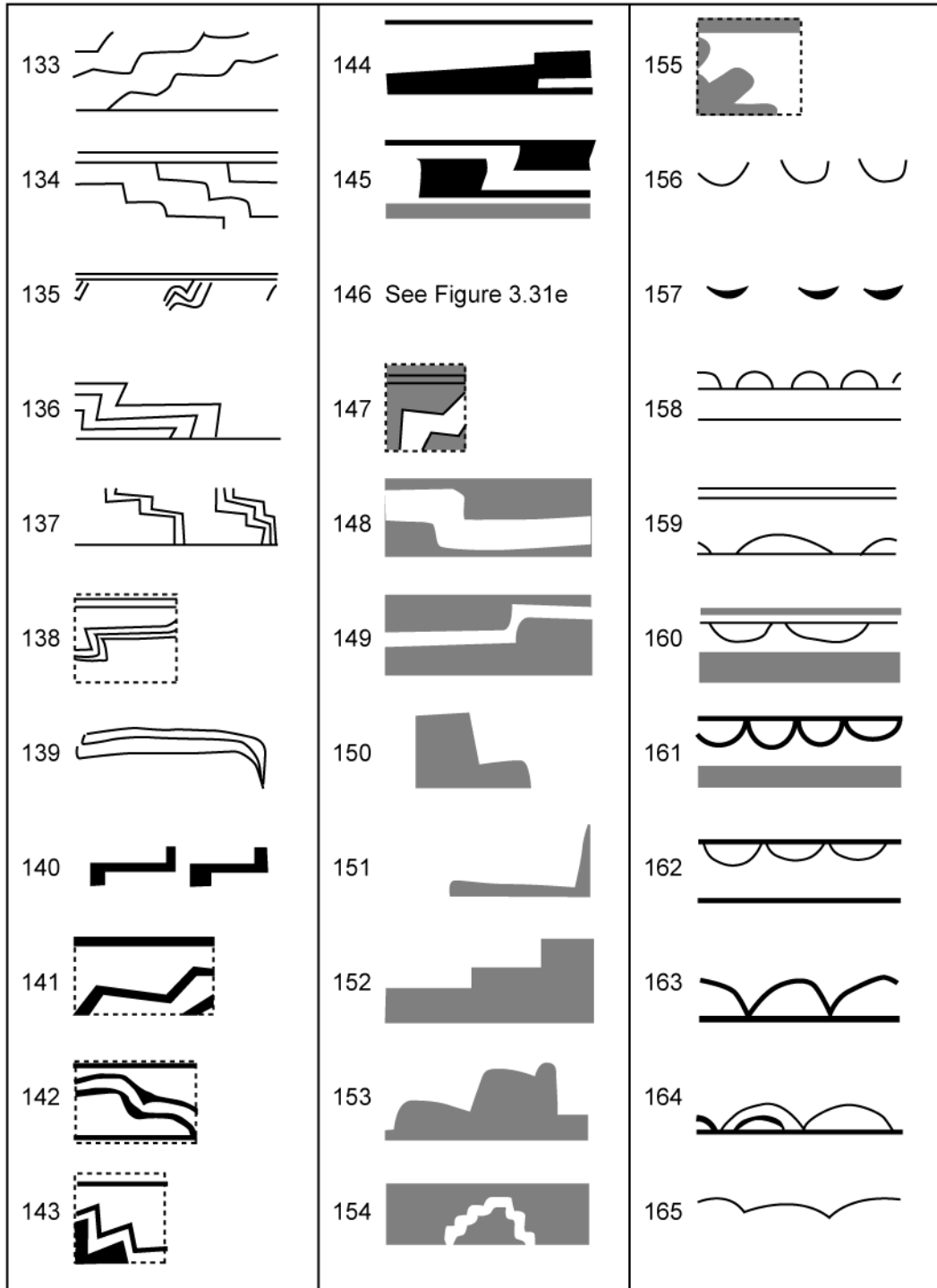


Figure 5.5 Motifs 133-165.

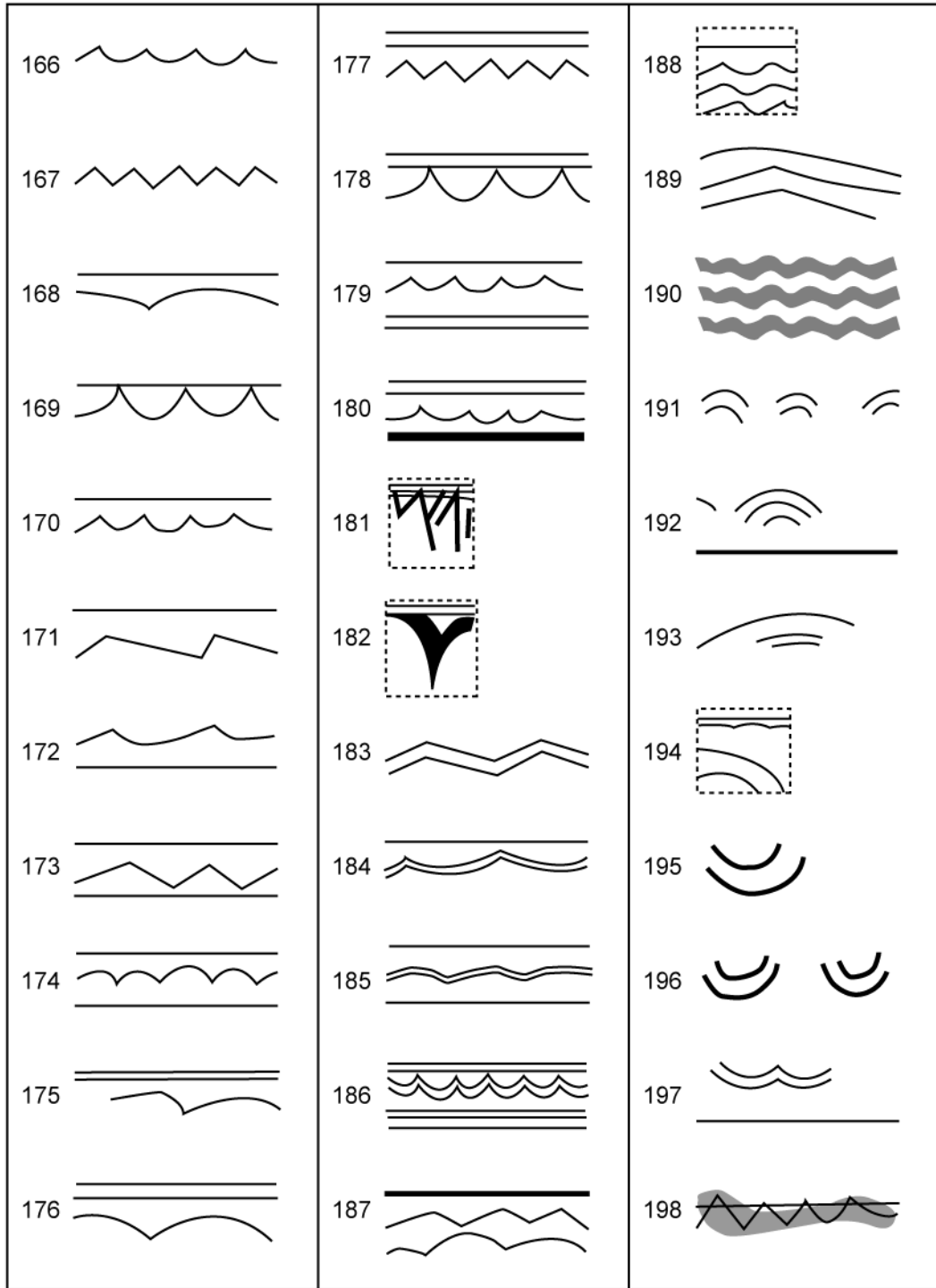


Figure 5.6 Motifs 166-198.

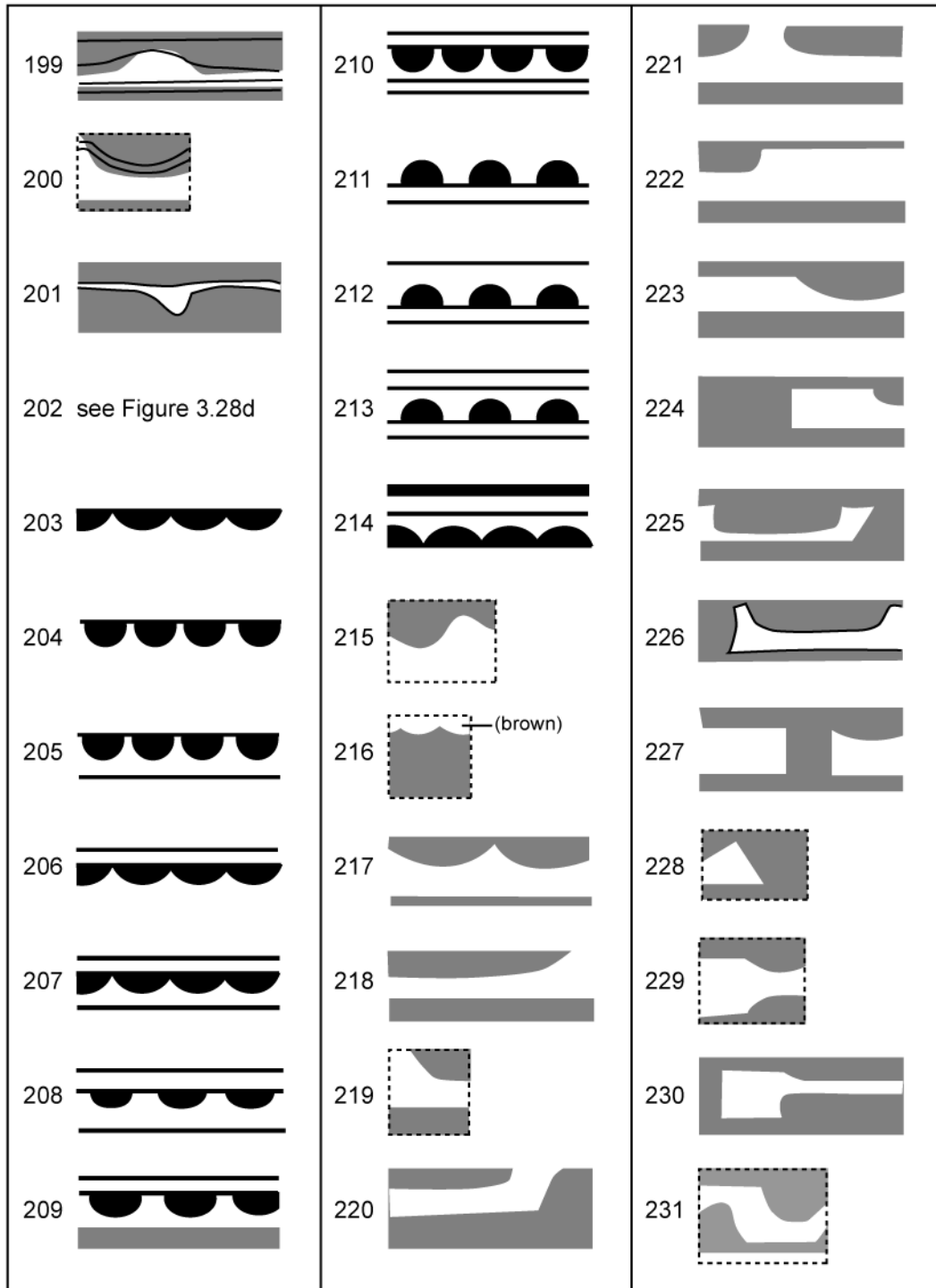


Figure 5.7 Motifs 199-231.

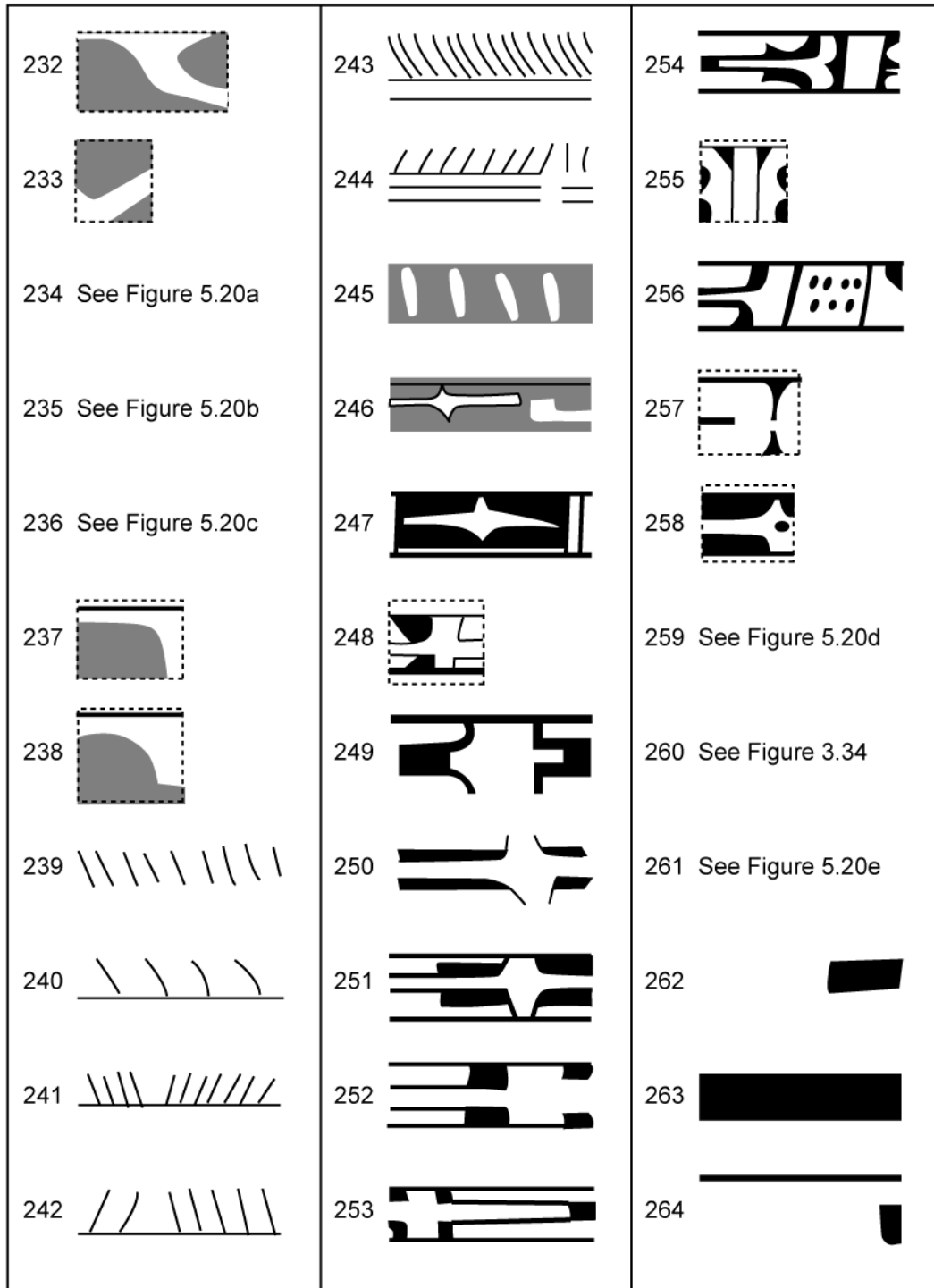


Figure 5.8 Motifs 232-264.

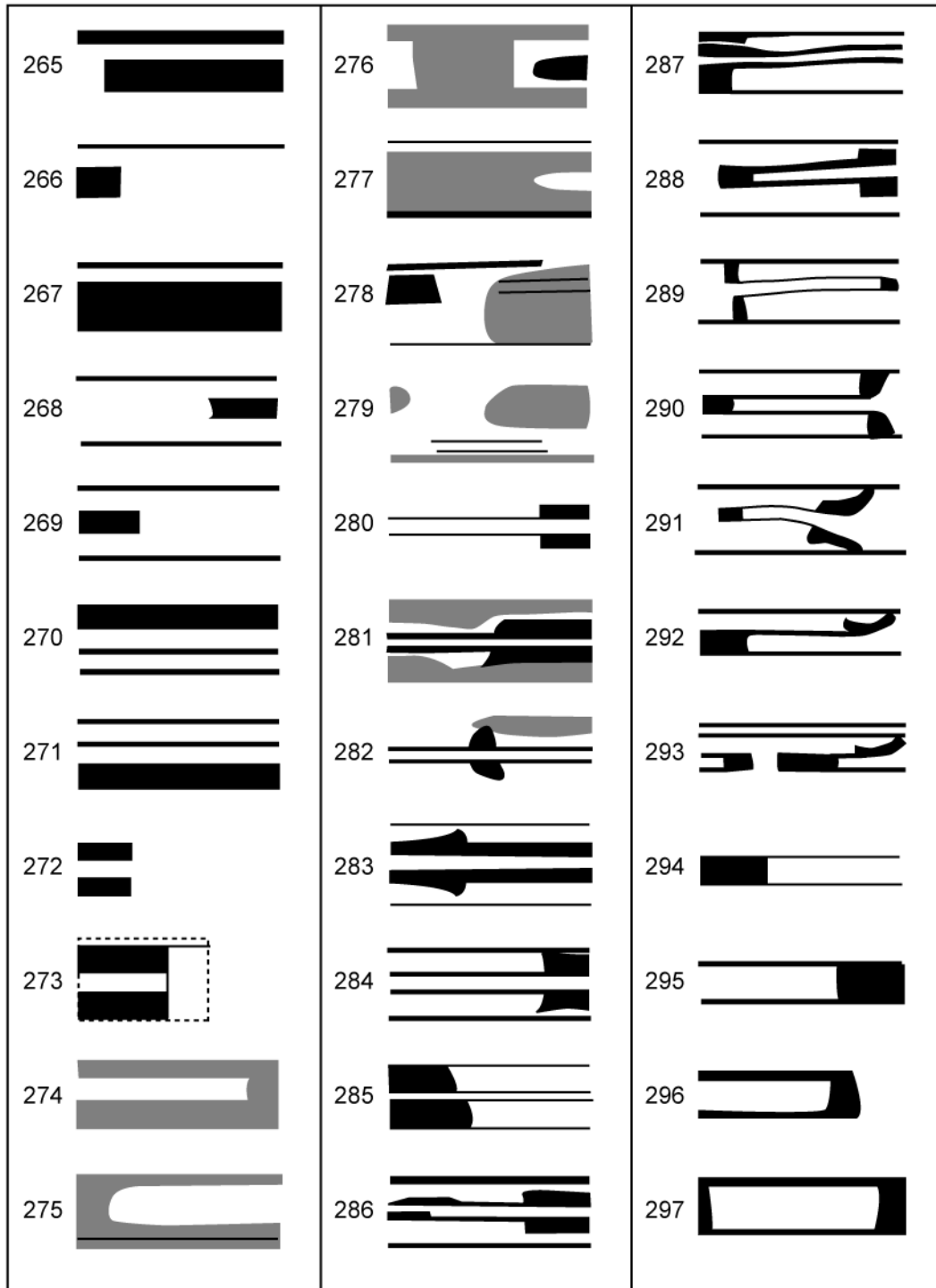


Figure 5.9 Motifs 265-297.

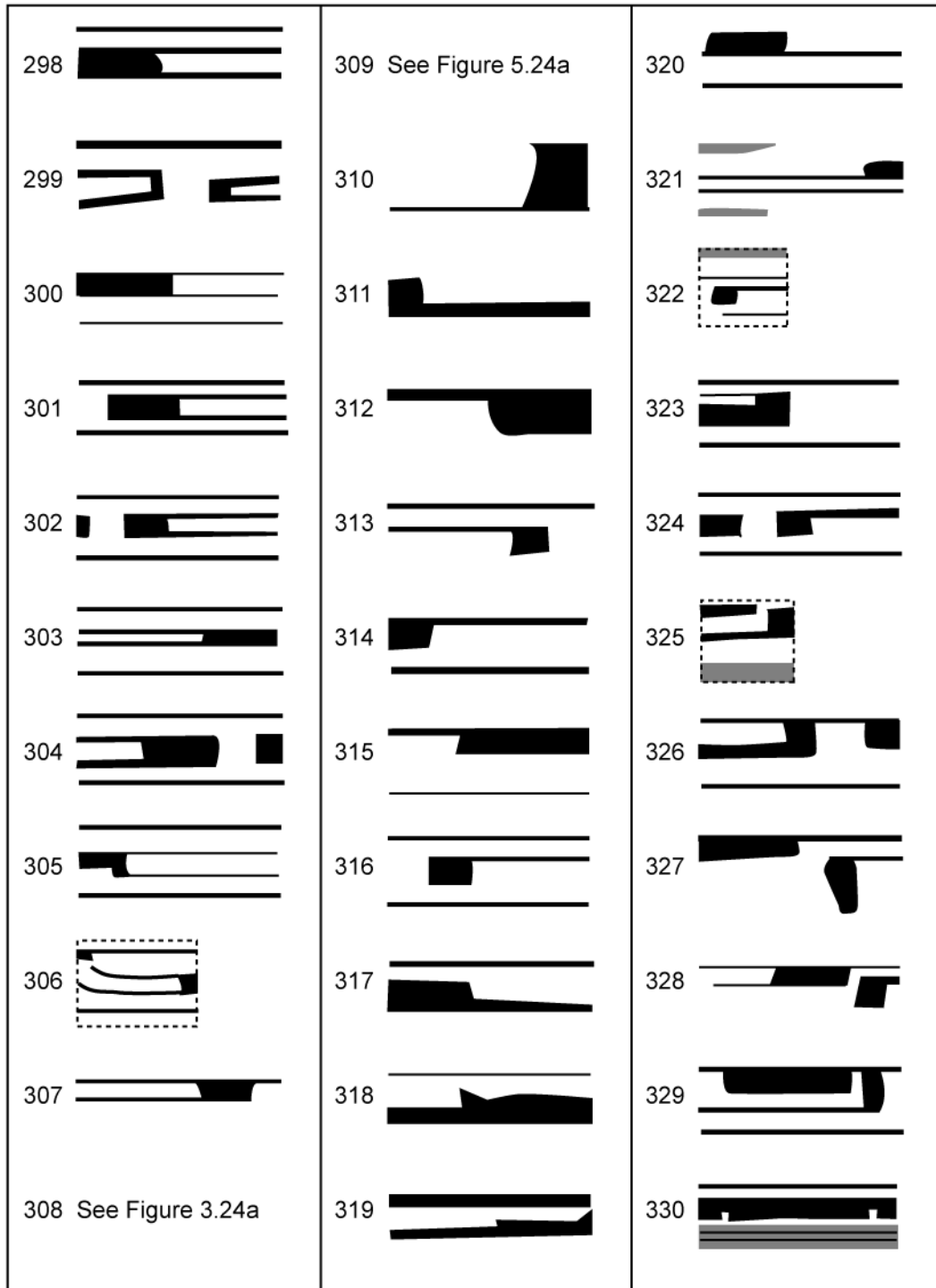


Figure 5.10 Motifs 298-330.

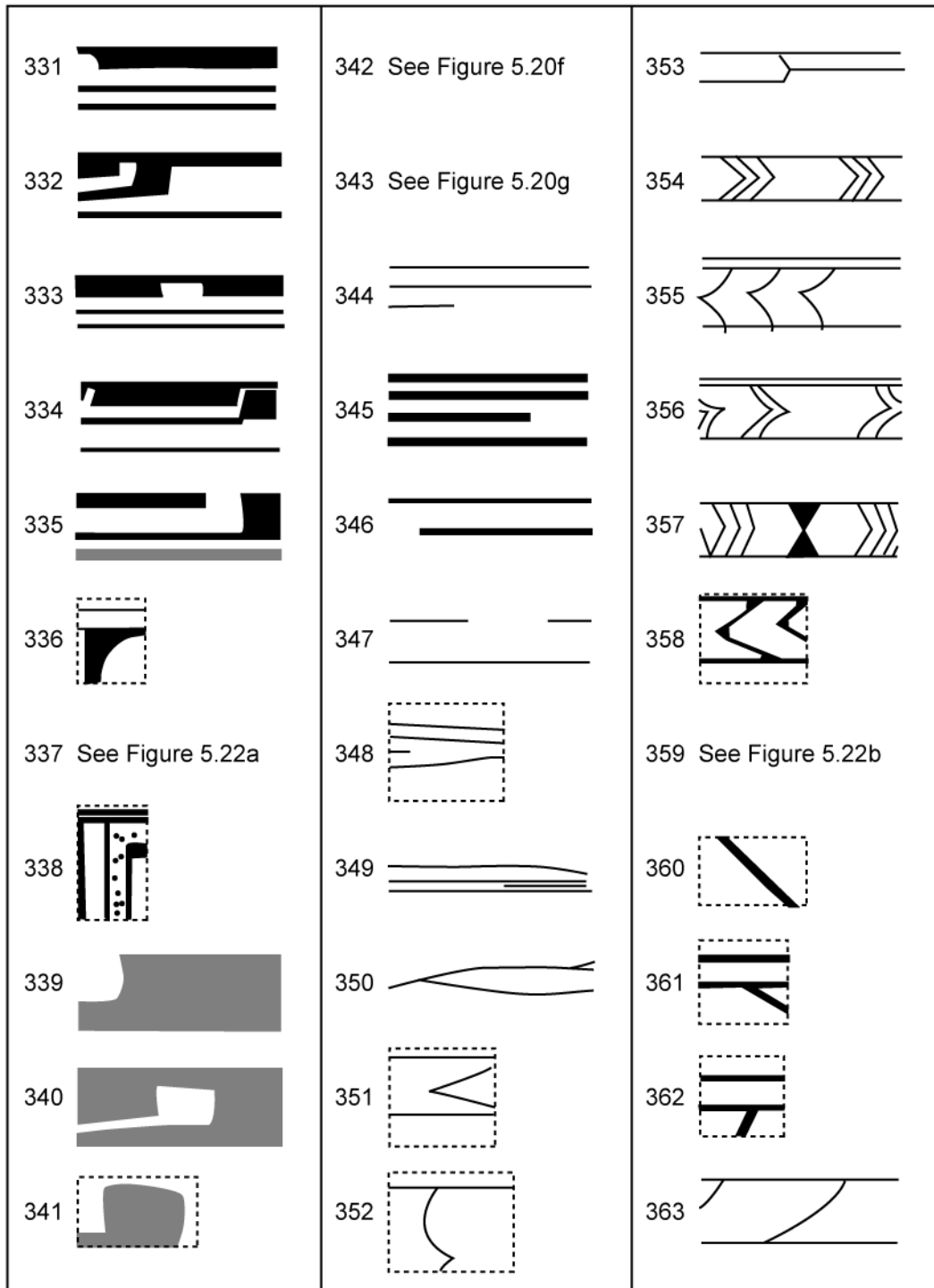


Figure 5.11 Motifs 331-363.

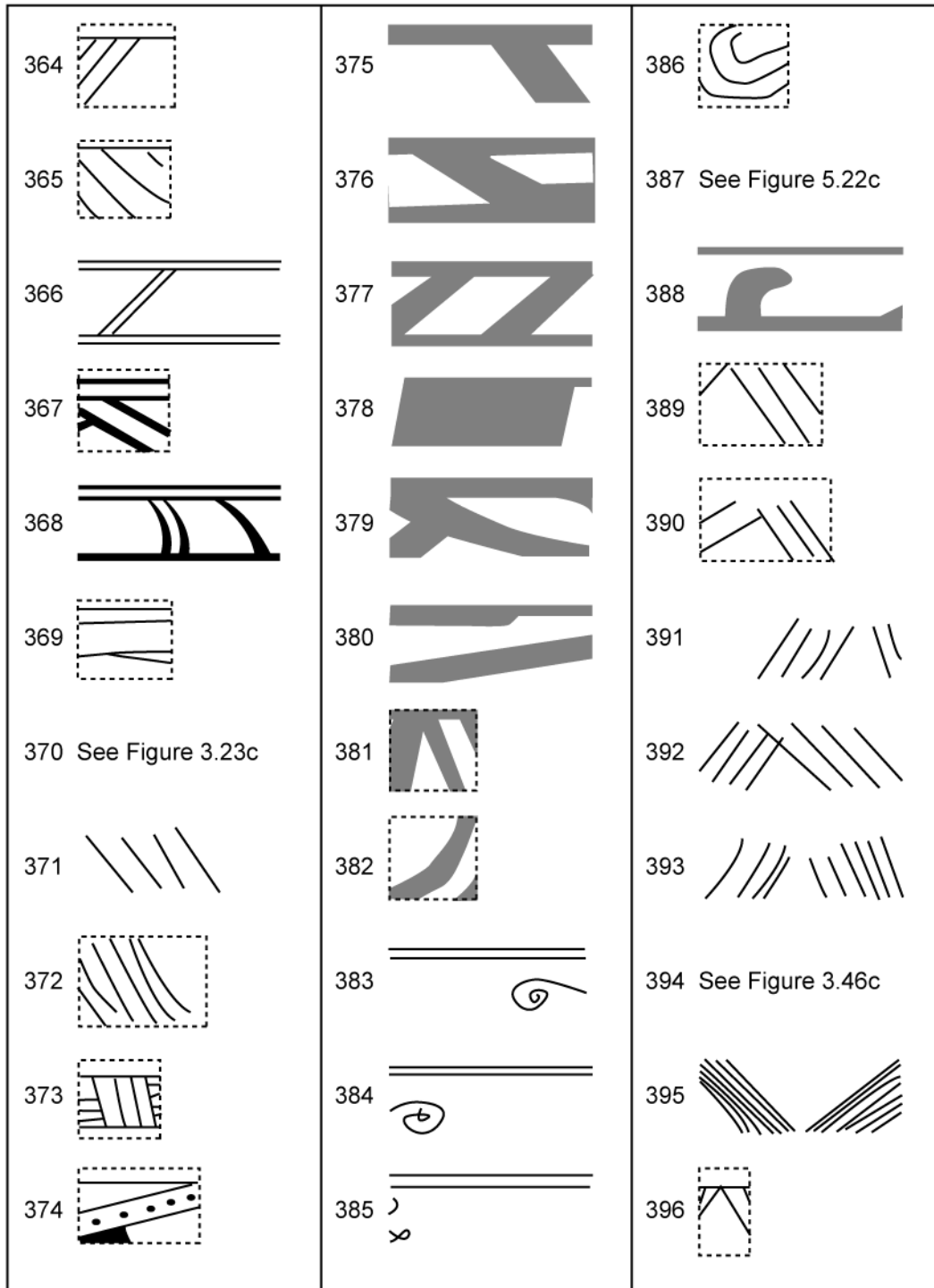


Figure 5.12 Motifs 364-396.

397		408	See Figure 3.25	419	See Figure 3.29c and Figure 5.25b
398		409		420	
399		410		421	
400		411	See Figure 3.19a	422	
401		412	See Figure 3.29d and Figure 5.27a	423	
402		413	See Figure 5.27b	424	
403		414		425	
404		415		426	
405		416	See Figure 3.21a	427	
406	See Figure 3.19b	417	See Figure 5.20h	428	
407	See Figure 3.15a	418	See Figure 3.29b and Figure 5.25a	429	

Figure 5.13 Motifs 397-429.

430		441		452	vertical fluting, see Figure 5.26e
431		442		453	See Figure 3.49a
432		443		454	See Figure 5.26f
433		444		455	
434		445	See Figure 3.31c	456	
435		446	See Figure 3.31d	457	
436		447		458	
437		448	horizontal fluting (1), see Figure 5.26a	459	
438		449	horizontal fluting (2), see Figure 5.26b	460	
439		450	See Figure 5.26c	461	
440		451	See Figure 5.26d	462	

Figure 5.14 Motifs 430-462.

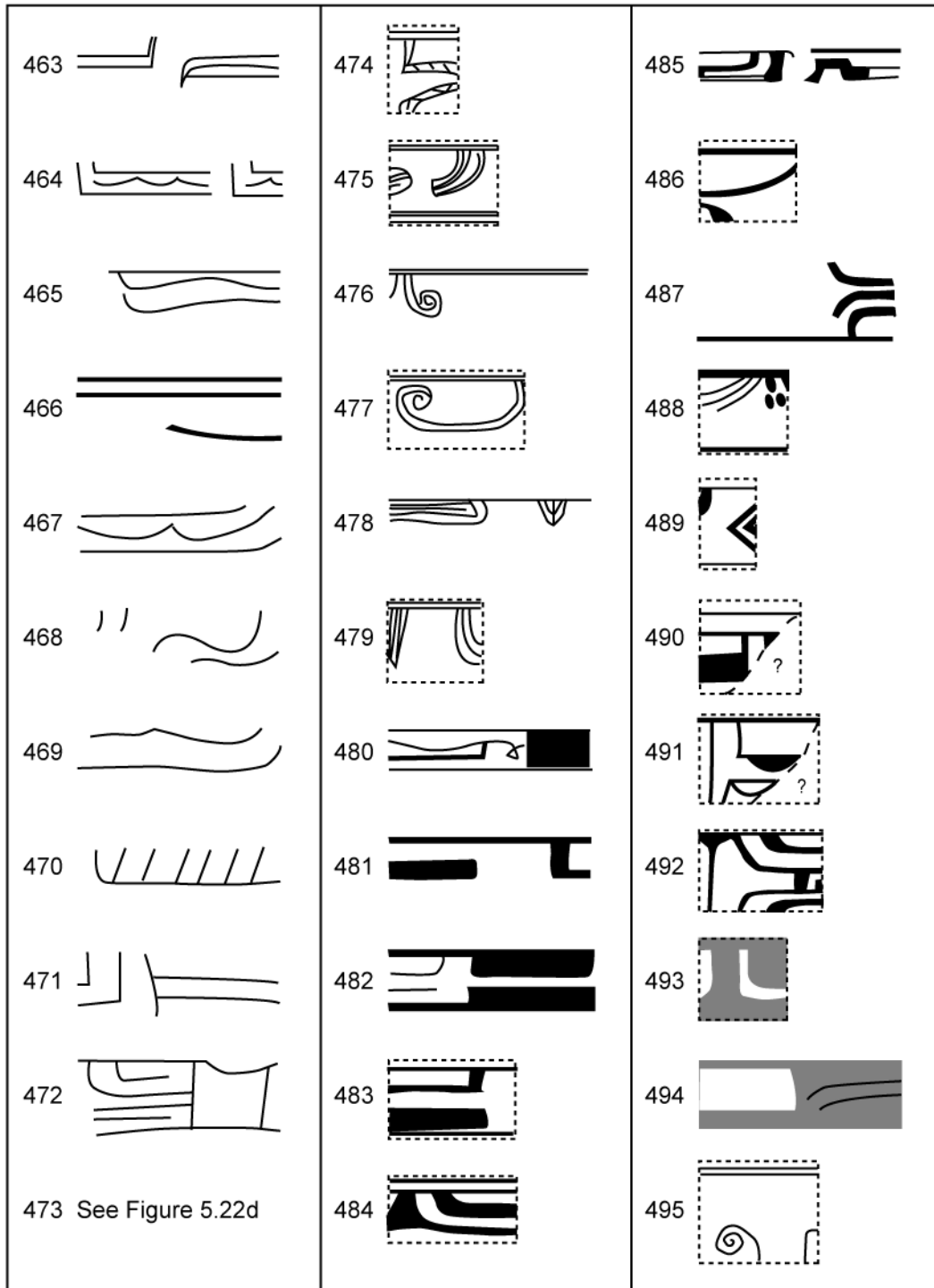


Figure 5.15 Motifs 463-495.

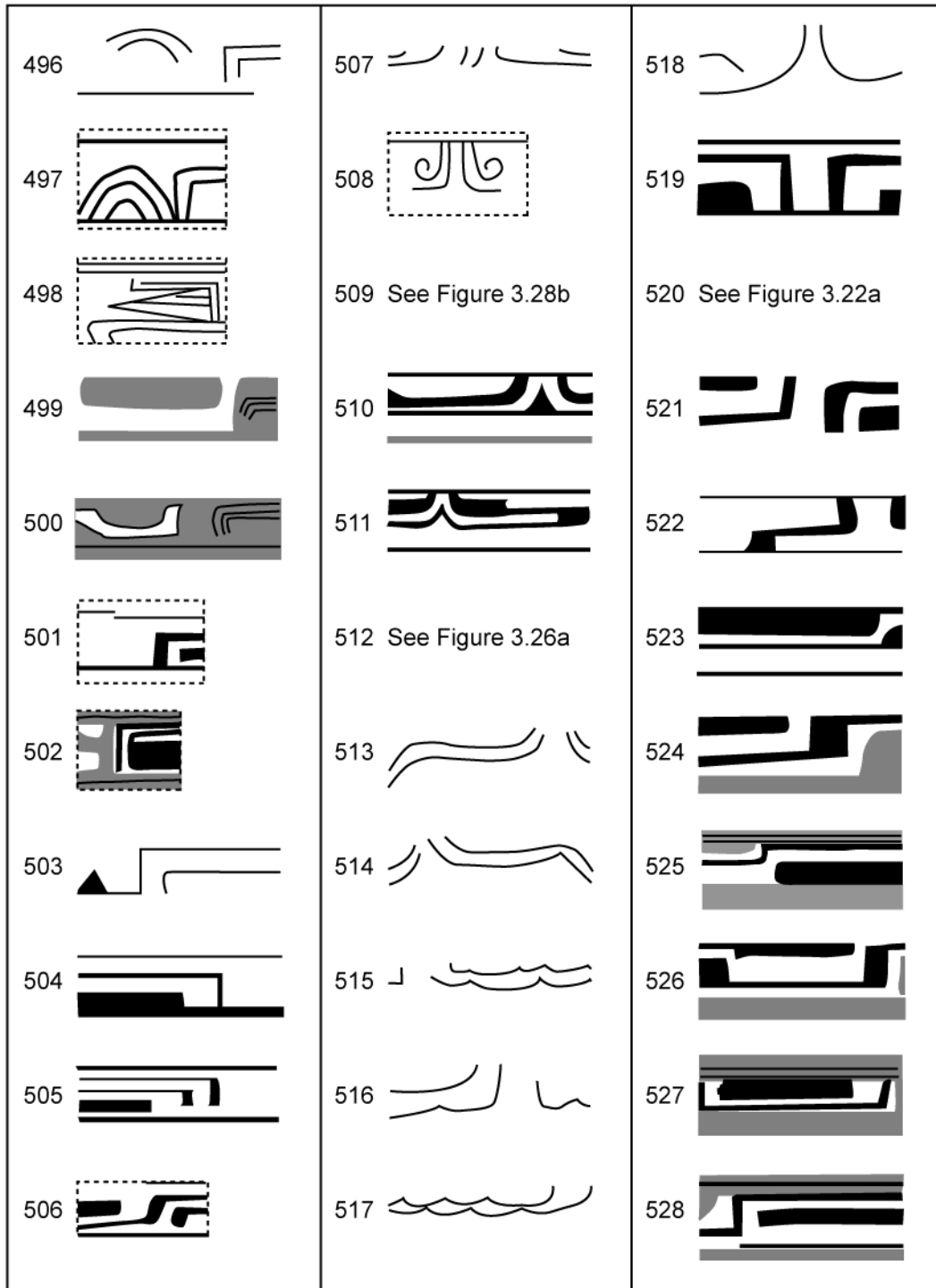


Figure 5.16 Motifs 496-528.


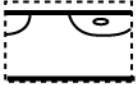













529		540 See Figure 5.24b	551 
530 See Figure 5.20i		541 See Figure 5.24c	552 
531 See Figure 5.20j		542 See Figure 3.40a	553 
532 See Figure 5.20k		543 See Figure 5.23a	554 
533 See Figure 3.27b		544 See Figure 5.21d	555 
534 See Figure 5.20l	545 		556 
535 See Figure 5.21a	546 See Figure 5.23b		557 
536 See Figure 5.21b	547 		558 
537 See Figure 5.21c	548 		559 See Figure 3.22c
538 See Figure 3.30c	549 		560 See Figure 5.21e
539 See Figure 3.29a and Figure 5.25c	550 		561 

Figure 5.17 Motifs 529-561.

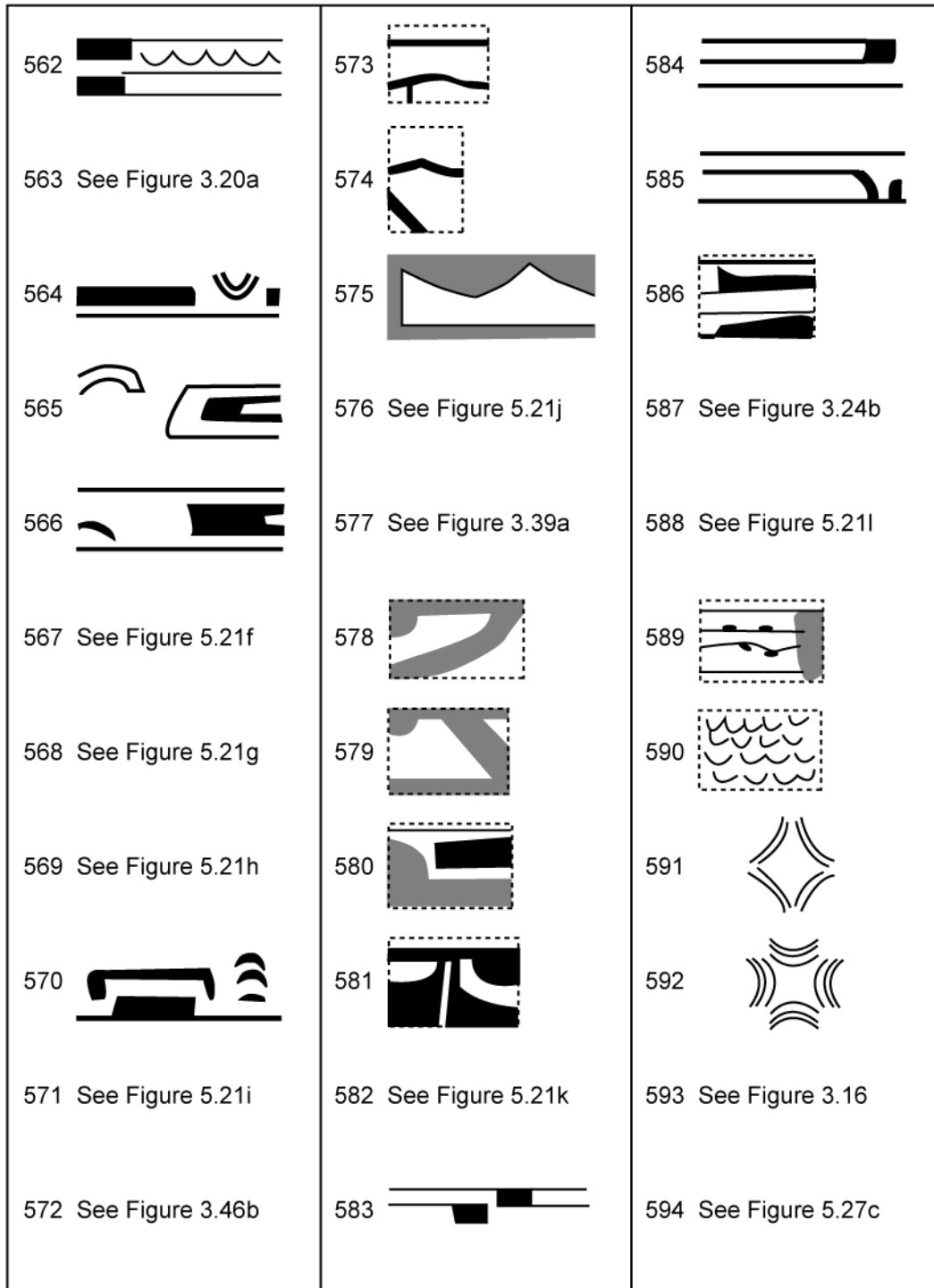


Figure 5.18 Motifs 562-594.





595 See Figure 5.27d	599 See Figure 5.27f	603  (fluting)
596 See Figure 3.17a	600 Three faint curving parallel lines on edge of interior base	604  (fluting)
597 See Figure 3.17b	601 Six faint lines on edge of interior base	605 
598 See Figure 5.27e	602  (fluting)	

Figure 5.19 Motifs 595-605.

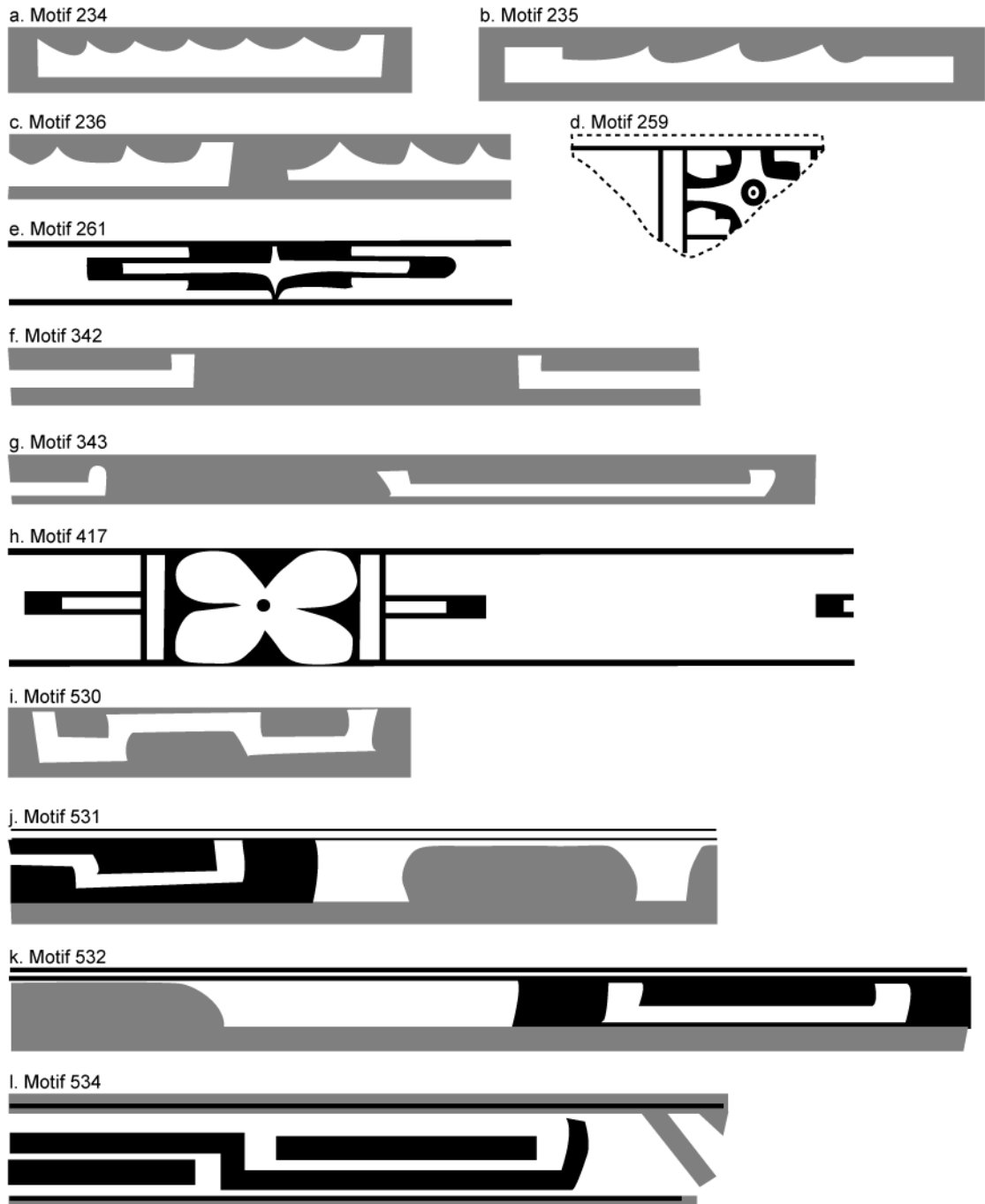


Figure 5.20 Decorations on semi-reconstructable vessels: Motifs 234-236, 259, 261, 342, 343, 417, 530-532, and 534.

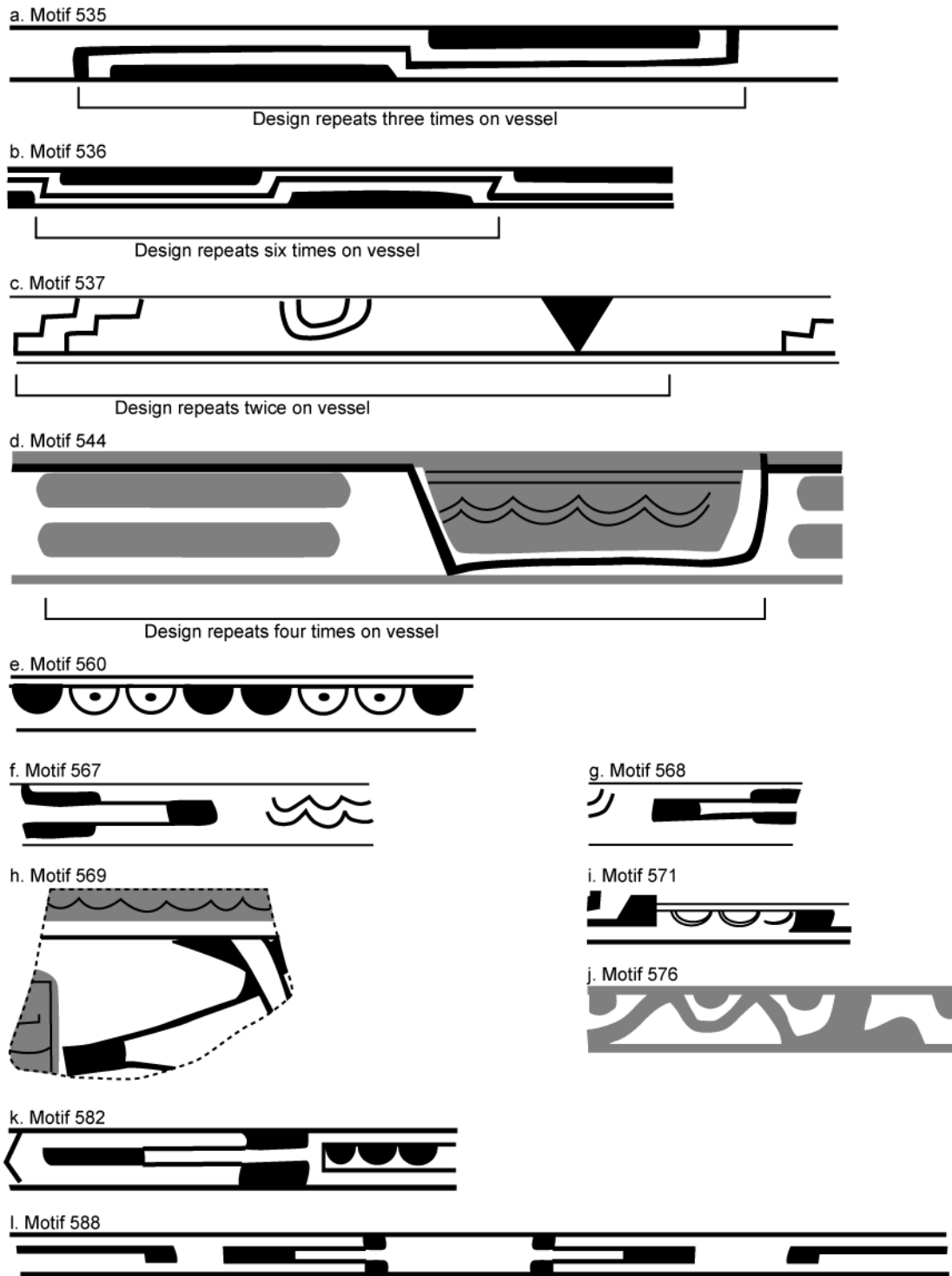


Figure 5.21 Decorations on semi-reconstructable vessels: Motifs 535-537, 544, 560, 567-569, 571, 576, 582, and 588.

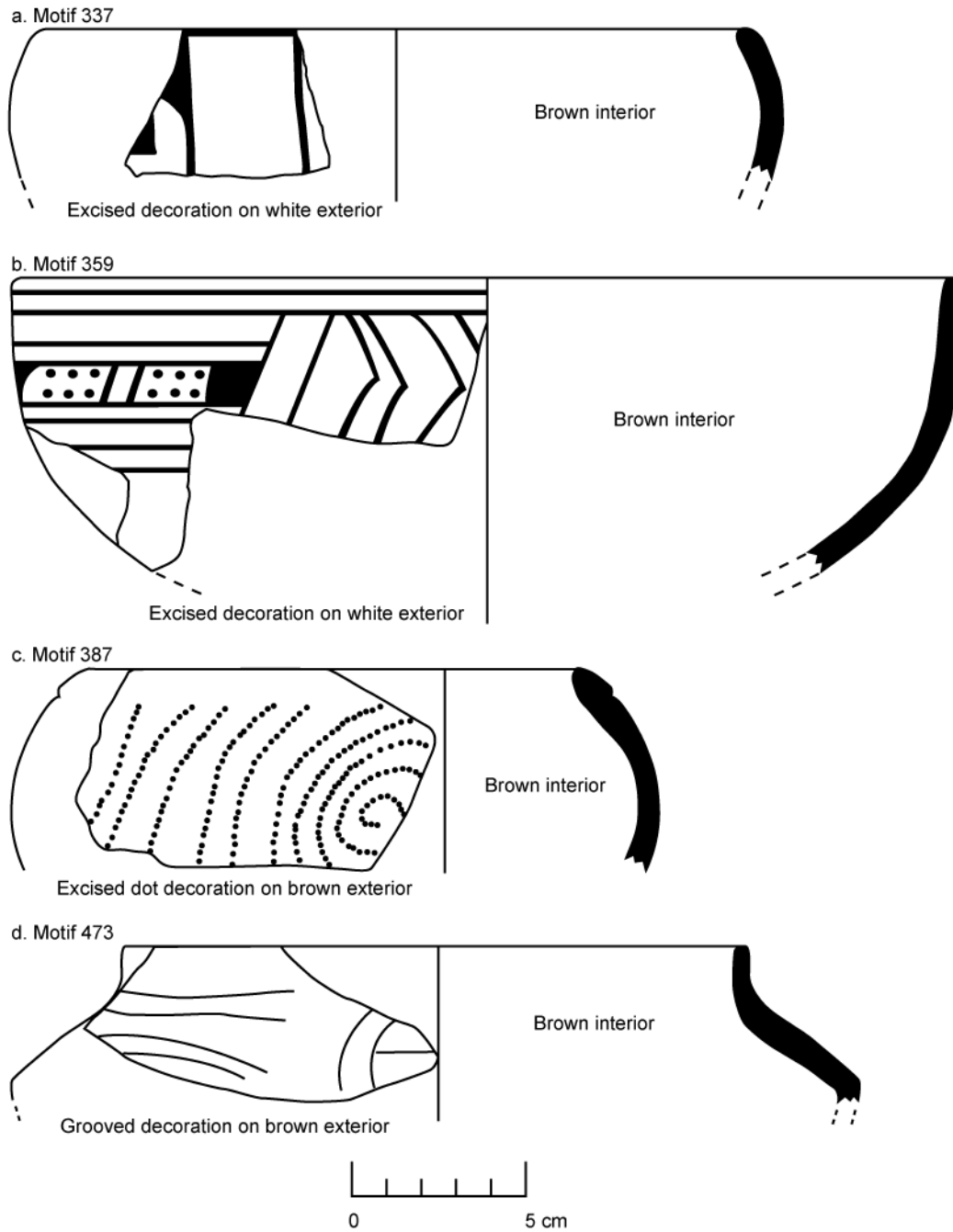


Figure 5.22 Exterior decoration on (a-b) San José White-and-Brown and (c-d) Mesitas Brown vessels: Motifs 337, 359, 387, and 473.

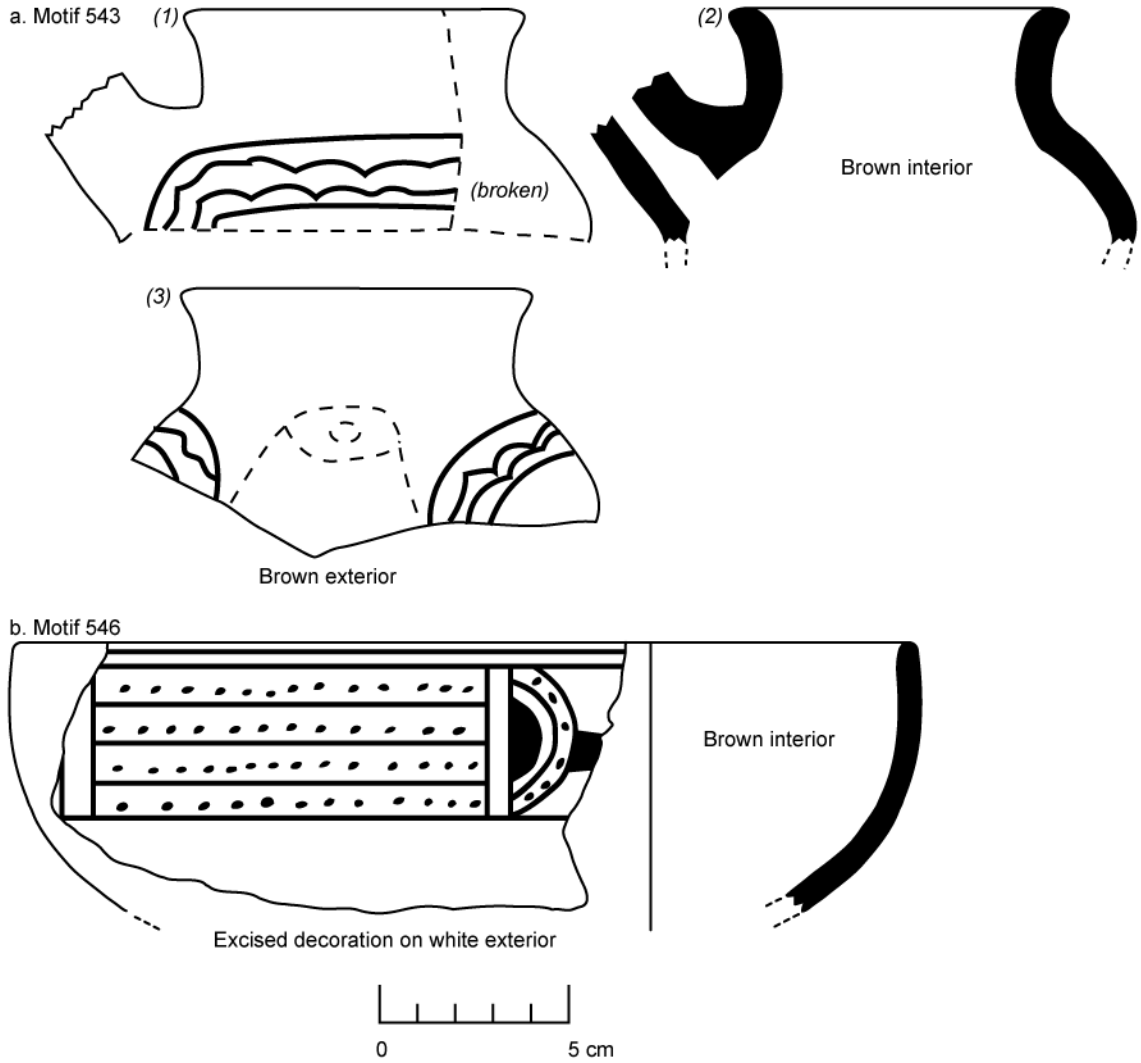


Figure 5.23 Exterior decoration on (a) a Mesitas Brown spouted jar and (b) a San José White-and-Brown simple bowl: Motifs 543 and 546.

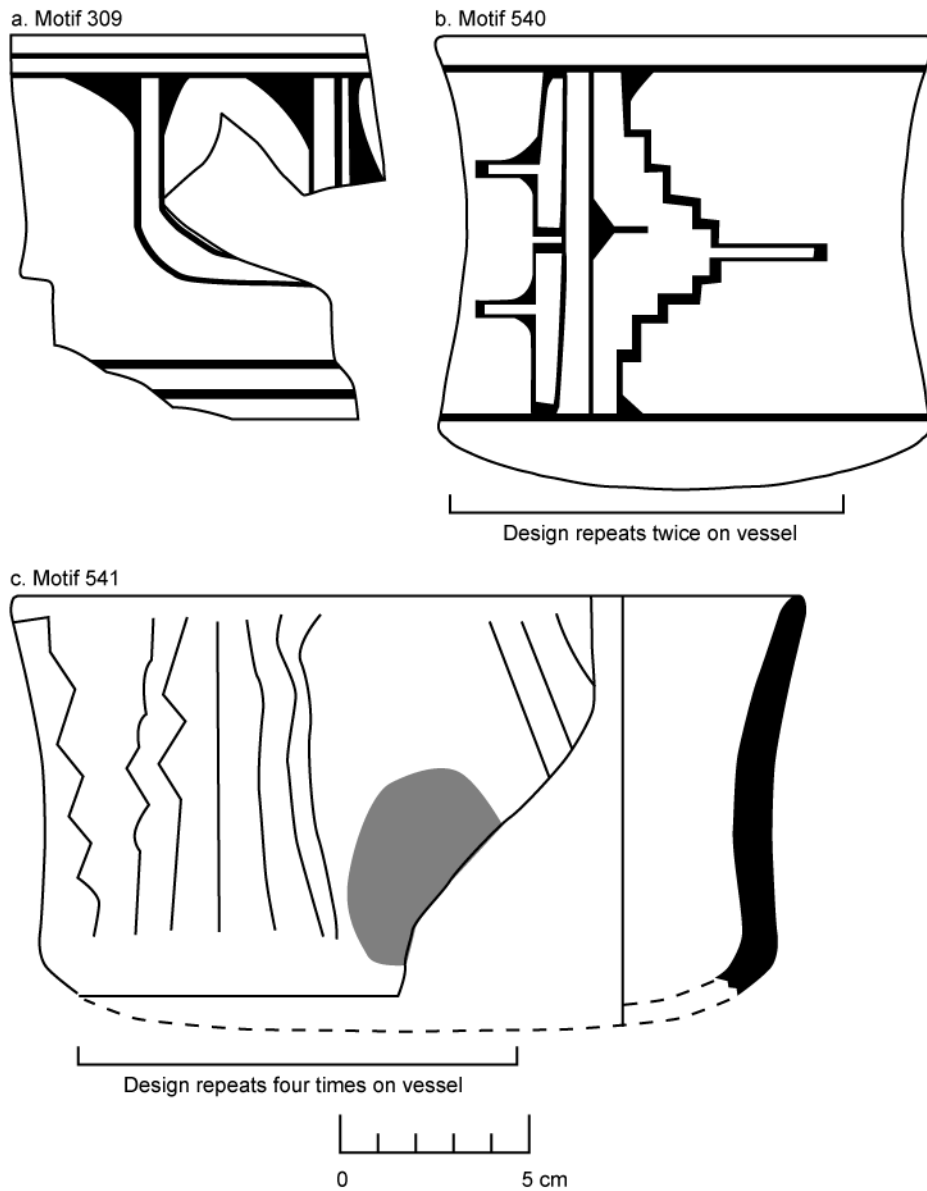


Figure 5.24 Exterior decoration on Yauhtentzi White (a-b) and Yauhtentzi Red-on-White (c) composite silhouette vases: Motifs 309, 540, and 541.

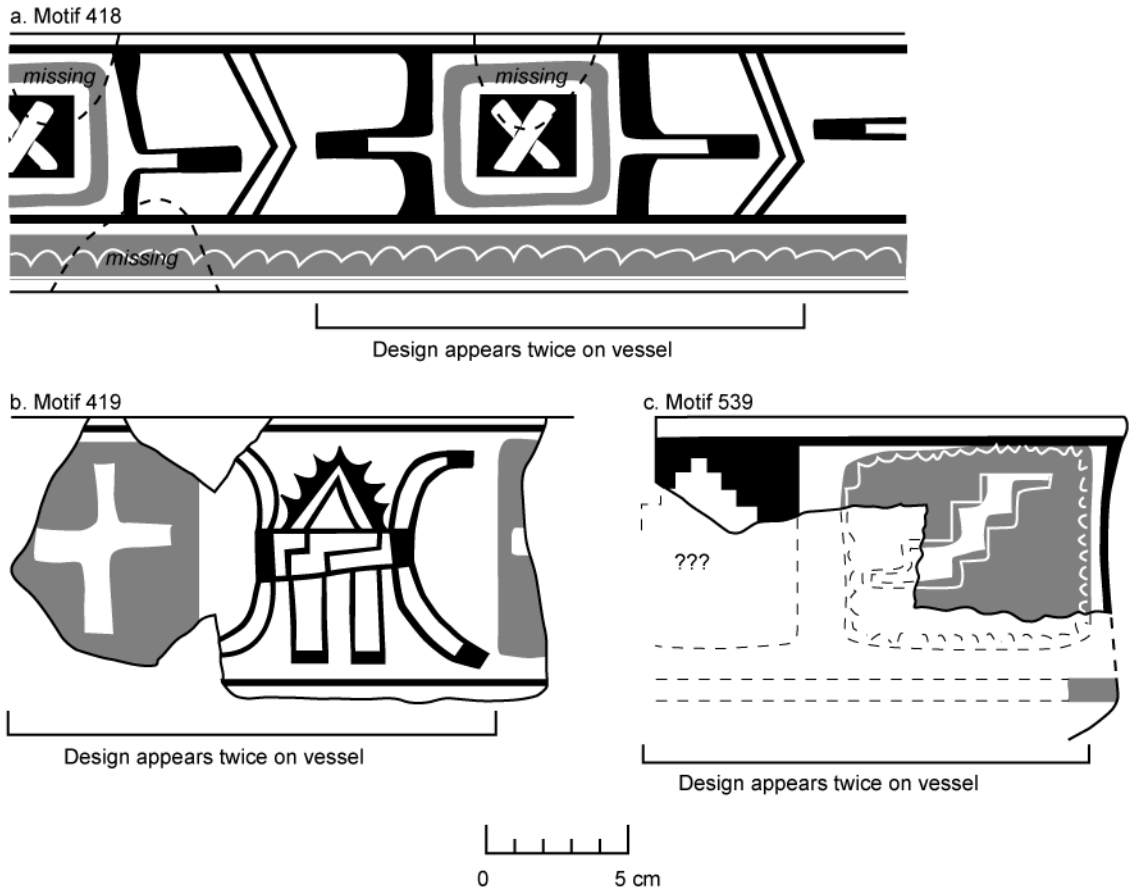


Figure 5.25 Roll-outs of Yauhtentzi Red-on-White composite silhouette vases: Motifs 418, 419, and 539.

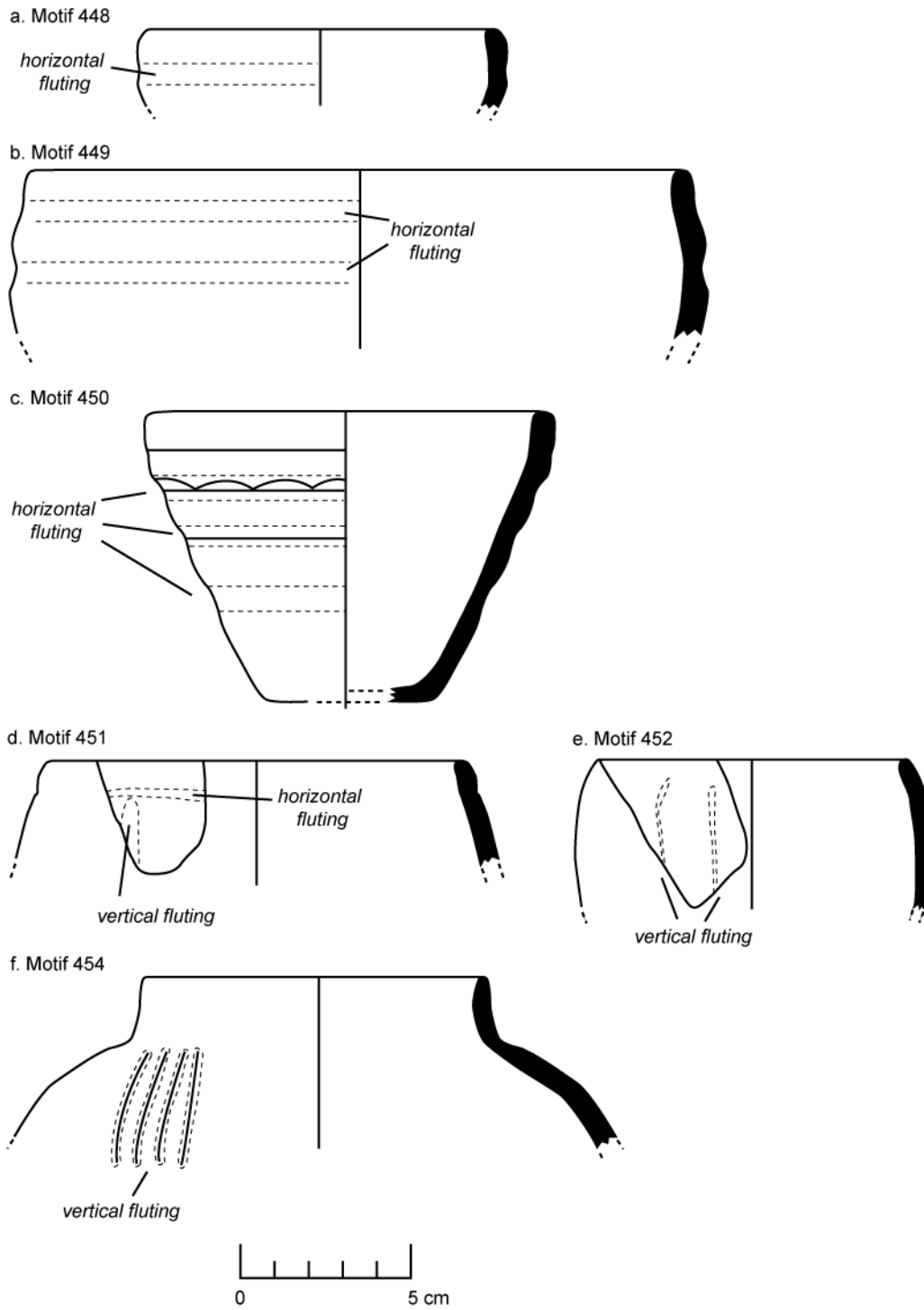
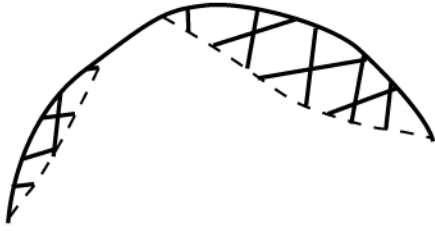


Figure 5.26 Fluted decorations: Motifs 448-452, and 454.

a. Motif 412



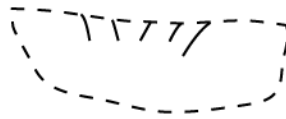
b. Motif 413



c. Motif 594



d. Motif 595



e. Motif 598



f. Motif 599

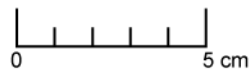
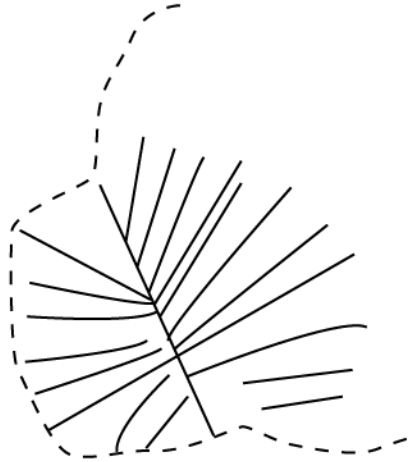


Figure 5.27 Interior base decorations: Motifs 412, 413, 594, 595, 598, and 599.

Table 5.1 Number of motif occurrences at Amomoloc and Tetel, by subphase.

Motif #	Amomoloc			Tetel		
	Tzompan-tepec	Early Tlatempa	Late Tlatempa	Early Tlatempa	Late Tlatempa	Texoloc
M001	3	11	32	-	12	14
M002	-	1	1	-	-	-
M003	-	-	-	-	1	-
M004	6	109	85	9	16	48
M005	-	7	7	-	3	1
M006	-	-	-	-	-	1
M007	-	1	-	1	-	1
M008	-	25	10	5	1	17
M009	-	1	-	-	-	-
M010	-	2	3	-	1	3
M011	-	1	-	-	-	-
M012	-	-	1	-	-	-
M013	1	2	4	-	-	7
M014	-	1	-	-	-	-
M015	-	1	1	-	-	1
M016	-	-	-	-	-	2
M017	-	-	1	-	-	1
M018	-	1	2	-	-	-
M019	-	-	1	-	-	-
M020	-	-	-	-	-	1
M021	-	-	-	-	-	2
M022	-	-	1	-	-	-
M023	-	-	-	-	-	1
M024	1	-	-	-	-	-
M025	-	-	1	-	-	-
M026	-	-	-	-	-	1
M027	-	-	1	-	-	-
M028	-	2	2	2	1	5
M029	-	2	1	-	-	6
M030	-	-	-	-	1	-
M031	-	-	-	-	1	-
M032	-	-	-	-	-	1
M033	-	1	-	-	-	-
M034	-	-	-	-	-	1
M035	-	1	-	-	1	1
M036	-	1	-	-	-	-
M037	-	1	-	-	-	-
M038	-	-	1	-	-	-
M039	-	-	1	-	-	-
M040	-	-	-	1	1	1
M041	-	12	-	-	1	2
M042	-	1	-	-	-	-
M043	-	-	1	-	-	-
M044	-	1	-	-	-	-

M045	-	1	-	-	-	-
M046	-	-	-	-	-	1
M047	-	-	1	-	-	2
M048	-	-	1	-	-	-
M049	-	-	1	-	-	-
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M052	-	-	1	-	-	-
M053	-	1	-	-	-	-
M054	-	1	-	-	-	-
M055	-	-	-	1	-	-
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M057	-	-	1	-	-	-
M058	-	1	1	-	1	1
M059	-	-	-	-	-	1
M060	-	1	3	-	1	1
M061	-	1	2	-	-	1
M062	-	-	1	-	-	-
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M064	-	-	1	-	-	-
M065	-	2	3	-	-	2
M066	-	-	1	-	-	1
M067	-	-	-	1	-	-
M068	-	2	1	-	1	1
M069	-	1	-	-	-	-
M070	-	-	-	-	-	1
M071	-	1	-	-	-	-
M072	-	1	-	-	-	-
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M075	-	1	-	-	-	-
M076	-	1	-	-	-	-
M077	-	2	-	-	-	-
M078	-	1	-	-	-	-
M079	-	-	-	-	-	3
M080	-	1	-	-	-	-
M081	-	-	-	-	-	1
M082	-	-	-	-	-	1
M083	-	-	-	-	-	1
M084	-	-	-	-	-	2
M085	-	-	1	-	-	-
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M285	-	-	1	-	-	-
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M293	-	-	1	-	-	-
M294	-	-	-	-	-	1
M295	-	2	-	-	-	-
M296	-	-	-	-	-	1
M297	-	-	1	-	-	-
M298	-	-	3	-	-	-
M299	-	-	1	-	-	-
M300	-	-	-	-	-	1
M301	-	-	4	-	-	-
M302	-	-	1	-	-	-
M303	-	1	3	-	-	-
M304	-	-	-	-	1	-
M305	-	-	1	-	-	-
M306	-	-	1	-	-	-
M307	-	1	-	-	-	-
M308	-	-	1	-	-	-
M309	-	-	1	-	-	-
M310	-	-	1	-	-	-
M311	-	-	1	-	-	-
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M317	-	-	1	-	-	-
M318	-	-	-	-	1	-
M319	-	-	1	-	-	-
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M321	-	1	-	-	-	-
M322	-	-	-	1	-	-
M323	-	-	1	-	-	-
M324	-	1	-	-	-	-
M325	-	1	-	-	-	-
M326	-	1	-	-	-	-
M327	-	1	-	-	-	-
M328	-	-	-	1	-	-
M329	-	-	1	-	-	-
M330	-	-	1	-	-	-
M331	-	1	-	-	-	-
M332	-	1	-	-	-	-
M333	-	-	-	-	1	-
M334	-	1	-	-	-	-
M335	-	-	-	-	-	1
M336	-	-	-	-	1	-
M337	-	-	1	-	-	-
M338	-	-	-	-	1	-

M339	-	-	1	-	-	-
M340	-	-	1	-	-	-
M341	-	1	-	-	-	-
M342	-	-	1	-	-	-
M343	-	-	1	-	-	-
M344	-	1	-	-	-	-
M345	-	1	-	-	-	-
M346	-	-	1	-	-	-
M347	-	-	-	-	-	1
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M349	-	1	-	-	-	-
M350	-	-	-	-	-	1
M351	-	1	-	-	-	-
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M353	-	-	-	-	1	-
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M385	-	1	-	-	-	-
M386	-	-	-	-	-	1
M387	-	-	-	-	-	1

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M389	-	-	-	-	-	1
M390	-	-	-	-	-	1
M391	-	-	-	-	-	1
M392	-	-	-	1	-	-
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M432	-	-	-	-	1	2
M433	-	-	1	-	-	-
M434	-	-	-	-	-	2
M435	-	1	1	-	-	-
M436	-	-	-	-	1	-

M437	-	1	-	-	-	-
M438	-	1	1	-	-	-
M439	-	-	1	-	-	-
M440	-	1	-	-	-	-
M441	-	1	-	-	-	-
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M447	-	-	-	-	-	1
M448	-	2	2	-	-	3
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M535	-	-	1	-	-	-

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M559	-	-	1	-	-	-
M560	-	1	-	-	-	-
M561	-	-	-	-	1	-
M562	-	-	-	-	2	-
M563	-	-	-	-	1	-
M564	-	-	1	-	-	-
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M566	-	-	1	-	-	-
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M568	-	-	1	-	-	-
M569	-	1	-	-	-	-
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M580	-	1	-	-	-	-
M581	-	-	-	-	-	1
M582	-	1	-	-	-	-
M583	-	1	-	-	-	-
M584	-	-	1	-	-	-

M585	-	-	1	-	-	-
M586	-	-	1	-	-	-
M587	-	-	1	-	-	-
M588	-	-	1	-	-	-
M589	-	-	-	-	-	1
M590	-	-	-	-	-	2
M591	-	-	1	-	1	-
M592	-	-	1	-	-	-
M593	1	-	-	-	-	-
M594	-	-	1	-	-	-
M595	-	-	1	-	-	-
M596	1	-	-	-	-	-
M597	1	-	-	-	-	-
M598	-	-	1	-	-	-
M599	-	-	1	-	-	-
M600	-	-	-	-	-	1
M601	-	1	-	-	-	-
M602	-	-	1	-	-	-
M603	-	-	-	-	-	1
M604	-	-	-	-	-	1
M605	-	-	1	-	-	-
TOTAL	25	377	426	42	115	291

Motif Classification into Categories

The catalog of motifs displays the diverse range of individual motifs at Amomoloc and Tetel. Of the 605 motifs recorded, only 108 of them occur more than once. Yet, it is possible to recognize broad similarities among many of the motifs in the sample. For example, if we add an upper line to Motif 16, then we have created Motif 18; if we double the line in Motif 16, we have created Motif 28 (see Figure 5.1). Essentially, all three individual motifs (Motifs 16, 18, and 28) depict a line curving up toward the rim of the vessel, and it seems reasonable to argue that Motifs 16 through 55 (Figures 5.1 and 5.2) all depict one upcurving line. What varies is how that curving line is executed (incised, grooved, excised, and/or painted); if the curving line is a single line,

or two or more lines together; if horizontal lines outline or meet the curving line; and so on.

While it is important to consider the variability among the motifs, it is also useful to highlight similarities to facilitate comparisons among households and sites, and to identify possible subjects or themes that the individual motifs reference (e.g., Pyne 1976). With this goal in mind, I developed general categories (Motif Categories A through X) to group motifs with similar basic elements (such as, upcurving line, downcurving line, triangle, etc.) (Figure 5.28; Table 5.2). When multiple basic elements combine to create an individual motif (e.g., Figure 5.21), the motif is assigned to multiple motif categories. For example, Motif 567 depicts both Motif Categories G and M (Figure 5.21f). The exception to this is Motif Category X, which is reserved for motifs that only depict continuous horizontal, parallel lines. For instance, although Motif 18 has one continuous horizontal line above the line that curves up, Motif 18 is assigned to Motif Category A only (Figure 5.1).

The categories do not have sharp divisions between them. First, the fragmentary nature of our sample means that we seldom have the opportunity to view a design motif in its entirety. It is easy to see that a small rim sherd depicting a motif classified as Motif Category A (upcurving line) could very well be attributed to Motif Category C (two upcurving lines) or E (one upcurving line, one downcurving line), if only we had recovered more of the vessel. Also, some motif categories blend into one another. For example, it is sometimes difficult to distinguish Motif Category F from N, because the excised blocks and lines of Motif Category N also can be arranged so as to create a step-like motif (e.g., Motif 334 in Figure 5.11). I am not asserting that these categories



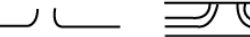
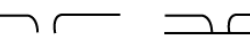
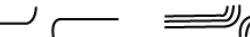



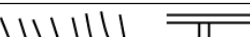
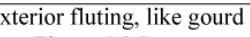





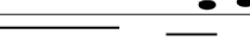




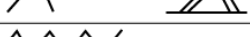
Motif category and varieties	AMOMOLOC			TETEL		Texoloc
	Tzompan-tepec	Early Tlatempa	Late Tlatempa	Early Tlatempa	Late Tlatempa	
A 	4	9	6	13	8	12
B 	0	5	5	4	4	5
C 	4	<1	2	0	5	5
D 	0	3	1	7	2	1
E 	0	2	1	2	2	<1
F 	0	5	5	7	7	2
G 	0	6	9	9	15	17
H 	0	9	8	2	5	5
I 	0	1	1	0	2	5
J exterior fluting, like gourd (see Figure 5.26)	15	1	<1	0	0	3
K 	4	<1	3	4	2	<1
L 	0	2	6	0	4	<1
M 	0	4	9	4	8	<1
N 	0	4	4	7	4	<1
O 	4	<1	2	0	<1	3
P 	0	<1	<1	0	0	1
Q 	0	1	1	2	2	<1
R 	0	<1	2	2	4	3
S 	0	2	<1	0	0	<1
T 	15	1	2	4	2	2
U 	15	<1	<1	0	0	0
X 	38	40	31	33	26	30
<i>Total</i>	n=26	n=420	n=497	n=46	n=133	n=318

Figure 5.28 Percentage of motif category occurrences at Amomoloc and Tetel, by subphase. Note that a rim sherd may depict more than one motif.

Table 5.2 Description of motif categories at Amomoloc and Tetel, including corresponding motif numbers. Note that motif numbers are repeated across categories when multiple motif categories are present on a single vessel.

Motif category	Description <i>(see Figure 5.28)</i>	Motif # <i>(see Figures 5.1-5.27)</i>
A	Upcurving	16-55, 455-462, 464-467, 469-472, 474-491, 493, 517
B	Downcurving	56-78, 473, 474, 486, 487, 491, 494-506, 545, 585
C	Double upcurving	79-93, 244, 507-513, 515, 516, 518
D	Double downcurving	94-108, 519, 520
E	One curving up, one curving down	109-121, 463, 521
F	Zig-zag or stepped	122-155, 419, 459, 461, 485, 498, 506, 522-528, 530-542, 544, 545
G	Scalloping	156-202, 394, 418, 450, 457, 458, 462, 464, 465, 467-469, 480, 491, 496, 497, 512, 513, 515-518, 537-539, 543, 544, 546-577
H	Filled half-circle	203-238, 246, 491, 499, 500, 524, 528-533, 546, 548-550, 552-560, 575, 576, 578-582
I	Vertical line	239-245, 431-441, 468, 470-472, 507, 542
J	Fluting (to resemble a gourd)	448-454, 602-604
K	Star, cross, and/or quatrefoil	246-261, 414-419, 591-593, 605
L	Block	262-279, 413, 480, 481, 483, 501, 502, 505, 506, 519, 521, 525, 527, 528, 534-536, 564, 570, 580, 585
M	Block with two or more parallel lines extending from it in the same direction	248, 249, 251-256, 259-261, 280-309, 359, 416-419, 482, 485, 492, 511, 540, 561-563, 565-569, 582-584, 587, 588
N	Block with one line extending from it (no vertical stacking of blocks)	260, 310-343, 374, 484, 504, 520, 526, 570, 571, 583, 586, 588
O	Circle	256, 258-260, 338, 359, 374, 403, 407, 414, 415, 442-447, 488, 541, 545, 546, 551, 560, 589
P	Non-continuous parallel, horizontal lines	344-350, 453
Q	Arrow	351-359, 418, 489, 498, 540, 582
R	Diagonal line	359-382, 456
S	Scroll	383-388, 414, 460, 476, 477, 495, 508, 509
T	“V”, inverted “V” and/or triangle	260, 357, 389-408, 419, 478, 479, 503, 510, 537, 572
U	Cross-hatching	405, 406, 409-413, 577
X	Continuous parallel, horizontal lines only	1-15, 420-430

necessarily represent types in the minds of the artisans who created them. Rather, the categorization of the motifs is an analytical tool for organizing the hundreds of individual motifs into sets of similar basic elements.

I developed these categories while looking at the motifs on a smaller sample of sherds, recovered after the first excavation season at Amomoloc and Tetel. It is interesting that I added only a couple new motif categories as I increased my sample from about 300 decorated sherds to 1,200 decorated sherds. This suggests that there were not an unlimited number of subjects that artisans depicted on pottery at Amomoloc and Tetel, a topic that I explore further in the following chapter.

CHAPTER 6

Identifying Variability in Motifs at Differing Scales

The decorative motifs at Amomoloc and Tetel are inextricably linked to the pottery vessels that bear them. Accordingly, any discussion of the significance of Middle Formative pan-Mesoamerican motifs must take into consideration the contexts within which such pottery formed part of social practice. It is reasonable to assume that the vast majority of pottery at Amomoloc and Tetel was used in the storage, cooking, and serving of food at the household and supra-household level. Numerous anthropological studies have illustrated the variety of social, economic, and political dynamics at play in the production and consumption of food, including wealth, status, identity, and more (e.g., Blitz 1993; Dietler and Hayden eds. 2001; Mills ed. 2004; Mintz 1985; Pollock 1983; Twiss ed. 2007; Welch and Scarry 1995).

In this chapter, I approach the question of how pan-Mesoamerican motifs functioned in Middle Formative societies from a number of differing social and spatial scales. First, I provide the social context for decorative motifs by examining ceramic assemblages in terms of food practices at the household and community level. I consider the following: What food preparation and consumption practices did the inhabitants of Amomoloc and Tetel engage in? Did all households participate in the cooking and serving of food in a similar manner? What percentage of ceramic assemblages was

decorated? How might variability or homogeneity in vessel shape and/or decoration reflect household and community level social dynamics?

After assessing synchronic and diachronic variability in the use of pottery in general, both decorated and undecorated, I then undertake a more detailed examination of the motifs, as well as the specific ceramic types and vessel shapes they are associated with. I examine what motifs are most common and evaluate whether variability exists in the kinds of motifs depicted at different sites. What, if anything, do the motifs represent? Are rules or structure discernable in the composition of motifs that may illuminate the kind of information they convey? Do these patterns change over time?

Finally, I approach the motif data at the larger regional scale by comparing the motifs at Amomoloc and Tetel to other sites in Tlaxcala, the Basin of Mexico, Morelos, the Tehuacán Valley, and the Valley of Oaxaca.

Variability in the Ceramic Assemblages

Anthropological studies indicate that ceramic vessels may be used for a number of different purposes, including cooking, food preparation, storage, serving, and transportation (Lesure 1998:20; Reina and Hill 1978:24-25; Rice 1987:208-210). While many factors affect the shape of a vessel, the function of a vessel and its form are highly correlated (Lesure 1998:20; Rice 1987:236-237; Sinopoli 1991:84-85). Middle Formative ceramics at Amomoloc and Tetel come in a variety of shapes, yet three general classes of vessel shape are identifiable: tecomates (Figure 3.3x, y), jars (Figure 3.3s-w), and bowls (Figures 3.1b-i, 3.2j-r).

Tecomates and jars were likely used for the cooking and storing of food and liquids, while bowls were primarily used for the serving of food and liquids (Clark and Gosser 1995:215; Coe and Flannery 1967:28-30, 80-81; Lesure 1998; Rosenswig 2010:148, 151). In addition to vessel shape, evidence for sooting and abrasion on some tecomates and jars at Amomoloc and Tetel (particularly on the interior bases of large jars) supports the proposition that their function was related to cooking and/or the preparation of food. The bowls in our sample generally do not have evidence for cooking; many are slipped and decorated, suggesting a function of food presentation, while far fewer tecomates or jars are decorated.

Ethnographic studies of small-scale, kin-based societies suggest that the presentation and sharing of food, sometimes involving large groups, can be an important arena for building political alliances and seeking prestige, as well as for reinforcing social relations of solidarity (Blitz 1993:84; Dietler and Hayden 2001; Lesure 1998:19). Differences in the proportion of serving vessels relative to the number of cooking vessels at Amomoloc and Tetel might indicate a greater emphasis on food presentation at certain locations within the sites (Blitz 1993:84; Drennan 1976a; Rosenswig 2010; Welch and Scarry 1995), providing insight into the social context that motifs were used in.

As mentioned earlier, the sample dating to the Tzompantepec phase (ca. 900-800 B.C.) is limited to one bell-shaped pit at Amomoloc (Feature A46), suggesting the existence of one possible household unit (Amom-TZ-1). This pit feature is large, with a depth of 65 cm and a diameter of 2.54 m at its base, and was filled in rather quickly with a variety of household refuse. The ceramic sample from Feature A46 consists of 108 rims. Serving vessels constitute 53% of the assemblage, and 33% of serving vessels were

decorated (Figure 6.1a; Table 6.1). This constitutes the lowest proportion of serving to cooking vessels for all time periods, as well as the lowest percentage of decorated vessels.

During the Early Tlatempa subphase (ca. 800-725 B.C.) at Amomoloc, three likely residences were identified, two in close proximity of each other in the southern portion of site, and the other approximately 75 m away. Compared with the previous phase, we see an overall increase in the proportion of serving to cooking vessels at the village, and the percentage of serving vessels that were decorated increased significantly as well (Figure 6.1a). Household Amom-ET-1, located in the same area of the site as the single Tzompantepec feature, had the highest percentage of serving to cooking vessels (65%), and the highest percentage of decorated serving vessels (54%) for the time period, though the differences among households were not great.

During the Late Tlatempa subphase (ca. 725-650 B.C.) at Amomoloc, we found evidence for three to six possible households, five of which I consider here (Amom-LT-1 through Amom-LT-5). The proportion of serving to cooking vessels again increased across the site, with serving vessels constituting 71-75% of the total ceramic assemblages at all households (Figure 6.1a). The highest percentage of decorated serving vessels was associated with Household Amom-LT-1 (72%), located in the same area of the site as Households Amom-TZ-1 and Amom-ET-1, while the percentage of decorated serving vessels at other households varied greatly. All the households in our Late Tlatempa sample at Amomoloc seem to have placed a greater emphasis on the presentation of food than earlier phases, but not all households decorated those serving vessels to the same degree. Household A-LT-5 has quite a low proportion of decorated to undecorated

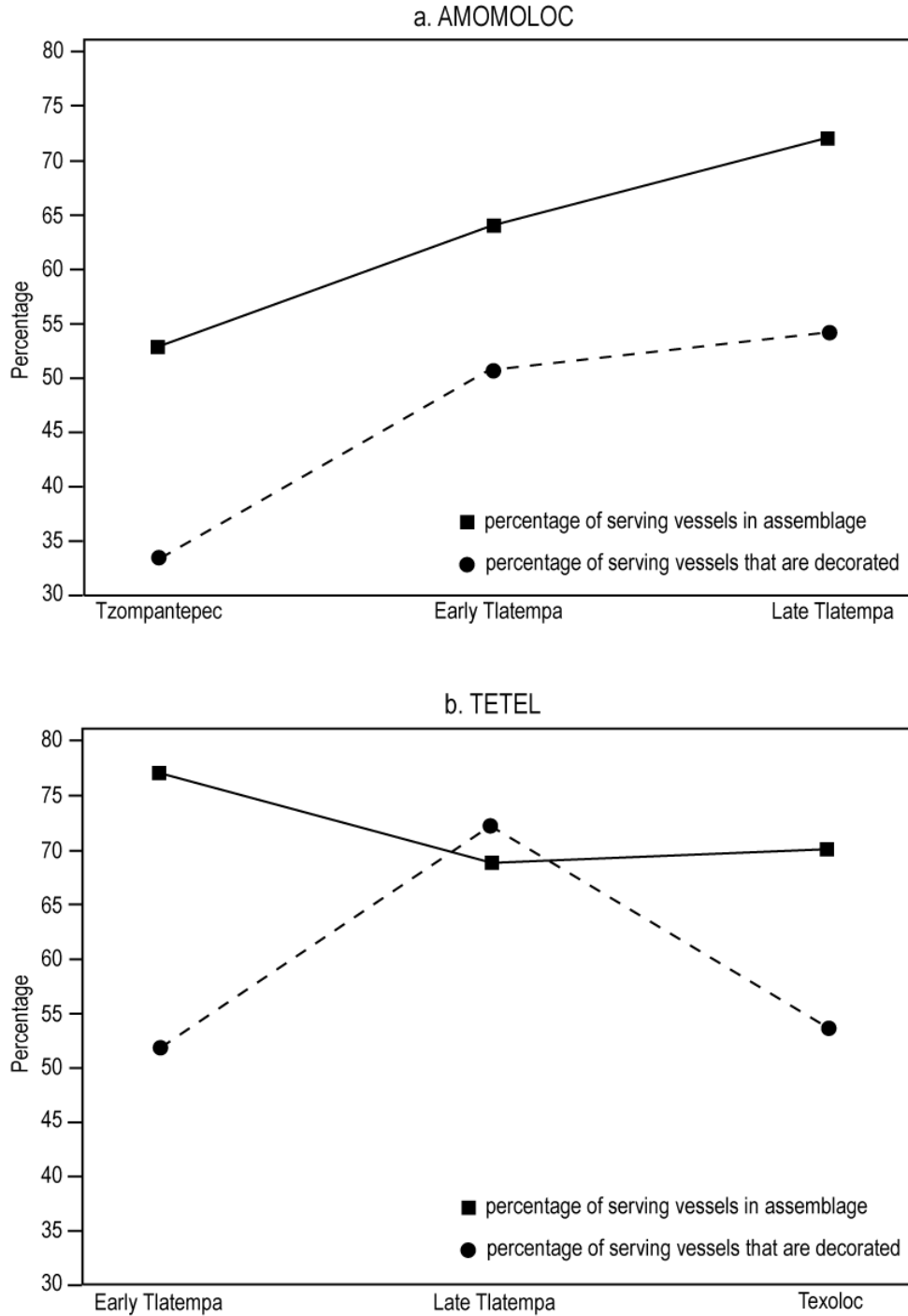


Figure 6.1 Graph of chronological trends in proportions of serving vessels and decorated serving vessels at Amomoloc (a) and Tetel (b). The percentage of serving vessels was calculated for each subphase by dividing the number of serving vessels by all rim sherds for the subphase. The percentage of decorated serving vessels was calculated by dividing the number of decorated serving vessels by all serving vessels for the subphase.

Table 6.1 Rim sherd count data for individual households at Amomoloc.

	AMOMOLOC								
	TZ-1	ET-1	ET-2	ET-3	LT-1	LT-2	LT-3	LT-4	LT-5
Total rim sherds	108	809	282	28	111	231	484	155	71
Cooking vessels	51	286	102	12	30	66	138	45	18
Serving vessels	57	523	180	16	81	165	346	110	53
Decorated serving vessels	19	280	76	8	58	97	194	45	16
A ¹	1	24	10	2	6	4	16	3	0
B	0	12	7	1	4	5	10	6	0
C	1	3	1	0	2	2	4	2	0
D	0	11	1	0	1	0	3	1	0
E	0	3	5	0	0	1	2	2	0
F	0	18	3	0	3	12	10	2	0
G	0	20	3	1	9	8	23	4	0
H	0	33	5	0	4	11	24	3	0
I	0	4	2	0	0	0	3	0	2
J	4	4	2	0	1	0	3	0	0
K	1	3	1	0	3	4	7	1	0
L	0	7	1	0	2	9	16	1	1
M	0	15	0	0	3	11	26	4	0
N	0	13	5	0	2	4	12	2	0
O	1	2	0	0	3	3	5	0	1
P	0	3	0	0	0	1	0	0	0
Q	0	4	1	0	0	4	1	0	0
R	0	2	0	1	0	2	4	1	1
S	0	8	0	0	0	0	2	1	0
T	4	6	0	0	2	1	3	1	1
U	4	3	1	0	0	0	1	0	0
X	10	126	40	3	23	37	67	20	8
Most common ²	J, T, U	H	A	A	G	F	M	B	I

Notes: (1) Number of examples of Motif Category A; (2) Most common motif category represented at the household, excluding X (simple lines).

serving vessels, with just 30% of serving vessels being decorated.

At Tetel, the pattern is somewhat different. During the Early Tlatempa subphase, our sample is limited to one household (Tetel-ET-1), suggested by the existence of a bell-shaped pit (Feature A12). This storage pit was likely located within the walls of the house associated with Platform 1, and contained 98 rim sherds, among other artifacts.

Household Tetel-ET-1 had a high percentage of serving to cooking vessels (77%), over half of which were decorated (Figure 6.1b; Table 6.2). Although we do not have other households in our sample at Tetel for this time period, we note that this proportion is higher than any household at Amomoloc for all time periods.

During the Late Tlatempa subphase at Tetel, there was evidence for two to four households, two of which I consider here. The household associated with Platform 1 (Tetel-LT-1) continued to exhibit a high percentage of serving to cooking vessels (68%), almost three-fourths of which were decorated (Figure 6.1b). Household Tetel-LT-2 also had a high percentage of serving to cooking vessels (72%), but a lower percentage of its serving vessels were decorated (61%). These proportions suggest a high degree of activity associated with the serving of food in decorated vessels, comparable to that taking place at Amomoloc during the Late Tlatempa subphase.

During the subsequent Texoloc phase (ca. 650-500 B.C.) at Tetel, there is evidence for the existence of two possible households. The first household (Tetel-TX-1), associated with Platform 1, continued using a higher percentage of serving vessels relative to cooking vessels (68%), similar to that calculated for this area of the site in the previous phase, but a lower percentage of serving vessels were decorated (51%) (Figure 6.1b). This suggests a slight decrease in the importance of decorated serving vessels at Platform 1. The household associated with Platform 2 (Tetel-TX-2), which was likely constructed in the early part of Texoloc phase, has a similarly high percentage of serving to cooking vessels (75%), and a slightly higher percentage of decorated serving vessels (59%) than Household Tetel-TX-1.

To summarize, at Amomoloc, we see a steady increase in the percentage of

Table 6.2 Rim sherd count data for individual households at Tetel.

	TETEL				
	ET-1	LT-1	LT-2	TX-1	TX-2
Total Sherds	98	193	32	549	157
Cooking vessels	23	61	9	174	40
Serving vessels	75	132	23	375	117
Decorated serving vessels	39	97	14	192	69
A ¹	6	9	1	26	12
B	2	5	0	11	4
C	0	6	0	13	4
D	3	3	0	3	1
E	1	2	0	3	0
F	3	7	2	5	1
G	4	19	1	36	18
H	1	6	1	12	5
I	0	2	1	12	5
J	0	0	0	7	2
K	2	3	0	1	0
L	0	4	1	1	0
M	2	11	0	2	1
N	3	2	3	1	1
O	0	0	1	10	1
P	0	0	0	4	0
Q	1	2	0	1	0
R	1	5	0	8	3
S	0	0	0	3	0
T	2	2	0	5	2
U	0	0	0	0	0
X	15	27	7	71	23
Most common ²	A	G	N	G	G

Notes: (1) Number of examples of Motif Category A; (2) Most common motif category represented at the household, excluding X (simple lines).

serving to cooking vessels over time, with an increasing proportion of decorated serving vessels as well, implying a heightened emphasis on the presentation of food, over its preparation for nutritional purposes (see Rosenswig 2010:163). Furthermore, the location at Amomoloc with evidence for the longest continuous occupation (Amom-TZ-1, Amom-ET-1, and Amom-LT-1) has a slightly higher percentage of decorated serving vessels than other households at the site throughout its history. Just as Drennan (1976a) found at

the Fábrica San José site, it is possible that this household had a relatively higher status than other, more recently established households.

At Tetel, the percentage of serving to cooking vessels was highest in the Early Tlatempa subphase (77%), and then decreased slightly over time to about 70% during the Late Tlatempa and Texoloc phases. For the Early Tlatempa subphase this represents a higher percentage than that associated with Household Amom-ET-1 (65%) for the same time period, yet the two villages have a similar degree of emphasis on food service during the Late Tlatempa subphase. Rather than a steady increase in the percentage of decorated serving vessels (as we found at Amomoloc), a cyclical pattern was noted at Tetel. We see an increase in decorated serving vessels from the Early to Late Tlatempa subphases, followed by a decrease in the Texoloc phase. A community wide emphasis on food service appears to have been important throughout Tetel's history, with only a slight decrease in the use of decorated serving vessels toward the end of its occupation.

Variability in the Distribution of Motifs

Having identified general synchronic and diachronic trends in the proportions of decorated serving vessels at Amomoloc and Tetel, I now evaluate patterning in the distribution of motifs at the community level, focusing on which motifs were most common for each time period and site. Decoration during the Tzompantepec phase was rather simple. The majority of decorated vessels are white-slipped (78%). This pattern varies in later time periods, though white vessels remain an important component of the complex of decorated vessels throughout the Middle Formative in Tlaxcala. The most

commonly decorated vessel shapes during the Tzompantepec phase include bowls with outleaning walls, simple bowls, and small jars (see Figures 3.1-3.3).

For all subphases, the presence of one to five horizontal, parallel lines running circumferentially along the rim of a vessel (either on the exterior just below the lip, on the rim itself, or on the interior just below the lip) is the most common decoration (Motif Category X). The Tzompantepec phase is no exception, with 38% of motifs being simple lines. It is not surprising that we would find a higher proportion of simple lines to “line break” motifs because of the fragmentary nature of the samples from Amomoloc and Tetel (the majority of rims represent less than 20% of the entire vessel). My focus from this point forward is on motifs involving more than just simple horizontal lines.

During the Tzompantepec phase at Amomoloc, the most common motifs are triangles (Motif Category T), cross-hatching (Motif Category U) and fluting on the exterior of vessels, perhaps intending to mimic gourds (Motif Category J) (Table 6.1). Triangles and cross-hatching were found exclusively on the exteriors of white jars and bowls (e.g., Figures 3.15a, 3.19a, b) and one red-on-white bowl (Figure 3.25), while fluting was less restricted and found on white, brown, and differentially-fired jars and bowls (e.g., Figure 5.26b). Motifs that we would consider classic “double-line-breaks,” such as upcurving or downcurving lines (e.g., Motif Categories C and D), were limited to two examples (Motifs 24 and 89; Figures 3.15g and 3.16), both of which were found on Yauhtentzi White dishes. Thus, the variety in motifs that we see later during the Tlatempa phase is notably absent during the Tzompantepec phase at Amomoloc.

Beginning with the Tlatempa phase, there is a dramatic increase in the size of our sample and the variety of decoration on pottery. The dominant decorated type and form

is still the white open bowl, with motifs along the interior rim of the dish. But, we have greater diversity in the kinds of motifs displayed and the techniques for displaying them. In the Tzompantepec phase, decoration is almost exclusively incised and rather simple. But in the Tlatempa phase, decoration is incised, excised, or painted on vessels (or a combination of those techniques), and there are more elaborate motifs with multiple components, not just “line breaks.”

At both Amomoloc and Tetel during the Early Tlatempa subphase, the majority of decorated vessels are Yauhtentzi Red-on-White (53% of decorated vessels at Amomoloc, 49% at Tetel) and Yauhtentzi White vessels (39% at Amomoloc, 36% at Tetel). The most commonly decorated vessel shapes are bowls with beveled rims and bowls with outcurving rims (Figure 3.1c, g). Simple bowls and closed bowls with incurving walls are often decorated as well (Figures 3.1b and 3.2o). Small composite silhouette cups with elaborate exterior decoration (e.g., Figure 6.2) are not common and are only found associated with some households. Household Amom-ET-1, the only household at Amomoloc during this subphase with such cups, has six examples, including Motifs 418 and 539 (see Figure 6.2, as well as Figure 5.25a, c). At Tetel, the single household identified for the subphase (Tetel-ET-1) possessed just one decorated composite silhouette cup, displaying Motif 169 on its interior rim (Figure 5.6) and Motif 212 on the exterior body (Figure 5.7).

During the Late Tlatempa subphase, Yauhtentzi White (54% of decorated vessels at Amomoloc, 42% at Tetel) is still the predominant decorated ceramic type, although Yauhtentzi Red-on-White diminishes in importance (26% of decorated vessels at Amomoloc, 15% at Tetel). A new type emerges as an important medium for decoration,



Figure 6.2 Decorated composite silhouette cups from Amomoloc. (Left to right) (a) Motif 587 (Household Amom-LT-3); (b) Motif 308 (Household Amom-LT-2); (c) Motif 418 (Household Amom-ET-1); and (d) Motif 540 (Household Amom-LT-2).

San José White-and Brown (15% of decorated vessels at Amomoloc, 22% at Tetel). Commonly decorated vessel shapes are similar to the Early Tlatempa subphase and, again, decorated composite silhouette cups have a limited distribution. At Amomoloc, Household A-LT-2 has five examples, including Motifs 308, 309, and 540 (see Figure 6.2, as well as Figures 3.24a, 5.24 a, b), while Household Amom-LT-3 also has five examples, including Motif 419 (Figure 5.25b). These cups may represent a different class of serving ware that only some households used in certain situations, though not all cups are as elaborately decorated as the examples depicted in the rollouts of Figures 5.24 and 5.25.

The most common motif category during the Early Tlatempa subphase at both Amomoloc and Tetel is a single upcurving line (Motif Category A), but other motifs, especially different forms of scalloping (Motif Categories G and H), are also very popular (Table 6.1). During the Late Tlatempa subphase at both sites, all these categories continue to be common, and decorations in the form of excised lines and blocks (Motif Category M) rise in importance. More interesting, though, is that while there are broad similarities across households, almost every Late Tlatempa household has a different motif category as the most common one (Tables 6.1 and 6.2). For example, scalloping (Motif Category G) is the most common at Household Amom-LT-1, stepped motifs (F) are the most common at Household Amom-LT-2, while excised blocks (M) are the most common at Household Amom-LT-3. Each household has pottery decorated with motifs representing almost every motif category, but in varying frequencies and with different individual motifs.

The Texoloc phase at Tetel marks a dramatic shift in the ceramic types decorated at the site. Although white vessels are still common (23% of decorated vessels), Mesitas Brown vessels become the dominant decorated type (29%), with Potrero Red-on-Brown also emerging as important (13%). There is a similar change in vessel shapes, as bowls with downcurving-everted rims and composite silhouette bowls begin to dominate the assemblage (see Figures 3.1e, 3.2q). Small composite silhouette cups with exterior decoration are absent. Motifs with one upcurving line and scalloping (Motif Categories A and G) increase in importance, and more elaborate designs involving excised blocks and stars or crossed bands almost disappear (K, L, M, N) (Table 6.2). Most of the same motif categories present in the Tlatempa phase continue during the Texoloc phase, so the

same potential for variability was at hand; yet greater homogeneity is observable in the distribution of motifs between households. Tetel's two Texoloc households have similar proportions of each motif category, as opposed to the variability among households noted for the Tlatempa phase.

Over time, there are changes in the kinds of motifs depicted at Amomoloc and Tetel, as well as variability in their distribution across the sites. During the Tzompantepec phase, decoration was simpler, emphasizing continuous horizontal lines, triangles, and cross-hatching, and only two double-line-breaks were noted. With the transition to the Tlatempa phase, there was some continuity in which ceramic types and shapes were decorated, but greater diversity in the kinds of motifs depicted and the combinations of different motifs on individual vessels. In the Early Tlatempa subphase, horizontal lines that curve up, scalloping or wavy lines, and excised half circles were most common. These motifs remained very popular throughout the Late Tlatempa phase, with the addition of excised block and lines, sometimes arranged to create or highlight four-pointed stars, crossed bands or flowers. Throughout the Tlatempa phase, each household seemingly had access to a similar range of motifs, but emphasized different ones.

The Texoloc phase represented a change from the previous period not only in the ceramic types and shapes that were decorated, but in the more homogeneous distribution of motifs at Tetel. White open bowls were no longer the dominant decorated vessel, as brown and red bowls with downcurving-everted rims and composite silhouettes became more common. Horizontal lines that curve up and scalloping were the most common motifs throughout the site, and decorations combining motifs from multiple motif

categories on the same vessel became less common than during the Late Tlatempa subphase.

Interpreting the Content of the Motifs

Given the diversity of motifs depicted on pottery at Amomoloc and Tetel, what iconographic subjects, if any, did the motifs refer to? In the Valley of Oaxaca, Flannery and Marcus (1994:147) suggest that designs on pottery of this period might be stylized depictions of supernatural forces such as "Earth" or "Sky" (see also Marcus 1989; Spencer and Redmond 2000). Although Middle Formative Tlaxcalan motifs are less clearly linked to Early Formative iconography than examples from the Valley of Oaxaca, I look for similarities between Tlaxcalan motifs and pan-Mesoamerican motifs from the later Early Formative period. Then I evaluate the ceramic decorations at Amomoloc and Tetel in terms of their structure and composition to look for evidence of consistency in how motifs are depicted (see Hegmon 1995:28-29; Robb 1998:341). Replication and redundancy in imagery are common ways of helping the viewer understand what is being depicted (Marcus 2007b:62), and we would expect important elements to recur in consistent ways in our data sample as well, if they refer to specific subjects or themes.

At first glance, the motifs from Amomoloc and Tetel cataloged in Chapter 5 appear more stylized and abstract than many examples of the Early Horizon style (e.g., Joralemon 1971:42, 48, 50, 81; Niederberger 1987:Figure 514). It is hard to identify anything that in and of itself looks like a jaguar or serpent, for example. But an important principle in later Early Formative imagery was *pars pro toto*, a part standing for the whole, so that, "a jaguar's canine teeth could stand for the jaguar, or a crocodile's foot

could stand for the crocodile” (Marcus 2007a:84; see also Pohorilenko 1996:124). Many of our motifs are similar to parts of Early Horizon motifs. For instance, the stars and crossed bands (Motif Category K) are clearly derived from Early Formative imagery (e.g., Niederberger 1976:Lámina XLV6; Joralemon 1971:14[motif 98], 15[motif 116]). The most common element, the horizontal line that curves up or down (Motif Categories A-E), appears as part of the stylized “Olmec dragon” (Covarrubias 1957:Figure 9; Joralemon 1971:36) or “fire serpent” (Flannery and Marcus 1994:141) motif.

While Middle Formative Tlaxcalan motifs do seem to contain some elements of Early Horizon imagery, is there other evidence to suggest the motifs from Amomoloc and Tetel represent specific subjects? If the motifs were iconographic, we would expect them to contain “clear, purposeful messages aimed at a specific target population” (Plog 1995:370)—the replication and redundancy that Marcus (2007b:62) refers to. Thus, I examined the motifs for organizing principles that potters may have followed in depicting motifs and organizing them into a compositional whole, i.e., a recognizable structure that would have helped others identify iconographic subjects when viewing the pottery.

First, it seems likely that there was a limited set of acceptable decorative themes available to potters at Amomoloc and Tetel. This is suggested by the fact that the motif categories developed to organize the motifs when the sample was just 300 rim sherds did not have to be expanded as the sample increased to 1,200 rim sherds. Yet it is possible to create much of the variation in the motifs by rearranging or transforming a few basic elements (e.g., horizontal lines and curving lines) (Figure 6.3). If individual motifs at this scale referenced specific subjects, we might expect actual occurrences to be grouped on this diagram. The pattern suggests that multiple possibilities within an overarching

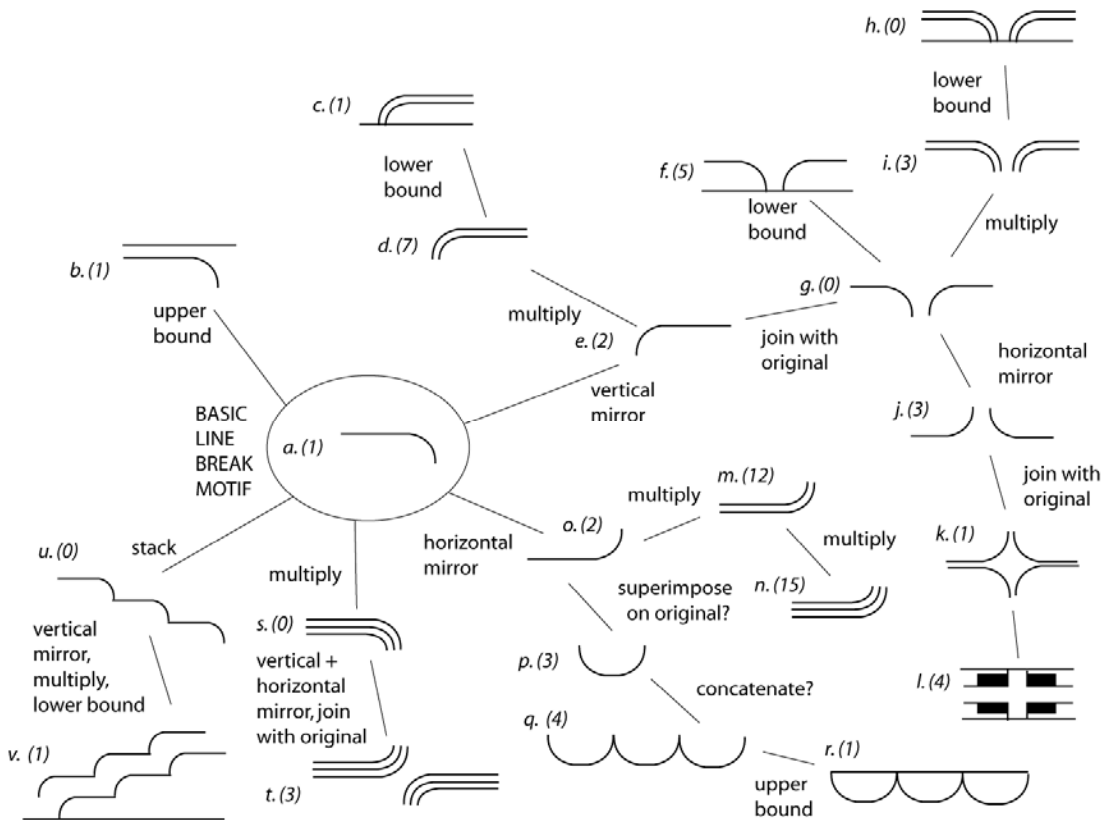


Figure 6.3 Example of possible transformations of the basic line break motif. The number of occurrences of individual motifs is given in parentheses next to each letter; note that only exact copies of motifs in the sample are counted.

decorative tradition were acceptable when creating motifs. It is hard to imagine that such variability could promote the recognition of specific subject matter unless all of it referenced the same thing.

It might be the case that individual motifs added up to something at the compositional level. Focusing on 42 complete or semi-complete vessels in the sample, there seems to be a pattern of endlessly rearranged transformations of individual motifs with no systematic repeated relations among them (e.g., Figures 3.21a, 3.27b, 3.34, 5.24b, 5.25a, b). For example, a motif is most likely to be repeated three times along the

interior rim of a vessel, while repetition of two or four times is most common for exterior decoration. There is little relation between interior rim and interior base design composition. In our sample, stars on the interior base of vessels have four, five, or six points, some with crosses or cross-hatching within them; there are also circles with excised grids (grater bowls); and none correlate with specific motifs or division of space on the interior rim.

If these decorations do refer to iconographic themes, then the similarities in the motifs to Early Formative imagery suggest that the subject was likely supernatural. Yet the endless variability in both individual motifs and how they were arranged on vessels make it difficult to imagine how multiple subjects would be clearly conveyed. Rather, the motifs seem to reference each other stylistically (e.g., Lesure 2005), evoking supernatural themes in a general way. In contrast, other media at Amomoloc and Tetel do reference specific subjects (e.g., opossums and the Old God of Fire are readily identifiable on different kinds of censers). Thus, the variability in imagery on pottery suggests a form of symbolic variation (Wiessner 1983:256), referencing supernatural themes in a “quasi-iconic” manner (Lesure et al. 2011), as opposed to the clearly iconographic motifs of the Early Formative.

Like the Early Horizon style, Middle Formative double-line-break motifs similar to those found in Tlaxcala, were distributed widely across Mesoamerica. In the concluding chapter, I will compare patterns in motif use at Amomoloc and Tetel to broader macro-regional trends, to evaluate the social significance of these widespread—yet diverse—motifs within the context of an increased focus on food service and decoration by the Late Tlatempa subphase in Tlaxcala.

CHAPTER 7

The Motifs of Amomoloc and Tetel in Broader Perspective

Household data at Amomoloc and Tetel indicate an increasing focus on food service and the decoration of pottery from the Tzompantepec phase through Late Tlatempa subphase. During the Late Tlatempa subphase in particular, there was much variability and play in how double-line-breaks were depicted, within a defined set of acceptable decorative motifs. All households apparently had access to a similar repertoire of motifs, yet chose to emphasize certain ones slightly more than others. During the Texoloc phase, there was a small decrease in the proportion of decorated serving vessels and evidence for increased homogeneity in the kinds of motifs depicted on pottery, coinciding with the emergence of larger regional centers with plazas and monumental architecture, like Xochitécatl, located just 30 km to the south of Tetel.

During the Early Formative period, widespread shared motifs of the Early Horizon style were found at regional centers throughout Mesoamerica, the product of long-distance ties that chiefly elites sought after in competition for prestige goods and esoteric knowledge (e.g., Flannery and Marcus 2000; Helms 1979; Niederberger 2000). No one region possessed the entire repertoire of design motifs, as multiple centers contributed to the richness and diversity of motifs of this competitive interaction sphere (see Flannery and Marcus 2000:29). Furthermore, pan-Mesoamerican motifs did not

have a strong presence at smaller villages during the Early Formative, but were restricted to large villages with emerging elites (Flannery and Marcus 1994:381). Early Horizon style motifs are notably absent from the ceramics of the Tehuacán Valley, for example, where complex political structures did not develop until later in the Formative period (see MacNeish et al. 1970:41-57; Flannery and Marcus 1994:381).

During the Middle Formative, pan-Mesoamerican double-line-breaks are found at larger centers such as Xochitécatl, Chalcatzingo, and others, as well as at smaller villages like Amomoloc and Tetel. I have examined variability in the use of these shared motifs at the local level for Amomoloc and Tetel, and now evaluate variability at the macro-regional level. In the Valley of Oaxaca toward the later part of the Early Formative and into the Middle Formative, smaller sites like Fábrica San José, Tierras Largas, and Abasolo shared more motifs with San José Mogote than would have been predicted from the distance between them, likely due to increased interaction between those sites and the ceremonial center (Plog 1976:270). Also, double-line-break motifs at San José Mogote were more similar to those at Tlapacoya-Zohapilco in the Basin of Mexico than Chalcatzingo in Morelos, even though Morelos is no farther from Oaxaca than the Basin of Mexico (Flannery and Marcus 1994:377-379). What does the patterning in motifs at Amomoloc and Tetel suggest about their participation in regional and interregional networks?

As noted in the introductory chapter, motif variability has not been the focus of ceramic publications for most regions in Mesoamerica. Thus, I make general observations regarding the similarities and differences between the motifs of Amomoloc

and Tetel, and those reported for the site of Xochitécatl, the Basin of Mexico, Morelos, the Tehuacán Valley, and the Valley of Oaxaca.

Strong Ties with Xochitécatl, Tlaxcala

By the Texoloc phase, Xochitécatl was a large ceremonial center, the core of which covered approximately 12 ha, though there is evidence for earlier occupation in the area as many of the ceramic types found in construction fill date to the Tlatempa phase (Serra Puche et al. 2004) (see Figure 1.1). Located approximately 30 km south of Tetel, Xochitécatl is the closest site to Amomoloc and Tetel for which we have published ceramic data (Serra Puche et al. 2004). Considering the strong ties in ceramics and motifs between the large center of San José Mogote and certain smaller villages surrounding it, it is not surprising that Amomoloc and Tetel share with Xochitécatl almost all the same ceramic types during the time periods under consideration. We would also expect the motifs on pottery at Xochitécatl to be very similar to those at Amomoloc and Tetel.

Though we do not have specific count data, many of the same motif categories represented at Amomoloc and Tetel are noted at Xochitécatl (Figure 7.1). On white bowls similar to those of our Yauhtentzi White variety, horizontal lines that curve up and down (Motif Categories A-E), scalloping lines (G), filled semi-circles (H), and excised blocks and lines (M-N) appear to be common (Figure 7.1a-x; see also Serra Puche et al. 2004:Figures 15, 16, Fotografía 22). In fact, our excavations have documented a couple examples of exact motif replications (Figure 7.1c, d, j, m). Decorations on the interior bases of white bowls in the form of simple stars, similar to those at Amomoloc and Tetel,

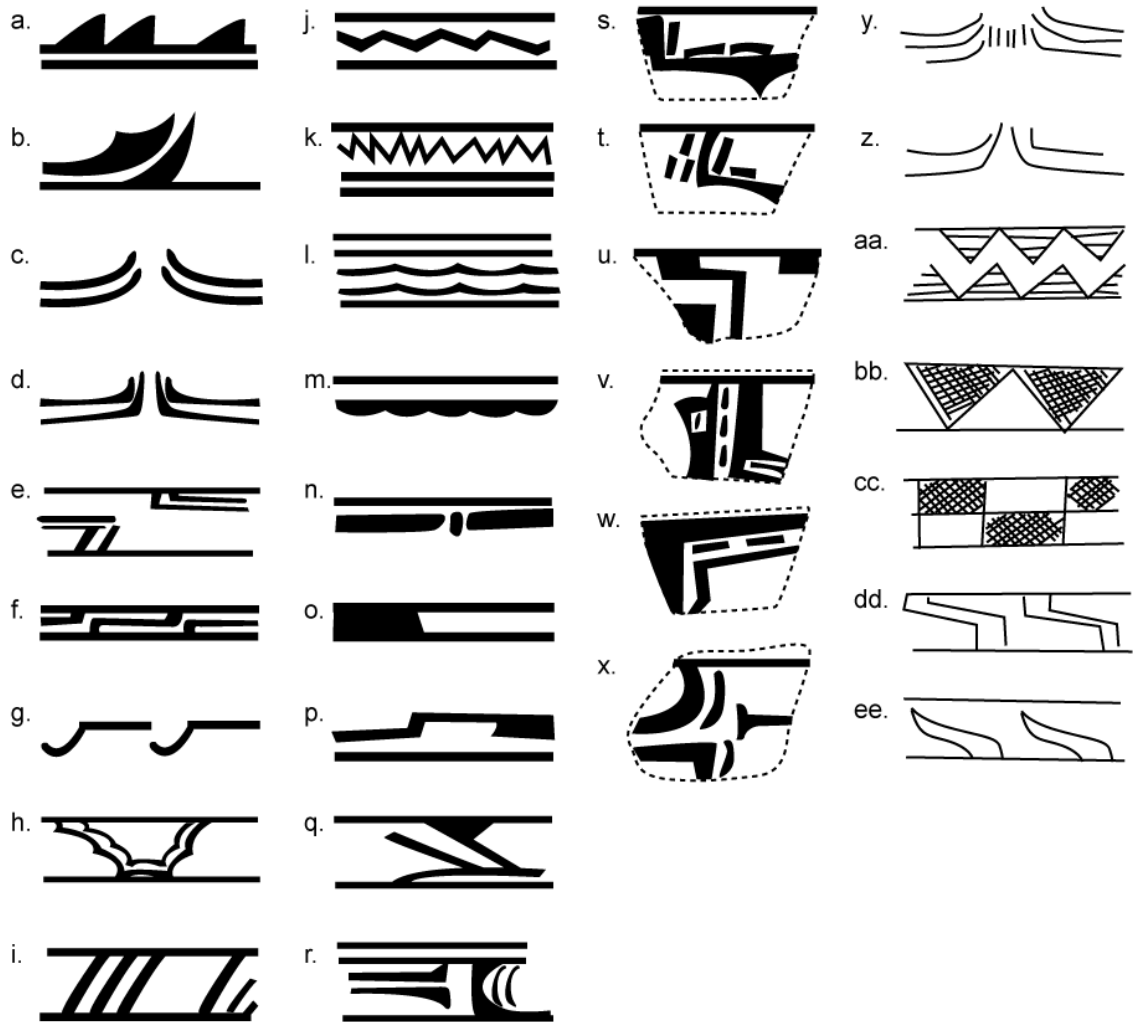


Figure 7.1 Motifs at the site of Xochitécatl, Tlaxcala. Designs on (a-x) white bowls (tipo Blanco esgrafiado); (y, z) brown bowls (tipo Café esgrafiado); and (aa-ee) black bowls (tipo Negro esgrafiado). Note that (c) and (d) are almost exact copies of Motif 88 (see Figure 5.3); (j) is an exact copy of Motif 173 (see Figure 5.6); and (m) is an exact copy of Motif 206 (see Figure 5.7) (redrawn from Serra Puche et al. 2004:Figuras 15, 20, 22, Fotografía 22).

are also catalogued in the inventory from Xochitécatl (Serra Puche et al. 2004:Figura 15c); the more elaborate grater bowls and sunbursts found in the Basin of Mexico and Morelos (e.g., Cyphers Guillén 1992:Figura 3.14; Niederberger 1987:Figure 585) are notably absent. Another type at Xochitécatl, *Café esgrafiado*, is decorated with motifs that exhibit strong similarities to those found on Mesitas Brown bowls at Tetel during the Texoloc phase, with several examples of line-breaks curving up to meet each other (Motif Category C), as well as wavy lines (G) (Figure 7.1y, z; see also Serra Puche et al. 2004:Figuras 22, 23).

There are some interesting differences between Xochitécatl, Amomoloc, and Tetel. For Xochitécatl, there are no illustrations of elaborately decorated vessels like the small composite silhouette cups found at Amomoloc and Tetel (e.g., Figure 5.25). Decorated red-on-white open bowls, displaying some of the more playful designs at Amomoloc and Tetel during the Tlatempa phase, do not appear to have been common at Xochitécatl, as just one decorated red-on-white bowl with two wavy lines on the interior rim is illustrated (Serra Puche et al. 2004:Lámina 3[lowermost sherd]). Xochitécatl also seems to have employed excised lines and blocks (Motif Categories K-M) in a somewhat different way than Amomoloc and Tetel, and there are several motifs at Xochitécatl that, while reminiscent of motifs at Amomoloc and Tetel, do not appear at Amomoloc or Tetel, and vice versa (e.g., Figure 7.1q-x).

Another important difference between Xochitécatl and the small villages of Amomoloc and Tetel was the greater presence of imported ceramic wares at Xochitécatl. Both Amomoloc and Tetel had limited access to Fermín Fine Gray vessels during the Tlatempa phase (four sherds at Amomoloc, one sherd at Tetel) and no imported sherds

during the Texoloc phase. Over 800 sherds of Gris fino, which Serra Puche et al. (2004:97) identify as originating in the Valley of Oaxaca, were found at Xochitécatl, as well as two other types of imported gray wares. A total of 28 sherds, attributed to three other imported types (Naranja granular, Blanco con decoración negativo, and Café negativo) at Xochitécatl, were identified as coming from the Basin of Mexico (Serra Puche et al. 2004:100-104). Xochitécatl seems to have been more connected to the Valley of Oaxaca than the Basin of Mexico, which is interesting considering the Valley of Oaxaca is over 200 km farther from central Tlaxcala than the Basin of Mexico. Since Tetel has no imported sherds during the Texoloc phase, it is possible that Xochitécatl was able to restrict connections between smaller villages and other regional centers during this time period, although neither Amomoloc nor Tetel had access to much foreign pottery in earlier phases.

Ties with the Basin of Mexico and Morelos

Sites within the Basin of Mexico are located approximately 100 km west of Amomoloc and Tetel; Chalcatzingo in Morelos is also approximately 100 km away (Figure 1.1). There are some general similarities in the ceramics of the two areas to each other and to Amomoloc and Tetel, although many more ceramic types overall are present at Tlapacoya-Zohapilco and Chalcatzingo than in Tlaxcala (Cyphers Guillén 1987, 1992; Niederberger 1976). Where we note the most similarities are in certain white wares, such as Cesto Blanco Tardío in the Basin of Mexico and Amatzinac Blanco at Chalcatzingo. By the Tetelpan phase in the Basin of Mexico, bowls began to have rounded bases and outcurving walls similar to the common bowl shapes at Amomoloc and Tetel during the

Tlatempa phase (compare Figure 3.1c, g to Niederberger 1987:Figure 569). In Chalcatzingo, the bowl shapes are almost comparable, yet the common shape seems to have a slight break where the rounded base meets the wall, walls that flare outward more than Tlaxcalan examples, and occasional downcurving rims (see Cyphers Guillén 1992:Figuras 3.13, 3.15, 3.21, 3.22).

During the Tetelpan phase in the Basin of Mexico, the classic double-line-breaks of the Manantial phase (Motif Categories C and E) are replaced by motifs emphasizing scalloping lines (Motif Category G) (Figures 7.2 and 7.3). At Amomoloc and Tetel, we see a general shift in focus over time from lines that curve up and/or down to scalloping lines, but the continued popularity of double-line-breaks, as well as the mixing of double-line-breaks with wavy lines and other motifs in Tlaxcala appears distinct from the examples of the Basin of Mexico. None of the common Tetelpan motifs would be out of place in Amomoloc or Tetel, though there are some differences. For example, motifs that would tend to be excised on Tlaxcalan examples are instead “filled” with a series of diagonal lines in the Basin of Mexico (Figure 7.3d, e). In fact, excised decoration on the interior rims of Tetelpan bowls is notably missing at Tlapacoya-Zohapilco.

The Middle Formative motifs at Chalcatzingo are much more heterogeneous than those depicted for the Basin of Mexico (Figure 7.4; see also Cyphers Guillén 1992:Figuras 3.23, 3.26, 3.27). There are examples of classic double-line-break motifs (Motif Categories A-E), scalloping (G), vertical lines (I), excised blocks (L-N), circles (O), diagonal lines (R), all mixed together in a variety of combinations. While many are similar to those found in Tlaxcala—certainly the building blocks of the motifs in Chalcatzingo are quite comparable—they are combined in distinct ways. The motifs in

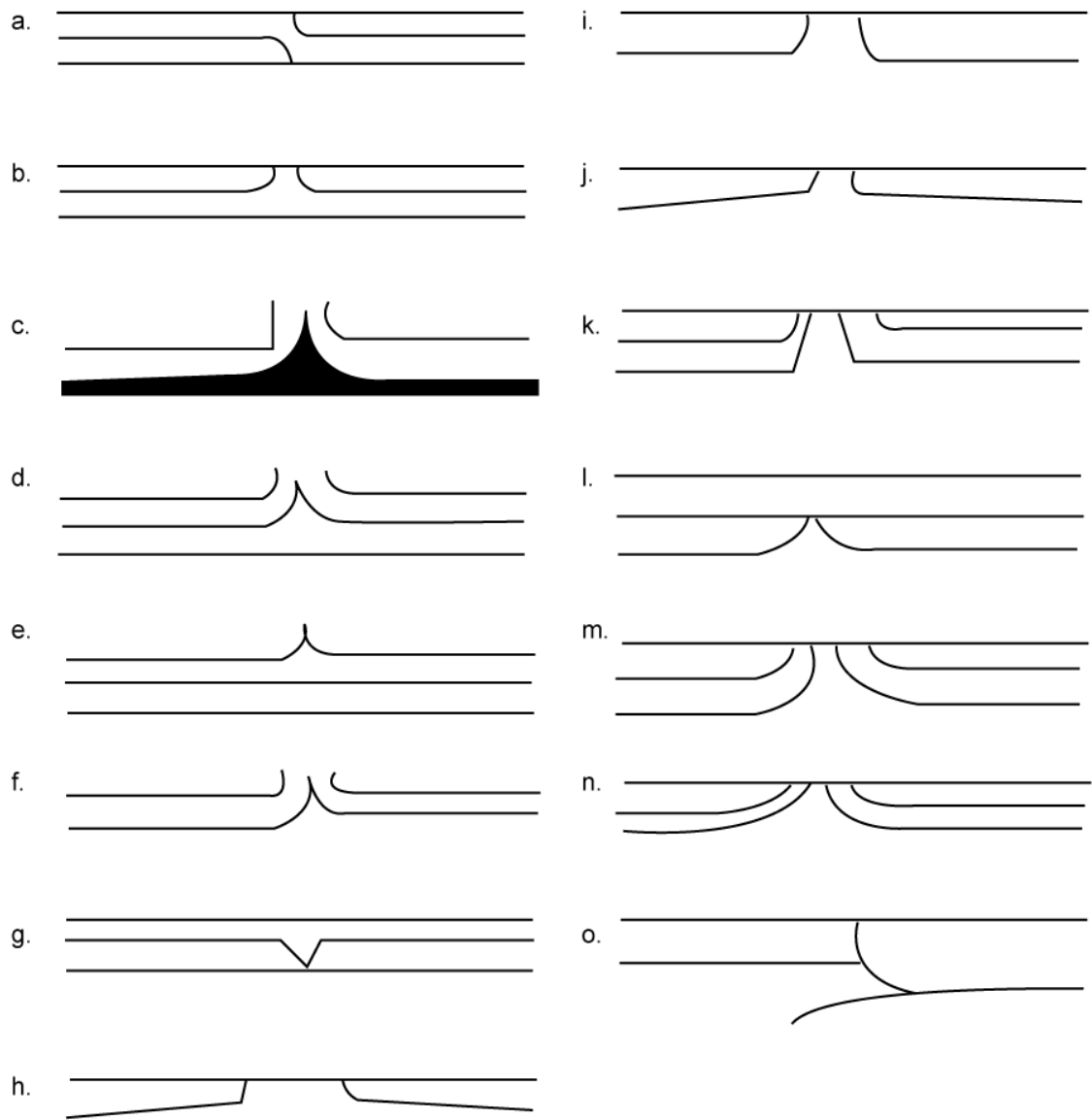


Figure 7.2 Common double-line-break motifs of the Manantial phase, Basin of Mexico (redrawn from Niederberger 1987:Figures 475, 476).

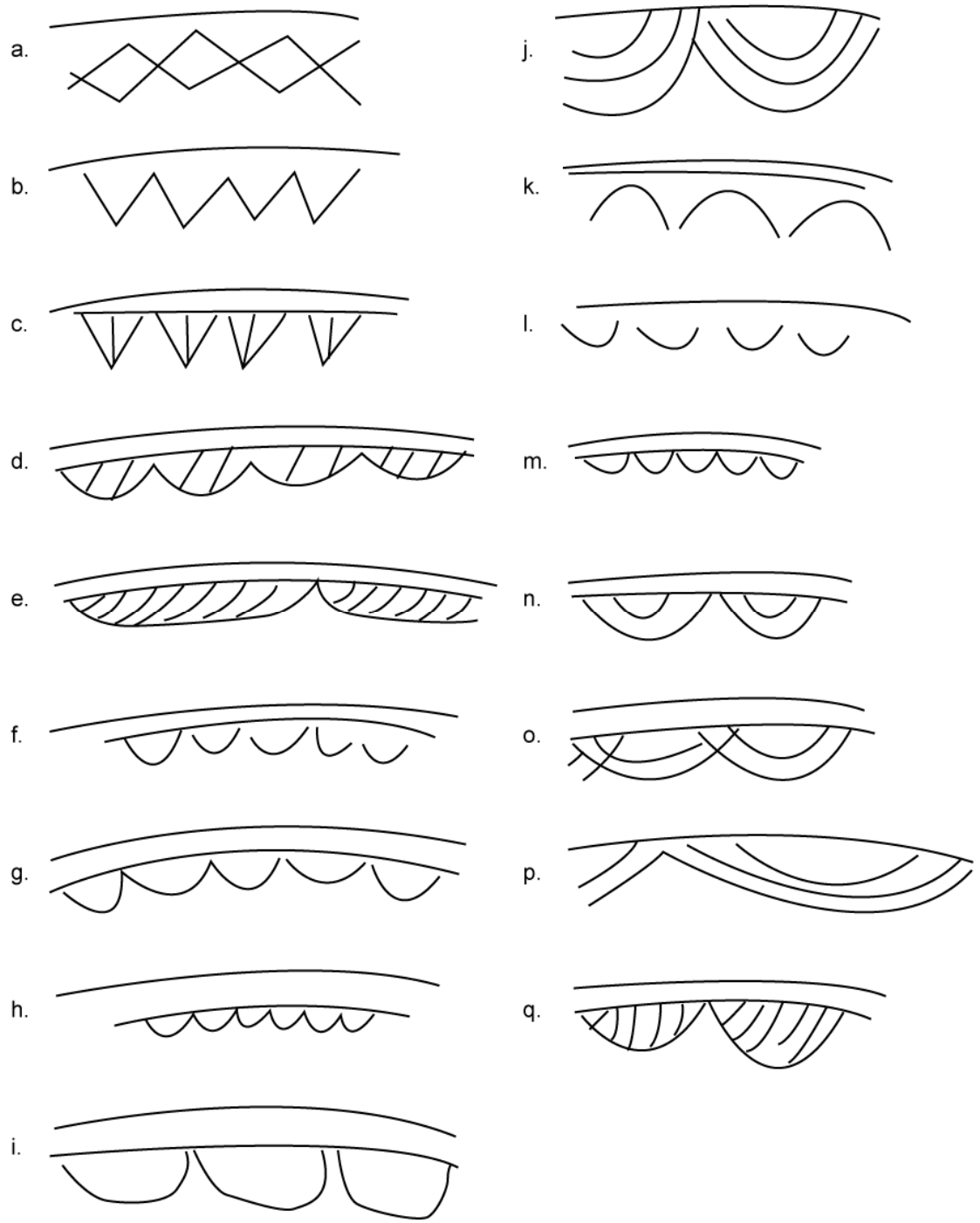


Figure 7.3 Common motifs of the late Manantial and Tetelpan phases, Basin of Mexico (redrawn from Niederberger 1987:Figure 568).

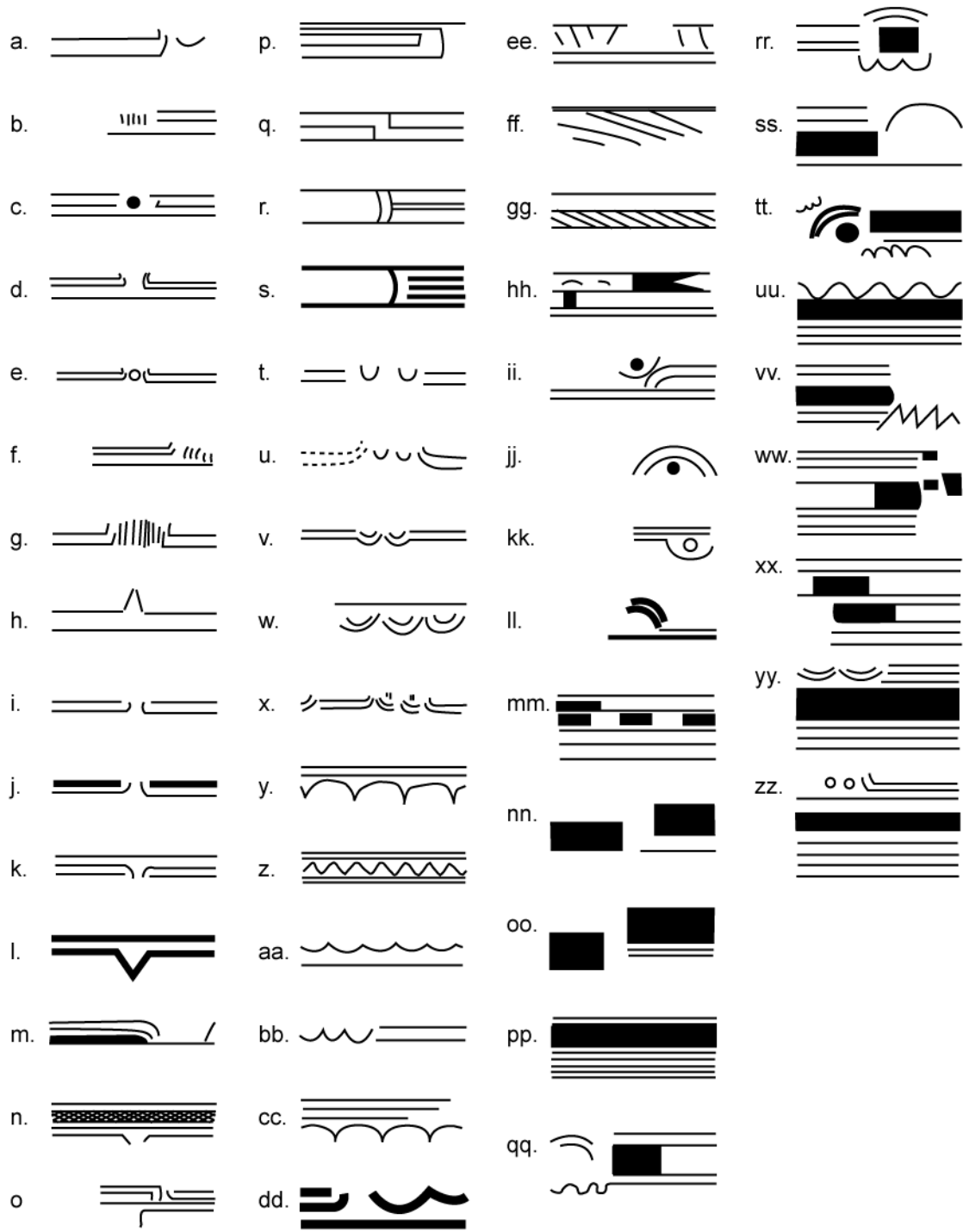


Figure 7.4 Various motifs from Chatcalzingo, Morelos (redrawn from Cyphers Guillén 1992:Figuras 3.23, 3.26, 3.27, A.6).

Figura 3.26 of Cyphers Guillén (1992), for example, employ excised blocks, lines, and wavy lines, but all would be strikingly out of place if found at Amomoloc or Tetel. Also, as mentioned earlier, the elaborate designs on the interior bases of bowls in the Basin of Mexico and Chalcatzingo are quite distinct from the simple stars and circles found on the interior bases of bowls at Amomoloc and Tetel.

Thus, the motifs at Amomoloc and Tetel resemble examples from both Tlapacoya-Zohapilco and Chalcatzingo, and the villagers in Tlaxcala seem to have incorporated styles from both areas. The double-line-breaks (Motif Categories A-E), and scalloping (G) in Tlaxcala are similar to those from the Basin of Mexico, while the use of excised blocks (L-N) and playful combinations of motifs are more similar to examples from Morelos. There are motifs used in both the Basin of Mexico and Chalcatzingo that do not appear in Tlaxcala, such as the pennant motif found in Morelos (e.g. Figure 7.4hh), which is somewhat similar to examples from the Valley of Oaxaca during the Middle Formative. Finally, some motifs found in Tlaxcala are not found in the Basin of Mexico or Chalcatzingo at all, especially the excised variations of crosses (Motif Category K) and painted variations of scalloping lines (H) (see Figure 5.20a, d).

Ties with the Tehuacán Valley and the Valley of Oaxaca

The Tehuacán Valley lies approximately 150 km southeast of Amomoloc and Tetel, and the Valley of Oaxaca is located approximately 300 km away (Figure 1.1). Because of the region's topography, it is likely that individuals traveling from Tlaxcala to the Valley of Oaxaca would have passed through the Tehuacán Valley, following a similar route to the modern highway today (Carballo and Pluckhahn 2007). During the

Middle Formative, double-line-break motifs appeared on white pottery in the Tehuacán Valley (Canoas White and Coatepec White), though the vessel shapes are slightly different than those found in Tlaxcala. In the Tehuacán Valley flat-based bowls seem to be more common than the rounded bowls so popular at Amomoloc and Tetel. Nevertheless, there are still some similarities in rim shape, as we see some interior rim thickening (see MacNeish et al. 1970: Figures 34, 35, 42, 62). Quachilco Brown is similar to our Mesitas Brown, and the downcurving-everted rim associated with this type, common at Tetel during the Texoloc phase (and often decorated), also appears in the Tehuacán Valley (MacNeish et al. 1970: Figures 68, 69).

The majority of line-breaks depicted on Canoas White bowls are double upcurving lines (Motif Category C); some of them have vertical lines at the point where the two lines meet (Figure 7.5), a feature that appears in some motifs from the Valley of Oaxaca (and Xochitécatl) but is absent at Amomoloc and Tetel. Horizontal lines that meet curving up and down (Motif Category E) are common as well. One Canoas White motif (Figure 7.5kk) is similar to the star or cross motifs of Amomoloc and Tetel (Motif Category K), which are uncommon in other regions.

Coatepec White replaces Canoas White in the later Middle Formative period and continues to display some of the upcurving motifs (Motif Categories A and C) so common on Canoas White (MacNeish et al. 1970: Figures 62, 63). However, triangles and rectangles filled with diagonal or vertical lines also appear, neither of which are found at Amomoloc or Tetel (Figure 7.5ll-nn). Like the Basin of Mexico, excised blocks and lines (Motif Categories L-N) are notably absent from the design repertoire of the Tehuacán Valley. It is interesting to note that the wavy lines (Motif Category G) that are

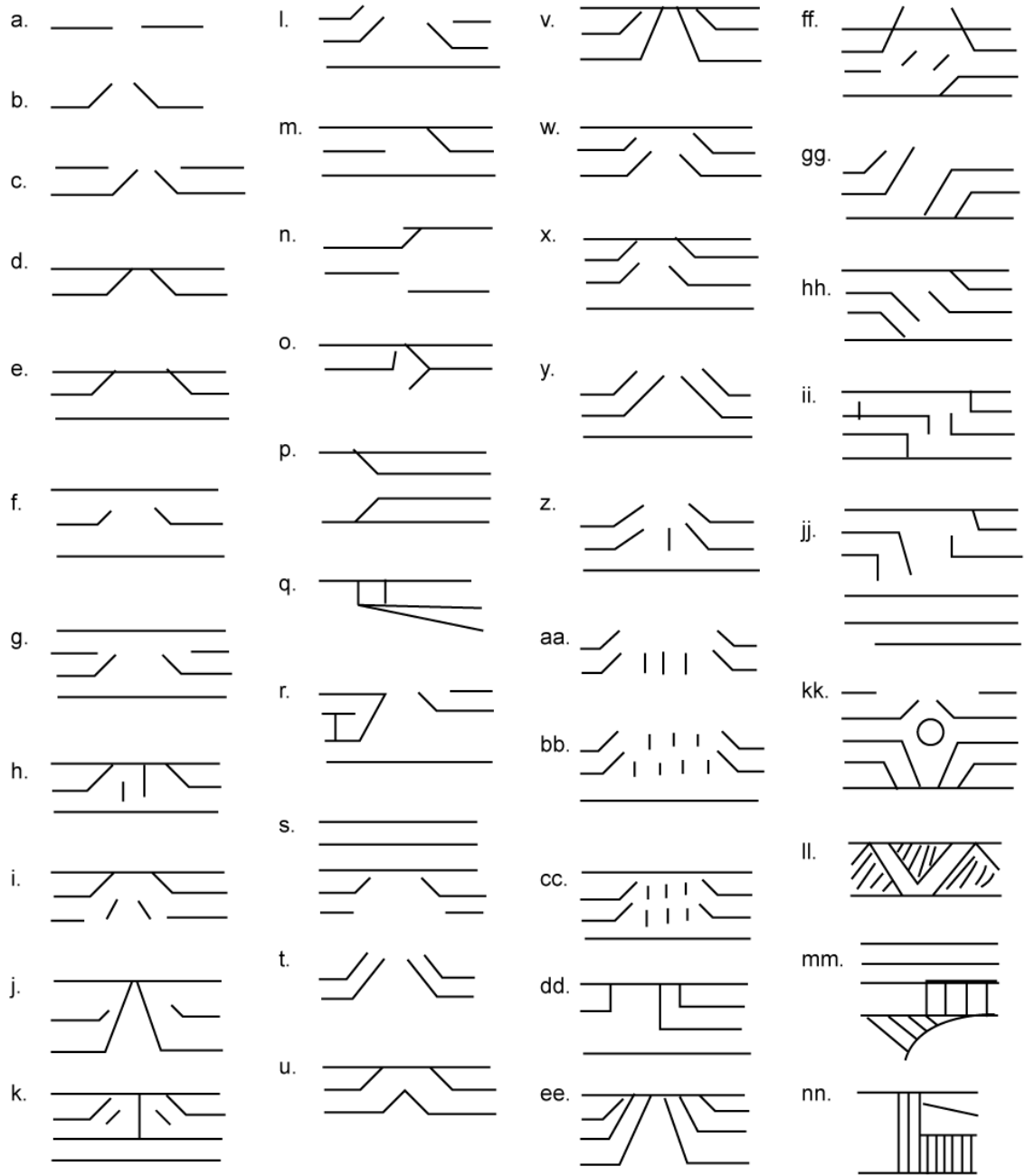


Figure 7.5 Motifs from the Tehuacán Valley. Designs on (a-kk) Canoas White vessels and (ll-nn) Coatepec White vessels (redrawn from MacNeish et al. 1970:Figures 32, 62).

so important on white pottery in other areas seem to be restricted to gray and brown wares in the Tehuacán Valley (MacNeish et al. 1970:Figures 68-70).

Flannery and Marcus (1994:140) have observed that many of the double-line-break elements on Tehuacán's Canoas White pottery (MacNeish et al. 1970:Figure 32) were shared with the Valley of Oaxaca. In the Valley of Oaxaca, double-line-break motifs began to appear during the San José phase, usually on Atoyac Yellow-white bowls with flat bases and outleaning or vertical walls, and increased in popularity during the Middle Formative period. Horizontal lines that curve up to meet the rim (Motif Categories A and C) are quite common, but involve variations that make most of the Oaxacan examples distinct from those found in Tlaxcala (Figures 7.6-7.8). The most common motif at the site of Huitzo, a wavy line bounded by two horizontal lines (Motif Category G) (Figure 7.6, design element 35), is copied exactly at Amomoloc and Tetel (Figure 5.6:Motifs 173 and 174), but is found in much lower frequencies in Tlaxcala. The excised designs (Motif Categories L-N) so popular at Chalcatzingo and in Tlaxcala are absent in the Valley of Oaxaca.

Because actual counts of double-line-break motif occurrences in the Valley of Oaxaca have been published (Flannery and Marcus 1994:Table 12.1; Plog 1976), it was possible to compute Brainerd-Robinson similarity coefficients between Amomoloc, Tetel, San José Mogote, Huitzo, Tierras Largas, and Abasolo (see Plog 1976:261 for details). Following Plog's methodology (1976:263-264), I restricted the comparative sample from Amomoloc and Tetel to interior rim decoration on Yauhtentzi White open bowls and did not include simple horizontal lines (Motifs 1-15). Only eight of the 139 motifs depicted for the Valley of Oaxaca were replicated exactly on the interior rims of

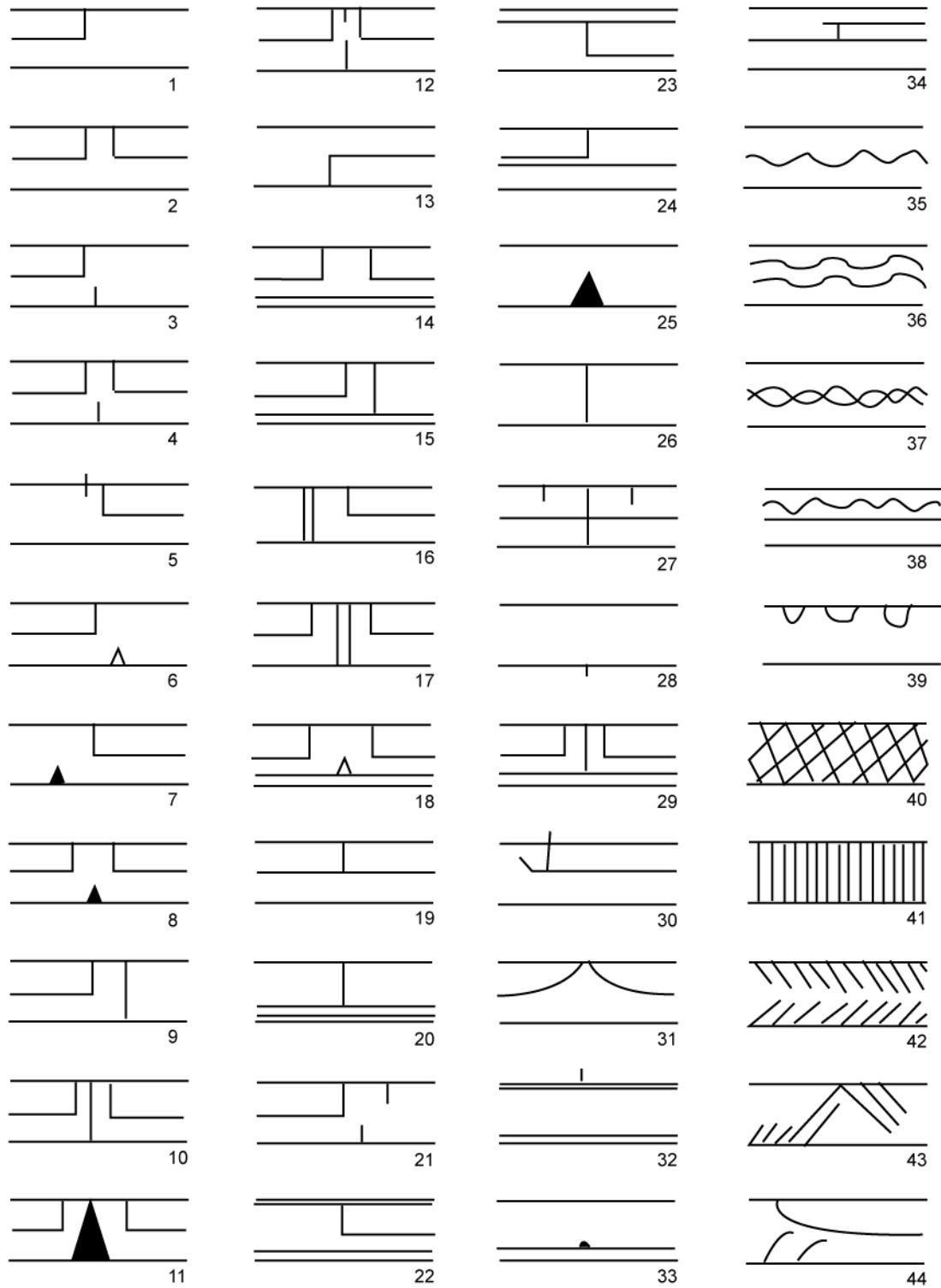


Figure 7.6 Plog's design elements 1 to 44, Atoyac Yellow-white pottery, Valley of Oaxaca (redrawn from Flannery and Marcus 1994:Figure 12.19). Note that design element 35 was the most common motif at Huitzo, and was replicated at Amomoloc and Tetel.

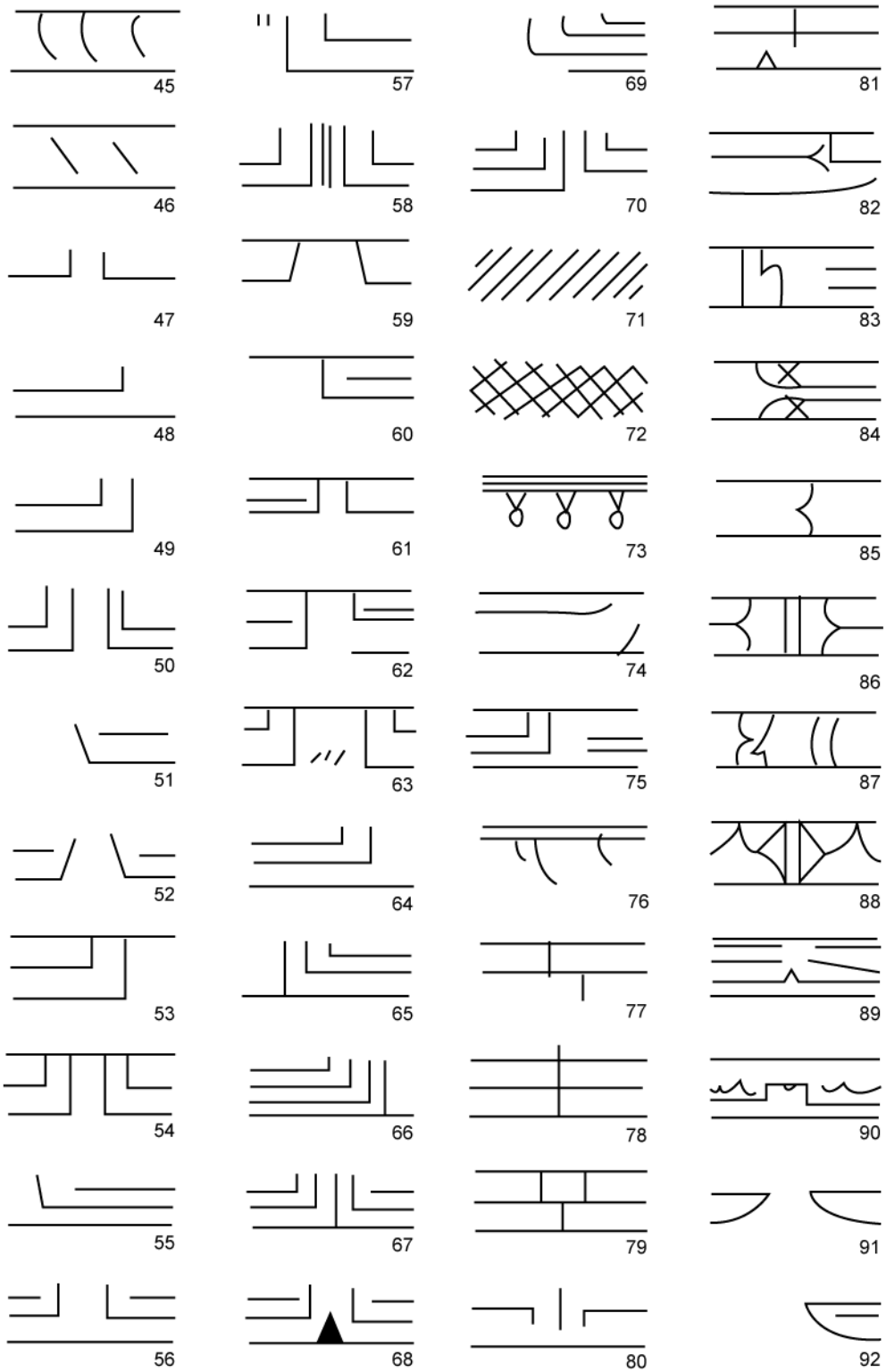


Figure 7.7 Plog's design elements 45 to 92, Atoyac Yellow-white pottery, Valley of Oaxaca (redrawn from Flannery and Marcus 1994:Figure 12.20).

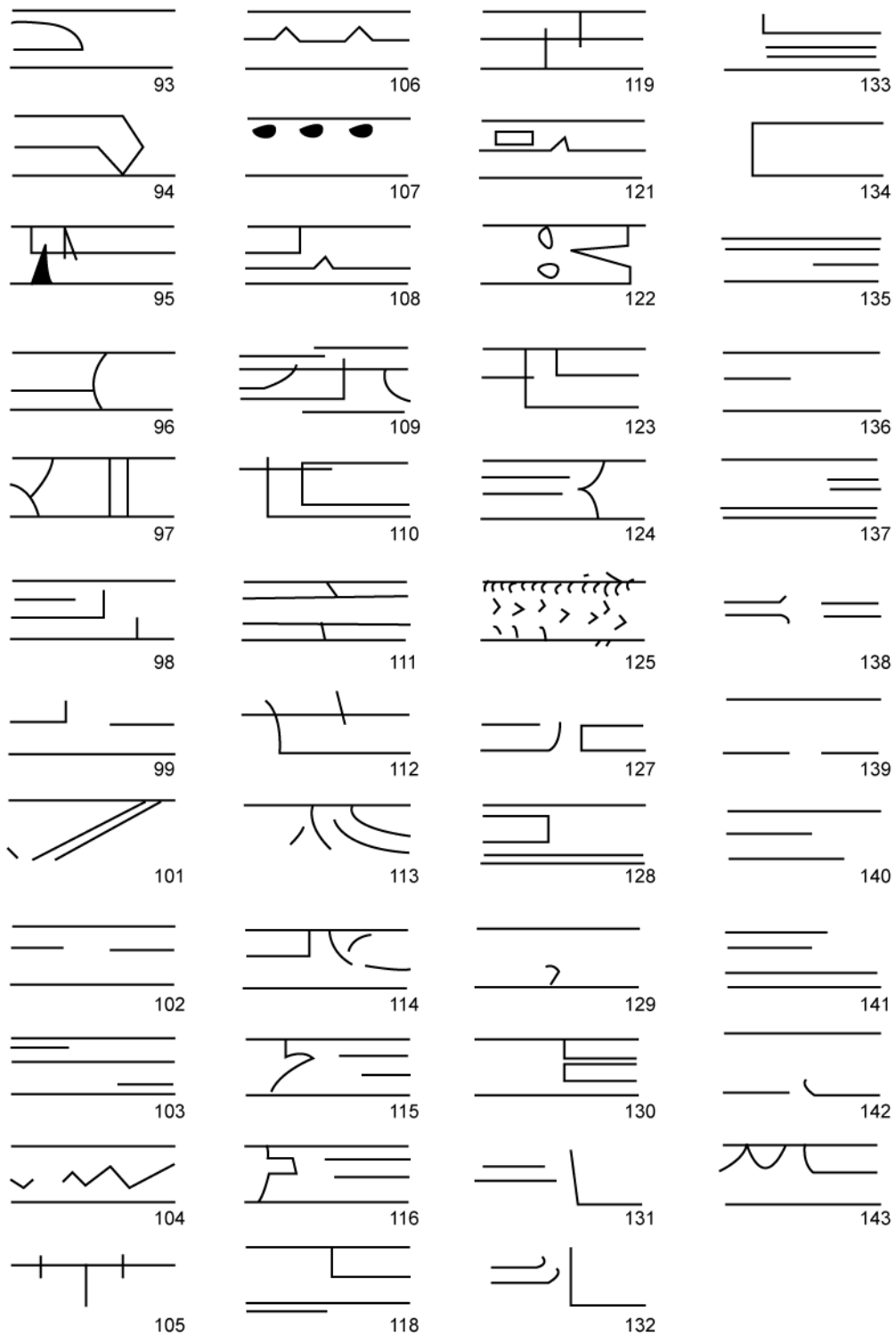


Figure 7.8 Plog's design elements 93 to 143, Atoyac Yellow-white pottery, Valley of Oaxaca (redrawn from Flannery and Marcus 1994:Figure 12.21).

Yauhtentzi White open bowls at Amomoloc and Tetel (Table 7.1).

As we would expect, all the sites in the Valley of Oaxaca are more similar to each other in their design repertoires than they are to any Tlaxcalan site (Table 7.2). Also, interestingly, almost all the sites in the Valley of Oaxaca are more similar to each other, including some sites with weaker ties like Huitzo and Tierras Largas, than the design motifs at Amomoloc and Tetel are to each other. This may be due to fact that although Amomoloc and Tetel are only 9 km apart, they were small autonomous villages that interacted in a less formal way (such that copying motifs exactly was not emphasized) than the sites in the Valley of Oaxaca, where competing civic-ceremonial sites dominated smaller villages.

It is only when I calculate similarity coefficients based on motif categories (rather than individual motifs) that the similarities between Amomoloc and Tetel are comparable to the similarities between sites within the Valley of Oaxaca (Table 7.3). For example, Amomoloc and Tetel shared motif categories to the same extent that San José Mogote and Tierras Largas shared motif categories. As would be expected, the degrees of

Table 7.1 Oaxacan design elements that are copied exactly on the interior rims of Yauhtentzi White open bowls at Amomoloc and Tetel.

Oaxacan design element	Tlaxcalan motif number
1	M018
24	M027
35	M173
36	M185
38	M179
47	M079
49	M028
50	M088

Table 7.2 Brainerd-Robinson coefficients for shared motifs on Yauhtentzi White and Atoyac Yellow-white bowls from Amomoloc, Tetel, and four Oaxacan villages. Column 4 ranks the site pairs in terms of shared designs (1 = most similar, 15 = least similar).

Site pairs	# motif occurrences per site pair	Brainerd-Robinson coefficient	Rank
Amomoloc-Tetel	122-53	13.11	6
Amomoloc-San José Mogote	122-94	6.56	8
Amomoloc-Huitzo	122-274	4.74	11
Amomoloc-Tierras Largas	122-143	4.92	10
Amomoloc-Abasolo	122-13	3.28	14
Tetel-San José Mogote	53-94	3.77	12/13
Tetel-Huitzo	53-274	1.46	15
Tetel-Tierras Largas	53-143	5.17	9
Tetel-Abasolo	53-13	3.77	12/13
San José Mogote-Huitzo	94-274	39.40	3
San José Mogote-Tierras Largas	94-143	66.39	1
San José Mogote-Abasolo	94-13	42.55	2
Huitzo-Tierras Largas	274-143	19.89	5
Huitzo-Abasolo	274-13	12.41	7
Tierras Largas-Abasolo	143-13	39.16	4

Table 7.3 Brainerd-Robinson coefficients for shared motif categories on Yauhtentzi White and Atoyac Yellow-white bowls from Amomoloc, Tetel, and four Oaxacan villages. Column 4 ranks the site pairs in terms of shared motif categories (1 = most similar, 15 = least similar).

Site pairs	# motif occurrences per site pair	Brainerd-Robinson coefficient	Rank
Amomoloc-Tetel	167-68	149.52	2
Amomoloc-San José Mogote	167-113	45.19	11
Amomoloc-Huitzo	167-308	50.60	10
Amomoloc-Tierras Largas	167-156	22.84	15
Amomoloc-Abasolo	167-16	37.65	13
Tetel-San José Mogote	68-113	54.76	9
Tetel-Huitzo	68-308	74.48	6
Tetel-Tierras Largas	68-156	36.58	14
Tetel-Abasolo	68-16	41.91	12
San José Mogote-Huitzo	113-308	94.03	5
San José Mogote-Tierras Largas	113-156	150.82	1
San José Mogote-Abasolo	113-16	132.74	4
Huitzo-Tierras Largas	308-156	69.26	7
Huitzo-Abasolo	308-16	57.31	8
Tierras Largas-Abasolo	156-16	144.55	3

similarity between Tlaxcalan and Oaxacan sites were low, when compared with the relationships between sites within each region. This supports the idea that while individual motifs at Amomoloc and Tetel exhibit a high degree of variability (i.e., it was not important for motifs to be replicated exactly), there was a local Tlaxcalan design tradition that influenced what kinds of motifs, in general, were depicted on pottery .

Some of the individual elements composing the Oaxacan designs are used in Tlaxcalan motifs, yet the Oaxacan examples display unique combinations. Many of the motifs from the Tehuacán Valley and the Valley Oaxaca (particularly at San José Mogote, Tierras Largas, and Abasolo) seem to be variations on a similar theme, emphasizing lines that curve up (Motifs Categories A and C). This likely relates to their origins, in the case of the Valley of Oaxaca, as simplified versions of Earth motifs that were used at some sites as lineage markers (see Flannery and Marcus 1994:140). The motifs at Amomoloc and Tetel suggest closer ties to the design traditions of Chalcatzingo and the Basin of Mexico, and the intra-site variability in the Tlaxcalan motifs makes it unlikely that they were used as lineage markers in a manner similar to that seen in the Valley of Oaxaca.

Conclusion: Social Interaction and Variation in Ceramics at Amomoloc and Tetel

The motifs on Middle Formative pottery at Amomoloc and Tetel suggest connections between these small villages and people living in adjacent highland regions, including the Basin of Mexico, Morelos, and the Valley of Oaxaca. Yet, the villagers at Amomoloc and Tetel possessed few non-local ceramics that would suggest trade in finished vessels with these regions. Only five Fermín Fine Gray rim sherds, three Ceniza

White rim sherds, and three small greenstone ornaments were recovered in our excavations. How, then, did the small villages of Amomoloc and Tetel participate in macro-regional interaction networks and sustain similarities in stylistic conventions over centuries? Comparing obsidian data to patterns in the motifs at Amomoloc and Tetel provides some insight.

During the Tzompantepec phase (ca. 900-800 B.C.), the ceramics at Amomoloc displayed few motifs, which were simple when compared to the decorations of the subsequent phases. Lithic data indicate a decentralized lithic procurement system at this time, as half of the obsidian at the site originated from sources northeast of the Basin of Mexico (i.e., Otumba, Paredón, Pachuca, and Tulancingo) and half originated from sources northeast of Tlaxcala (i.e., Oyameles/Zaragoza) near the Sierra Madre Oriental (Carballo et al. 2007:37). The ratio of imported obsidian (60%) to other locally available materials for fabricating chipped-stone tools (40%) also demonstrates fewer connections to long-distance networks than in later phases (Carballo et al. 2007:38). Strong connections to other regions are not exhibited in the style of ceramic motifs or obsidian exchange patterns. The earliest settled villages in central Tlaxcala, occupying a sparsely populated landscape and perhaps established by people who moved away from increasingly hierarchical societies to the south, did not place an emphasis on food service in their ceramic assemblages. Perhaps it was not until populations increased at the community and regional levels that participation in a larger shared motif system became important.

During the Tlatempa phase (ca. 800-650 B.C.), just prior to development of chiefdoms in Tlaxcala, the ceramic assemblages of Amomoloc and Tetel suggest an

increased emphasis on the serving of food in decorated vessels, as well as high variability in the motifs depicted. The procurement of obsidian from the sources northeast of the Basin of Mexico became favored relative to those northeast of Tlaxcala, as later communities participated in more organized exchange networks with people living closer to the Basin of Mexico sources (Carballo et al. 2007:37).

It is interesting that the motifs at Amomoloc and Tetel during the Tlatempa phase appear to involve a mix of Basin of Mexico and Chalcatzingo design traditions. García Cook (1981) identified Tlaxcala as an important route for communication and trade in central Mexico, as it is topographically a natural corridor connecting the northern Basin of Mexico to Puebla and the Gulf Coast. Least cost path analyses and other data support the identification of Tlaxcala as a likely transportation route between the northern Basin of Mexico and destinations to the south, as this route is relatively flat when compared to the high elevation passes connecting the southern Basin of Mexico to Puebla (Carballo and Pluckhahn 2007:614, Figure 4). It is likely that traders carrying highly desirable obsidian from sources north of the Basin of Mexico would have moved through Tlaxcala on their way to sites like Chalcatzingo and San José Mogote. Located close to these trade routes, Amomoloc and Tetel may have adopted heterogeneous motif styles to signal their participation in multiple long-distance networks involving different regions.

During the Texoloc phase (ca. 650-500 B.C.), the dominant ceramic types and shapes at Tetel changed markedly from the Tlatempa phase. Many of the same motifs continued in use but there was a greater focus on scalloping lines and lines that curve up (Motif Categories G, A, and C), as the use of excised line and block decorations (Motif Categories L-N) decreased significantly. Accompanying these changes was a more

focused procurement of obsidian, as 96% of the obsidian at Tetel was imported from Basin of Mexico sources, and approximately 80% of all chipped-stone tools at Tetel were made from obsidian as opposed to local lithic material (Carballo et al. 2007:38-39). With the development of complex societies and the establishment of more formalized exchange networks in the region, food service and motif variability appears to have become less important to the social dynamics of small villages in the area.

In conclusion, shared motifs were displayed on highly visible serving vessels at Amomoloc and Tetel to varying degrees throughout the occupational histories of these communities. When the earliest villages in central Tlaxcala were established, the presentation of food was not emphasized in ceramic assemblages, few pan-Mesoamerican motifs were used to decorate pottery, and villagers participated in long-distance exchange networks in a relatively informal manner.

With the increase in population over the following centuries, but before the development of social stratification in central Tlaxcala around 650 B.C., food service became increasingly focused on bowls decorated with pan-Mesoamerican motifs, as the presentation of food was likely an important arena for the negotiation of socio-political dynamics (e.g., Blitz 1993; Lesure 1998). At the local level, a high degree of stylistic variability in the execution of motifs is observable, perhaps indicating its expression as a form of local competition and signaling participation in long-distance trade networks. Yet the motifs, generally evocative of supernatural themes, adhered to a central Tlaxcalan design tradition, while referencing motif styles from other regions around Mexico, as interregional trade networks became more formalized.

Once ranked societies were established in central Tlaxcala, ceramic assemblages changed dramatically in color and shape, and decorated serving vessels became slightly less important to the internal dynamics of Tetel. The use of shared motifs did not change as dramatically, though motifs became more standardized in the themes they referenced, and stylistic ties with Chalcatzingo decreased as ties to the Basin of Mexico were strengthened through the further formalization of long-distance exchange networks.

As the variability in Middle Formative motifs at Amomoloc and Tetel illustrate, shared art styles during the Formative period in Mesoamerica were not static, unified phenomena. At small villages in central Tlaxcala, pan-Mesoamerican motifs were used differently and for different purposes at varying social and spatial scales, and across time. This may have also been true for other areas of Mesoamerica, which would carry important implications for understanding the dynamics of early villages in those regions as well.

APPENDIX A

Provenience Data by Rim Sherd

Appendix A provides exact provenience information by feature for each rim sherd included in the seriation described in Chapter 4. In Table A.1, Column 1 lists the household unit designation, Column 2 provides the feature number, Column 3 lists the unique sherd number that each rim sherd received during analysis, Column 4 provides the ceramic type, Column 5 lists the vessel shape, and Column 6 indicates whether or not the rim sherd was decorated.

The following abbreviations were used in Table A.1:

Household Unit:

A-ET-1 = Amomoloc, Early Tlatempa, Household Unit 1

A-ET-2 = Amomoloc, Early Tlatempa, Household Unit 2

A-ET-3 = Amomoloc, Early Tlatempa, Household Unit 3

A-LT-1 = Amomoloc, Late Tlatempa, Household Unit 1

A-LT-2 = Amomoloc, Late Tlatempa, Household Unit 2

A-LT-3 = Amomoloc, Late Tlatempa, Household Unit 3

A-LT-4 = Amomoloc, Late Tlatempa, Household Unit 4

A-LT-5 = Amomoloc, Late Tlatempa, Household Unit 5

A-TZ-1 = Amomoloc, Tzompantepec, Household Unit 1

T-ET-1 = Tetel, Early Tlatempa, Household Unit 1

T-LT-1 = Tetel, Late Tlatempa, Household Unit 1

T-LT-2 = Tetel, Late Tlatempa, Household Unit 2

T-TX-1 = Tetel, Texoloc, Household Unit 1

T-TX-2 = Tetel, Texoloc, Household Unit 2

Type:

AP = Amomoloc Plain

CenW = Ceniza White

FGray = Fermín Fine Gray

Gaz = Gazca Painted White-on-Red

LagDR = Laguna Dark Red

LagDR+B = Laguna Dark Red-on-Buff

LagR = Laguna Red

LagRSc = Laguna Red-and-Scraped

MB = Mesitas Brown

MFineB = Mesitas Fine Brown

Palmas = Palmas Black-and-White

PasBW = Pascuala Black-and-White

PotR/B = Potrero Red-on-Brown

PotSRB = Potrero Streaky Red-on-Brown

SJW = San José White-and-Brown

Xal = Xalmonto Red-and-White

YauW = Yauhtentzi White

YRW = Yauhtentzi Red-on-White

Form:

b = Simple bowls (see Figure 3.1b)

c = Bowls with beveled rims (see Figure 3.1c)

d = Bowls with horizontal-flat rims (see Figure 3.1d)

e = Bowls with downcurving-everted rims (see Figure 3.1e)

f = Bowls with outcurving rims (see Figure 3.1f)

g = Bowls with outcurving rims and a band of interior thickening
along the rim (see Figure 3.1g)

h = Bowls with an exterior fold at rim (see Figure 3.1h)

i = Bowls with an interior fold at rim (see Figure 3.1i)

j = Bowls with pinched-in walls (see Figure 3.2j)

k = Bowls with slightly incurving walls (see Figure 3.2k)

l = Bowls with outleaning walls (see Figure 3.2l)

m = Bowls with vertical walls (see Figure 3.2m)

n = Cylinders with vertical walls (see Figure 3.2n)

o = Closed bowls with incurving walls and direct rims (see Figure
3.2o)

p = Closed bowls with incurving walls and vertical rims (see
Figure 3.2p)

q = Composite silhouette dishes (see Figure 3.2q)

r = Composite silhouette vases (see Figure 3.2r)

s = Jars with vertical necks and rims (see Figure 3.3s)

t = Jars with outcurving necks and direct rims (see Figure 3.3t)

u = Jars with horizontal-everted rims (see Figure 3.3u)

v = Jars with downcurving rims (see Figure 3.3v)

w = Jars with incurving necks and direct rims (see Figure 3.3w)

x = Heavy tecomates (see Figure 3.3x)

y = Fine tecomates (see Figure 3.3y)

Decorated?:

N = undecorated

Y = decorated

Table A.1 Provenience data by rim sherd for Amomoloc and Tetel. See Appendix A for explanation of abbreviations.

Household Unit	Feature	Sherd #	Type	Form	Decorated?
A-ET-1	FA023	S00001	LagDR+B	t	N
A-ET-1	FA023	S00003	LagDR+B	t	N
A-ET-1	FA023	S00004	LagDR+B	t	N
A-ET-1	FA023	S00005	LagDR+B	t	N
A-ET-1	FA023	S00006	LagDR+B	t	N
A-ET-1	FA023	S00008	LagDR+B	t	N
A-ET-1	FA023	S00010	AP	t	N
A-ET-1	FA023	S00011	AP	t	N
A-ET-1	FA023	S00012	AP	t	N
A-ET-1	FA023	S00013	AP	t	N
A-ET-1	FA023	S00015	AP	t	N
A-ET-1	FA023	S00017	AP	t	N
A-ET-1	FA023	S00018	AP	t	N
A-ET-1	FA023	S00019	AP	t	N
A-ET-1	FA023	S00021	AP	t	N
A-ET-1	FA023	S00022	AP	t	N
A-ET-1	FA023	S00023	AP	t	N
A-ET-1	FA023	S00024	AP	t	N
A-ET-1	FA023	S00025	AP	t	N
A-ET-1	FA023	S00026	AP	t	N
A-ET-1	FA023	S00027	AP	t	N
A-ET-1	FA023	S00028	AP	t	N
A-ET-1	FA023	S00029	AP	t	N
A-ET-1	FA023	S00030	AP	t	N

A-ET-1	FA023	S00033	AP	t	N
A-ET-1	FA023	S00035	AP	t	N
A-ET-1	FA023	S00036	AP	t	N
A-ET-1	FA023	S00037	AP	t	N
A-ET-1	FA023	S00038	AP	t	N
A-ET-1	FA023	S00040	AP	x	N
A-ET-1	FA023	S00041	MB	y	N
A-ET-1	FA023	S00042	MB	y	N
A-ET-1	FA022	S00043	MB	y	N
A-ET-1	FA023	S00044	LagDR	t	N
A-ET-1	FA022	S00045	MB	t	N
A-ET-1	FA023	S00046	MB	t	N
A-ET-1	FA023	S00048	AP	t	N
A-ET-1	FA023	S00049	AP	t	N
A-ET-1	FA023	S00050	AP	t	N
A-ET-1	FA023	S00051	AP	t	N
A-ET-1	FA023	S00052	AP	t	N
A-ET-1	FA023	S00053	AP	t	N
A-ET-1	FA023	S00054	AP	t	N
A-ET-1	FA023	S00055	AP	t	N
A-ET-1	FA023	S00056	AP	t	N
A-ET-1	FA023	S00057	AP	t	N
A-ET-1	FA023	S00058	AP	t	N
A-ET-1	FA023	S00059	AP	t	N
A-ET-1	FA023	S00060	AP	t	N
A-ET-1	FA023	S00061	AP	t	N
A-ET-1	FA023	S00062	AP	t	N
A-ET-1	FA023	S00063	AP	t	N
A-ET-1	FA023	S00064	AP	t	N
A-ET-1	FA023	S00065	AP	t	N
A-ET-1	FA023	S00066	AP	t	N
A-ET-1	FA023	S00067	AP	t	N
A-ET-1	FA023	S00068	AP	t	N
A-ET-1	FA023	S00069	LagDR+B	t	N
A-ET-1	FA023	S00070	LagDR+B	t	N
A-ET-1	FA023	S00071	AP	t	N
A-ET-1	FA023	S00072	MB	x	N
A-ET-1	FA022	S00081	MB	t	N
A-ET-1	FA022	S00082	AP	t	N
A-ET-1	FA022	S00484	AP	x	N
A-ET-1	FA022	S00485	AP	y	N
A-ET-1	FA022	S00486	LagDR	y	N
A-ET-1	FA022	S00487	LagDR	x	N
A-ET-1	FA022	S00490	AP	t	N
A-ET-1	FA022	S00491	AP	t	N
A-ET-1	FA022	S00492	AP	t	N
A-ET-1	FA022	S00493	YauW	s	N
A-ET-1	FA022	S00494	YauW	t	N
A-ET-1	FA022	S00495	LagDR	t	N

A-ET-1	FA022	S00496	AP	t	N
A-ET-1	FA022	S00497	AP	t	N
A-ET-1	FA022	S00498	LagDR+B	t	N
A-ET-1	FA022	S00499	LagRSc	t	N
A-ET-1	FA022	S00500	AP	t	N
A-ET-1	FA022	S00501	AP	t	N
A-ET-1	FA022	S00502	AP	t	N
A-ET-1	FA022	S00503	AP	t	N
A-ET-1	FA022	S00504	AP	t	N
A-ET-1	FA022	S00505	AP	t	N
A-ET-1	FA022	S00506	AP	t	N
A-ET-1	FA022	S00507	AP	t	N
A-ET-1	FA022	S00508	AP	t	N
A-ET-1	FA022	S00509	AP	t	N
A-ET-1	FA022	S00510	AP	t	N
A-ET-1	FA022	S00511	AP	t	N
A-ET-1	FA022	S00512	AP	t	N
A-ET-1	FA022	S00513	AP	t	N
A-ET-1	FA022	S00514	AP	t	N
A-ET-1	FA022	S00515	AP	t	N
A-ET-1	FA054	S00813	AP	t	N
A-ET-1	FA054	S00814	AP	t	N
A-ET-1	FA054	S00816	AP	t	N
A-ET-1	FA054	S00817	AP	t	N
A-ET-1	FA054	S00818	AP	t	N
A-ET-1	FA054	S00819	AP	t	N
A-ET-1	FA054	S00820	AP	t	N
A-ET-1	FA054	S00821	AP	t	N
A-ET-1	FA054	S00822	AP	t	N
A-ET-1	FA054	S00824	MB	t	N
A-ET-1	FA054	S00826	MB	t	N
A-ET-1	FA054	S00828	MB	s	N
A-ET-1	FA054	S00829	AP	s	N
A-ET-1	FA054	S00830	AP	s	N
A-ET-1	FA054	S00831	AP	x	N
A-ET-1	FA054	S00832	AP	x	N
A-ET-1	FA054	S00834	LagR	x	N
A-ET-1	FA054	S00836	LagR	y	N
A-ET-1	FA054	S00838	MB	x	N
A-ET-1	FA054	S00839	AP	t	N
A-ET-1	FA054	S00844	AP	t	N
A-ET-1	FA054	S00845	AP	t	N
A-ET-1	FA054	S00846	AP	t	N
A-ET-1	FA054	S00847	AP	t	N
A-ET-1	FA054	S00848	AP	t	N
A-ET-1	FA054	S00849	AP	t	N
A-ET-1	FA054	S00850	AP	t	N
A-ET-1	FA054	S00852	AP	t	N
A-ET-1	FA054	S00853	AP	t	N

A-ET-1	FA054	S00854	AP	t	N
A-ET-1	FA054	S00855	AP	t	N
A-ET-1	FA054	S00856	AP	t	N
A-ET-1	FA054	S00857	AP	t	N
A-ET-1	FA054	S00858	AP	t	N
A-ET-1	FA054	S00859	AP	t	N
A-ET-1	FA054	S00861	AP	t	N
A-ET-1	FA054	S00863	LagRSc	u	N
A-ET-1	FA054	S00864	LagDR+B	t	N
A-ET-1	FA054	S00865	LagDR+B	t	N
A-ET-1	FA054	S00866	LagDR+B	t	N
A-ET-1	FA054	S00868	LagRSc	t	N
A-ET-1	FA054	S00869	LagRSc	t	N
A-ET-1	FA054	S00870	MB	t	N
A-ET-1	FA054	S00871	AP	t	N
A-ET-1	FA054	S00873	LagR	t	N
A-ET-1	FA047	S00908	MB	s	N
A-ET-1	FA047	S00911	YauW	s	N
A-ET-1	FA047	S00913	LagDR	t	N
A-ET-1	FA047	S00914	LagDR	t	N
A-ET-1	FA047	S00917	PotSRB	y	N
A-ET-1	FA047	S00918	LagDR	y	N
A-ET-1	FA047	S00919	LagDR	y	N
A-ET-1	FA047	S00920	MB	y	N
A-ET-1	FA047	S00921	MB	y	N
A-ET-1	FA047	S00922	MB	y	N
A-ET-1	FA047	S00923	LagDR	x	N
A-ET-1	FA047	S00924	LagDR	x	N
A-ET-1	FA047	S00925	LagDR	x	N
A-ET-1	FA047	S00926	LagDR	x	N
A-ET-1	FA047	S00927	LagDR	x	N
A-ET-1	FA047	S00928	AP	t	N
A-ET-1	FA047	S00929	AP	t	N
A-ET-1	FA047	S00930	AP	t	N
A-ET-1	FA047	S00931	AP	t	N
A-ET-1	FA047	S00932	AP	t	N
A-ET-1	FA047	S00933	AP	t	N
A-ET-1	FA047	S00934	AP	t	N
A-ET-1	FA047	S00935	AP	t	N
A-ET-1	FA047	S00936	AP	t	N
A-ET-1	FA047	S00937	AP	t	N
A-ET-1	FA047	S00938	AP	t	N
A-ET-1	FA047	S00939	AP	t	N
A-ET-1	FA047	S00940	AP	t	N
A-ET-1	FA047	S00941	AP	t	N
A-ET-1	FA047	S00942	AP	t	N
A-ET-1	FA047	S00943	AP	t	N
A-ET-1	FA047	S00944	AP	t	N
A-ET-1	FA047	S00945	AP	t	N

A-ET-1	FA047	S00946	AP	t	N
A-ET-1	FA047	S00947	AP	t	N
A-ET-1	FA047	S00948	AP	t	N
A-ET-1	FA047	S00949	AP	t	N
A-ET-1	FA047	S00950	AP	t	N
A-ET-1	FA047	S00951	AP	t	N
A-ET-1	FA047	S00952	AP	t	N
A-ET-1	FA047	S00953	AP	t	N
A-ET-1	FA047	S00954	AP	t	N
A-ET-1	FA047	S00955	AP	t	N
A-ET-1	FA047	S00956	AP	t	N
A-ET-1	FA047	S00957	AP	t	N
A-ET-1	FA047	S00958	AP	t	N
A-ET-1	FA047	S00959	AP	t	N
A-ET-1	FA047	S00960	AP	t	N
A-ET-1	FA047	S00961	AP	t	N
A-ET-1	FA047	S00962	AP	t	N
A-ET-1	FA047	S00963	AP	t	N
A-ET-1	FA047	S00964	AP	t	N
A-ET-1	FA047	S00965	AP	t	N
A-ET-1	FA047	S00966	AP	t	N
A-ET-1	FA047	S00968	AP	t	N
A-ET-1	FA047	S00969	AP	t	N
A-ET-1	FA047	S00970	AP	t	N
A-ET-1	FA047	S00971	AP	t	N
A-ET-1	FA047	S00972	AP	t	N
A-ET-1	FA047	S00973	AP	t	N
A-ET-1	FA047	S00974	AP	t	N
A-ET-1	FA047	S00975	AP	t	N
A-ET-1	FA047	S00976	AP	t	N
A-ET-1	FA047	S00977	AP	t	N
A-ET-1	FA047	S00978	AP	t	N
A-ET-1	FA047	S00979	AP	t	N
A-ET-1	FA047	S00980	AP	t	N
A-ET-1	FA047	S00981	AP	t	N
A-ET-1	FA047	S00982	AP	t	N
A-ET-1	FA047	S00983	AP	t	N
A-ET-1	FA047	S00984	AP	t	N
A-ET-1	FA047	S00985	AP	t	N
A-ET-1	FA047	S00986	AP	t	N
A-ET-1	FA047	S00987	AP	t	N
A-ET-1	FA047	S00988	AP	t	N
A-ET-1	FA047	S00989	AP	t	N
A-ET-1	FA047	S00990	AP	t	N
A-ET-1	FA047	S00991	AP	t	N
A-ET-1	FA047	S00992	AP	t	N
A-ET-1	FA047	S00993	AP	t	N
A-ET-1	FA047	S00994	AP	t	N
A-ET-1	FA047	S00995	AP	t	N

A-ET-1	FA047	S00996	AP	t	N
A-ET-1	FA047	S00997	AP	t	N
A-ET-1	FA047	S00998	AP	t	N
A-ET-1	FA047	S00999	AP	t	N
A-ET-1	FA022	S01001	MB	k	N
A-ET-1	FA023	S01002	AP	b	N
A-ET-1	FA023	S01003	MB	b	N
A-ET-1	FA022	S01004	PasBW	l	N
A-ET-1	FA023	S01005	AP	l	N
A-ET-1	FA023	S01006	AP	l	N
A-ET-1	FA023	S01007	MB	b	N
A-ET-1	FA023	S01008	MB	b	N
A-ET-1	FA023	S01009	MB	b	N
A-ET-1	FA023	S01010	LagDR	k	N
A-ET-1	FA023	S01013	MB	f	N
A-ET-1	FA023	S01014	MB	e	N
A-ET-1	FA023	S01015	MB	c	N
A-ET-1	FA023	S01016	MB	b	N
A-ET-1	FA023	S01017	LagDR	b	N
A-ET-1	FA023	S01018	AP	k	N
A-ET-1	FA023	S01019	MB	k	N
A-ET-1	FA023	S01026	AP	o	N
A-ET-1	FA023	S01027	AP	b	N
A-ET-1	FA023	S01030	AP	b	N
A-ET-1	FA023	S01032	MB	b	N
A-ET-1	FA023	S01033	MB	d	N
A-ET-1	FA023	S01034	MB	d	N
A-ET-1	FA023	S01035	MB	d	N
A-ET-1	FA023	S01037	MB	h	N
A-ET-1	FA023	S01038	MB	h	N
A-ET-1	FA023	S01040	AP	e	N
A-ET-1	FA023	S01042	YRW	t	N
A-ET-1	FA023	S01046	YRW	g	N
A-ET-1	FA023	S01048	YRW	g	N
A-ET-1	FA023	S01051	YauW	g	N
A-ET-1	FA023	S01053	YauW	f	N
A-ET-1	FA023	S01054	YRW	f	N
A-ET-1	FA023	S01055	YRW	o	N
A-ET-1	FA023	S01061	Xal	j	N
A-ET-1	FA023	S01062	YauW	b	N
A-ET-1	FA023	S01063	YauW	b	N
A-ET-1	FA023	S01066	YauW	d	N
A-ET-1	FA022	S01103	MFineB	b	N
A-ET-1	FA022	S01140	YauW	c	N
A-ET-1	FA023	S01161	YauW	c	N
A-ET-1	FA047	S01173	YauW	h	N
A-ET-1	FA047	S01174	YauW	h	N
A-ET-1	FA022	S01194	YauW	b	N
A-ET-1	FA023	S01209	YauW	b	N

A-ET-1	FA023	S01210	YauW	b	N
A-ET-1	FA023	S01211	YauW	b	N
A-ET-1	FA023	S01212	YauW	b	N
A-ET-1	FA047	S01213	YauW	b	N
A-ET-1	FA022	S01219	YRW	b	N
A-ET-1	FA022	S01228	YRW	b	N
A-ET-1	FA023	S01233	YRW	b	N
A-ET-1	FA023	S01234	YRW	b	N
A-ET-1	FA023	S01238	YRW	j	N
A-ET-1	FA023	S01240	YRW	b	N
A-ET-1	FA023	S01241	YRW	b	N
A-ET-1	FA023	S01242	YRW	b	N
A-ET-1	FA023	S01243	YRW	b	N
A-ET-1	FA022	S01244	YRW	j	N
A-ET-1	FA022	S01245	YRW	j	N
A-ET-1	FA023	S01275	YRW	g	N
A-ET-1	FA023	S01280	YRW	g	N
A-ET-1	FA023	S01281	YRW	g	N
A-ET-1	FA023	S01294	YRW	c	N
A-ET-1	FA022	S01300	YauW	d	N
A-ET-1	FA047	S01320	YRW	c	N
A-ET-1	FA022	S01327	YRW	j	N
A-ET-1	FA022	S01345	YRW	c	N
A-ET-1	FA023	S01383	YauW	g	N
A-ET-1	FA023	S01390	YRW	o	N
A-ET-1	FA047	S01408	YauW	k	N
A-ET-1	FA022	S01433	YRW	j	N
A-ET-1	FA023	S01436	YRW	f	N
A-ET-1	FA023	S01438	YRW	b	N
A-ET-1	FA023	S01450	YauW	f	N
A-ET-1	FA022	S02624	YauW	g	N
A-ET-1	FA022	S02625	PotSRB	k	N
A-ET-1	FA022	S02626	LagDR	b	N
A-ET-1	FA022	S02627	LagDR	b	N
A-ET-1	FA022	S02628	AP	h	N
A-ET-1	FA022	S02629	MB	b	N
A-ET-1	FA022	S02630	MB	b	N
A-ET-1	FA022	S02631	MB	b	N
A-ET-1	FA022	S02632	MB	b	N
A-ET-1	FA022	S02633	MB	b	N
A-ET-1	FA022	S02634	MB	b	N
A-ET-1	FA022	S02636	YRW	b	N
A-ET-1	FA022	S02637	YRW	b	N
A-ET-1	FA022	S02638	AP	b	N
A-ET-1	FA022	S02639	AP	b	N
A-ET-1	FA022	S02641	LagR	i	N
A-ET-1	FA022	S02642	LagR	i	N
A-ET-1	FA022	S02647	MB	e	N
A-ET-1	FA022	S02648	MB	e	N

A-ET-1	FA022	S02649	PotR/B	e	N
A-ET-1	FA047	S02664	MB	e	N
A-ET-1	FA054	S03506	YauW	q	N
A-ET-1	FA054	S03510	YauW	c	N
A-ET-1	FA054	S03548	YRW	g	N
A-ET-1	FA054	S03568	YRW	j	N
A-ET-1	FA054	S03569	YRW	j	N
A-ET-1	FA054	S03571	YRW	j	N
A-ET-1	FA054	S03572	YRW	j	N
A-ET-1	FA054	S03573	YRW	j	N
A-ET-1	FA054	S03574	YRW	j	N
A-ET-1	FA054	S03575	YauW	j	N
A-ET-1	FA054	S03577	YRW	b	N
A-ET-1	FA054	S03580	YauW	k	N
A-ET-1	FA054	S03581	YauW	k	N
A-ET-1	FA054	S03582	YauW	k	N
A-ET-1	FA054	S03584	YauW	k	N
A-ET-1	FA054	S03585	YauW	k	N
A-ET-1	FA054	S03586	YauW	k	N
A-ET-1	FA054	S03595	YRW	b	N
A-ET-1	FA054	S03598	YauW	b	N
A-ET-1	FA054	S03599	YauW	b	N
A-ET-1	FA054	S03600	YauW	b	N
A-ET-1	FA054	S03604	YauW	b	N
A-ET-1	FA054	S03605	YauW	b	N
A-ET-1	FA054	S03606	YauW	d	N
A-ET-1	FA054	S03607	YauW	d	N
A-ET-1	FA054	S03627	YauW	o	N
A-ET-1	FA054	S03629	YauW	q	N
A-ET-1	FA054	S03633	AP	k	N
A-ET-1	FA054	S03634	AP	k	N
A-ET-1	FA054	S03635	AP	k	N
A-ET-1	FA054	S03636	AP	k	N
A-ET-1	FA054	S03637	AP	k	N
A-ET-1	FA054	S03638	AP	b	N
A-ET-1	FA054	S03639	AP	b	N
A-ET-1	FA054	S03641	AP	d	N
A-ET-1	FA054	S03643	AP	b	N
A-ET-1	FA054	S03644	AP	b	N
A-ET-1	FA054	S03645	AP	b	N
A-ET-1	FA054	S03646	YauW	b	N
A-ET-1	FA054	S03647	AP	b	N
A-ET-1	FA054	S03648	AP	b	N
A-ET-1	FA054	S03649	AP	e	N
A-ET-1	FA054	S03651	MB	k	N
A-ET-1	FA054	S03654	MB	b	N
A-ET-1	FA054	S03655	MB	b	N
A-ET-1	FA054	S03656	MB	b	N
A-ET-1	FA054	S03657	MB	c	N

A-ET-1	FA054	S03660	PotR/B	b	N
A-ET-1	FA054	S03678	AP	j	N
A-ET-1	FA023	S05291	LagRSc	t	N
A-ET-1	FA023	S05292	LagRSc	t	N
A-ET-1	FA023	S05293	LagRSc	t	N
A-ET-1	FA023	S05294	AP	t	N
A-ET-1	FA023	S05295	AP	t	N
A-ET-1	FA047	S06012	YauW	c	N
A-ET-1	FA047	S06025	YRW	c	N
A-ET-1	FA047	S06029	YRW	gc	N
A-ET-1	FA047	S06030	YRW	gc	N
A-ET-1	FA047	S06032	YRW	gc	N
A-ET-1	FA047	S06033	YRW	gc	N
A-ET-1	FA047	S06036	YRW	gc	N
A-ET-1	FA047	S06038	YRW	gc	N
A-ET-1	FA047	S06043	YRW	gc	N
A-ET-1	FA047	S06044	YRW	gc	N
A-ET-1	FA047	S06050	YauW	gc	N
A-ET-1	FA047	S06055	YRW	c	N
A-ET-1	FA047	S06057	YRW	c	N
A-ET-1	FA047	S06059	YRW	c	N
A-ET-1	FA047	S06061	YRW	c	N
A-ET-1	FA047	S06068	YauW	gc	N
A-ET-1	FA047	S06070	YRW	f	N
A-ET-1	FA047	S06071	YRW	f	N
A-ET-1	FA047	S06072	YRW	f	N
A-ET-1	FA047	S06085	YRW	b	N
A-ET-1	FA047	S06086	YRW	b	N
A-ET-1	FA047	S06088	YRW	b	N
A-ET-1	FA047	S06089	YRW	b	N
A-ET-1	FA047	S06090	YRW	b	N
A-ET-1	FA047	S06091	YRW	b	N
A-ET-1	FA047	S06094	Xal	b	N
A-ET-1	FA047	S06095	YRW	k	N
A-ET-1	FA047	S06097	YRW	j	N
A-ET-1	FA047	S06098	YRW	j	N
A-ET-1	FA047	S06099	YRW	j	N
A-ET-1	FA047	S06103	YauW	h	N
A-ET-1	FA047	S06107	YauW	h	N
A-ET-1	FA047	S06108	YauW	h	N
A-ET-1	FA047	S06109	YauW	i	N
A-ET-1	FA047	S06113	YauW	q	N
A-ET-1	FA047	S06114	YauW	q	N
A-ET-1	FA047	S06115	YauW	j	N
A-ET-1	FA047	S06116	YauW	k	N
A-ET-1	FA047	S06117	YauW	k	N
A-ET-1	FA047	S06118	YauW	k	N
A-ET-1	FA047	S06122	YauW	k	N
A-ET-1	FA047	S06123	YauW	b	N

A-ET-1	FA047	S06124	YauW	b	N
A-ET-1	FA047	S06125	YauW	b	N
A-ET-1	FA047	S06126	YauW	b	N
A-ET-1	FA047	S06127	YauW	b	N
A-ET-1	FA047	S06128	YauW	b	N
A-ET-1	FA047	S06129	YauW	b	N
A-ET-1	FA047	S06130	YauW	b	N
A-ET-1	FA047	S06131	YauW	b	N
A-ET-1	FA047	S06132	YauW	b	N
A-ET-1	FA047	S06133	YauW	b	N
A-ET-1	FA047	S06134	YauW	b	N
A-ET-1	FA047	S06135	YauW	b	N
A-ET-1	FA047	S06136	YauW	b	N
A-ET-1	FA047	S06144	YauW	b	N
A-ET-1	FA047	S06146	YauW	b	N
A-ET-1	FA047	S06147	YauW	b	N
A-ET-1	FA047	S06148	YauW	b	N
A-ET-1	FA047	S06149	YauW	b	N
A-ET-1	FA047	S06150	YauW	b	N
A-ET-1	FA047	S06155	PotR/B	q	N
A-ET-1	FA047	S06156	PotSRB	b	N
A-ET-1	FA047	S06158	MB	f	N
A-ET-1	FA047	S06159	MB	k	N
A-ET-1	FA047	S06160	MB	k	N
A-ET-1	FA047	S06161	MB	k	N
A-ET-1	FA047	S06162	MB	b	N
A-ET-1	FA047	S06163	MB	b	N
A-ET-1	FA047	S06164	MB	b	N
A-ET-1	FA047	S06165	MB	m	N
A-ET-1	FA047	S06166	MB	j	N
A-ET-1	FA047	S06167	MB	c	N
A-ET-1	FA047	S06168	MB	c	N
A-ET-1	FA047	S06169	MB	d	N
A-ET-1	FA047	S06173	PotSRB	h	N
A-ET-1	FA047	S06174	AP	l	N
A-ET-1	FA047	S06175	AP	l	N
A-ET-1	FA047	S06176	AP	l	N
A-ET-1	FA047	S06177	AP	b	N
A-ET-1	FA047	S06178	AP	b	N
A-ET-1	FA047	S06179	AP	b	N
A-ET-1	FA047	S06180	AP	b	N
A-ET-1	FA047	S06181	AP	b	N
A-ET-1	FA047	S06182	AP	b	N
A-ET-1	FA047	S06183	AP	b	N
A-ET-1	FA047	S06184	AP	b	N
A-ET-1	FA047	S06185	AP	b	N
A-ET-1	FA047	S06186	AP	b	N
A-ET-1	FA047	S06187	AP	b	N
A-ET-1	FA047	S06188	AP	b	N

A-ET-1	FA047	S06189	AP	b	N
A-ET-1	FA047	S06190	AP	b	N
A-ET-1	FA047	S06191	AP	b	N
A-ET-1	FA047	S06192	AP	b	N
A-ET-1	FA049	S06546	YRW	b	N
A-ET-1	FA049	S06547	YRW	b	N
A-ET-1	FA049	S06548	YRW	k	N
A-ET-1	FA049	S06549	YRW	j	N
A-ET-1	FA049	S06551	YauW	g	N
A-ET-1	FA049	S06552	YauW	k	N
A-ET-1	FA049	S06553	YauW	k	N
A-ET-1	FA049	S06554	YauW	k	N
A-ET-1	FA049	S06556	PasBW	b	N
A-ET-1	FA049	S06561	AP	l	N
A-ET-1	FA049	S06562	AP	j	N
A-ET-1	FA049	S06563	MB	c	N
A-ET-1	FA023	S07802	YauW	g	N
A-ET-1	FA023	S07807	YRW	k	N
A-ET-1	FA023	S07808	YauW	b	N
A-ET-1	FA023	S07810	YRW	b	N
A-ET-1	FA023	S07812	LagDR	h	N
A-ET-1	FA023	S07813	YRW	o	N
A-ET-1	FA023	S07814	MB	l	N
A-ET-1	FA047	S08712	YauW	k	N
A-ET-1	FA047	S08713	YRW	c	N
A-ET-1	FA047	S08716	YRW	c	N
A-ET-1	FA047	S08719	YauW	b	N
A-ET-1	FA047	S09000	LagRSc	t	N
A-ET-1	FA047	S09001	LagRSc	t	N
A-ET-1	FA047	S09002	LagR	t	N
A-ET-1	FA047	S09003	LagR	v	N
A-ET-1	FA047	S09004	LagRSc	t	N
A-ET-1	FA047	S09005	LagRSc	t	N
A-ET-1	FA047	S09006	LagRSc	t	N
A-ET-1	FA047	S09007	LagRSc	t	N
A-ET-1	FA047	S09008	LagRSc	t	N
A-ET-1	FA047	S09009	LagRSc	t	N
A-ET-1	FA047	S09010	LagRSc	t	N
A-ET-1	FA047	S09011	LagRSc	t	N
A-ET-1	FA047	S09012	LagRSc	t	N
A-ET-1	FA047	S09013	LagRSc	t	N
A-ET-1	FA047	S09014	AP	t	N
A-ET-1	FA047	S09015	AP	t	N
A-ET-1	FA047	S09016	AP	v	N
A-ET-1	FA047	S09017	AP	v	N
A-ET-1	FA047	S09018	AP	v	N
A-ET-1	FA047	S09025	AP	x	N
A-ET-1	FA049	S09271	LagRSc	t	N
A-ET-1	FA049	S09272	LagRSc	t	N

A-ET-1	FA049	S09273	LagRSc	t	N
A-ET-1	FA049	S09274	MB	t	N
A-ET-1	FA049	S09275	LagDR	t	N
A-ET-1	FA049	S09276	AP	t	N
A-ET-1	FA049	S09277	AP	t	N
A-ET-1	FA049	S09279	AP	t	N
A-ET-1	FA049	S09280	AP	t	N
A-ET-1	FA049	S09281	AP	t	N
A-ET-1	FA049	S09282	AP	t	N
A-ET-1	FA049	S09283	AP	t	N
A-ET-1	FA049	S09284	AP	t	N
A-ET-1	FA049	S09285	AP	t	N
A-ET-1	FA023	S09534	MB	y	N
A-ET-1	FA023	S09535	AP	t	N
A-ET-1	FA023	S09537	YauW	s	N
A-ET-1	FA023	S09540	AP	t	N
A-ET-1	FA022	S09788	MB	v	N
A-ET-1	FA022	S09789	LagDR+B	t	N
A-ET-1	FA023	S09811	AP	t	N
A-ET-1	FA023	S09812	AP	t	N
A-ET-1	FA023	S09813	AP	t	N
A-ET-1	FA023	S09815	MB	v	N
A-ET-1	FA023	S09816	AP	y	N
A-ET-1	FA047	S10362	LagRSc	v	N
A-ET-1	FA047	S10363	LagR	v	N
A-ET-1	FA023	S00073	YauW	y	Y
A-ET-1	FA022	S00488	YauW	s	Y
A-ET-1	FA022	S00489	MFineB	w	Y
A-ET-1	FA047	S00909	MB	t	Y
A-ET-1	FA047	S00910	PasBW	s	Y
A-ET-1	FA047	S00912	YauW	t	Y
A-ET-1	FA049	S01029	YRW	q	N
A-ET-1	FA023	S01041	YauW	r	Y
A-ET-1	FA023	S01043	YRW	f	Y
A-ET-1	FA023	S01044	YRW	g	Y
A-ET-1	FA023	S01045	YRW	g	Y
A-ET-1	FA023	S01047	YRW	g	Y
A-ET-1	FA023	S01049	YRW	g	Y
A-ET-1	FA023	S01050	YauW	f	Y
A-ET-1	FA023	S01056	YRW	o	Y
A-ET-1	FA023	S01057	YauW	o	Y
A-ET-1	FA023	S01058	YauW	c	Y
A-ET-1	FA023	S01059	YauW	c	Y
A-ET-1	FA023	S01060	YRW	c	Y
A-ET-1	FA023	S01064	YRW	c	Y
A-ET-1	FA023	S01065	YRW	c	Y
A-ET-1	FA023	S01067	PasBW	c	Y
A-ET-1	FA023	S01068	YRW	i	Y
A-ET-1	FA023	S01069	YRW	o	Y

A-ET-1	FA023	S01070	YRW	o	Y
A-ET-1	FA023	S01071	YRW	o	Y
A-ET-1	FA022	S01142	YauW	c	Y
A-ET-1	FA022	S01148	YauW	c	Y
A-ET-1	FA023	S01159	YauW	c	Y
A-ET-1	FA023	S01160	YauW	c	Y
A-ET-1	FA047	S01162	YauW	c	Y
A-ET-1	FA022	S01165	YauW	c	Y
A-ET-1	FA022	S01179	YauW	b	Y
A-ET-1	FA023	S01182	YauW	b	Y
A-ET-1	FA023	S01185	YauW	b	Y
A-ET-1	FA023	S01186	YauW	b	Y
A-ET-1	FA023	S01187	YauW	b	Y
A-ET-1	FA023	S01215	YauW	b	Y
A-ET-1	FA023	S01239	YRW	b	Y
A-ET-1	FA023	S01270	YRW	gg	Y
A-ET-1	FA023	S01271	YRW	gg	Y
A-ET-1	FA023	S01276	YRW	gg	Y
A-ET-1	FA023	S01277	YRW	gg	Y
A-ET-1	FA023	S01279	YRW	gg	Y
A-ET-1	FA023	S01282	YRW	gg	Y
A-ET-1	FA047	S01283	YRW	gg	Y
A-ET-1	FA022	S01285	YRW	c	Y
A-ET-1	FA022	S01286	YRW	c	Y
A-ET-1	FA022	S01288	YRW	c	Y
A-ET-1	FA023	S01292	YRW	c	Y
A-ET-1	FA023	S01293	YRW	c	Y
A-ET-1	FA023	S01295	YRW	c	Y
A-ET-1	FA023	S01296	YRW	c	Y
A-ET-1	FA022	S01303	YRW	c	Y
A-ET-1	FA023	S01309	YRW	c	Y
A-ET-1	FA023	S01310	YRW	c	Y
A-ET-1	FA023	S01311	YRW	c	Y
A-ET-1	FA023	S01312	YRW	c	Y
A-ET-1	FA023	S01313	YRW	c	Y
A-ET-1	FA023	S01314	YRW	c	Y
A-ET-1	FA023	S01315	YRW	c	Y
A-ET-1	FA022	S01316	YRW	c	Y
A-ET-1	FA047	S01318	YRW	c	Y
A-ET-1	FA022	S01323	YRW	c	Y
A-ET-1	FA022	S01324	YRW	c	Y
A-ET-1	FA022	S01325	YRW	c	Y
A-ET-1	FA023	S01328	YRW	c	Y
A-ET-1	FA023	S01329	YRW	c	Y
A-ET-1	FA023	S01330	YRW	c	Y
A-ET-1	FA047	S01331	YRW	c	Y
A-ET-1	FA022	S01334	YRW	c	Y
A-ET-1	FA022	S01337	YRW	c	Y
A-ET-1	FA023	S01339	YRW	c	Y

A-ET-1	FA023	S01340	YRW	c	Y
A-ET-1	FA047	S01341	YRW	c	Y
A-ET-1	FA023	S01344	YRW	c	Y
A-ET-1	FA022	S01347	YRW	j	Y
A-ET-1	FA023	S01354	YauW	fg	Y
A-ET-1	FA023	S01381	YauW	fg	Y
A-ET-1	FA023	S01382	YauW	fg	Y
A-ET-1	FA023	S01391	YRW	o	Y
A-ET-1	FA023	S01392	YRW	o	Y
A-ET-1	FA023	S01393	YRW	o	Y
A-ET-1	FA023	S01394	YRW	o	Y
A-ET-1	FA023	S01402	YRW	o	Y
A-ET-1	FA047	S01403	YRW	o	Y
A-ET-1	FA022	S01415	YauW	d	Y
A-ET-1	FA022	S01416	YauW	i	Y
A-ET-1	FA023	S01419	YauW	d	Y
A-ET-1	FA047	S01420	YauW	i	Y
A-ET-1	FA022	S01421	YauW	h	Y
A-ET-1	FA047	S01422	YauW	h	Y
A-ET-1	FA022	S02620	YauW	c	Y
A-ET-1	FA022	S02621	YRW	c	Y
A-ET-1	FA022	S02622	YRW	c	Y
A-ET-1	FA022	S02623	YauW	f	Y
A-ET-1	FA022	S02635	PotR/B	l	Y
A-ET-1	FA022	S02643	YauW	o	Y
A-ET-1	FA022	S02644	MB	o	Y
A-ET-1	FA022	S02645	YRW	o	Y
A-ET-1	FA054	S03502	YRW	r	Y
A-ET-1	FA054	S03503	YRW	r	Y
A-ET-1	FA054	S03504	YauW	r	Y
A-ET-1	FA054	S03507	YauW	h	Y
A-ET-1	FA054	S03508	YauW	c	Y
A-ET-1	FA054	S03509	YauW	c	Y
A-ET-1	FA054	S03511	YauW	c	Y
A-ET-1	FA054	S03515	YauW	fg	Y
A-ET-1	FA054	S03516	YauW	fg	Y
A-ET-1	FA054	S03517	YauW	fg	Y
A-ET-1	FA054	S03518	YauW	fg	Y
A-ET-1	FA054	S03519	YauW	fg	Y
A-ET-1	FA054	S03520	YauW	fg	Y
A-ET-1	FA054	S03525	YauW	fg	Y
A-ET-1	FA054	S03526	YauW	fg	Y
A-ET-1	FA054	S03527	YauW	fg	Y
A-ET-1	FA054	S03529	YauW	fg	Y
A-ET-1	FA054	S03530	YauW	fg	Y
A-ET-1	FA054	S03531	YauW	fg	Y
A-ET-1	FA054	S03532	YauW	fg	Y
A-ET-1	FA054	S03533	YauW	fg	Y
A-ET-1	FA054	S03534	YRW	c	Y

A-ET-1	FA054	S03535	YRW	c	Y
A-ET-1	FA054	S03536	YRW	c	Y
A-ET-1	FA054	S03537	YRW	c	Y
A-ET-1	FA054	S03538	YRW	c	Y
A-ET-1	FA054	S03539	YRW	c	Y
A-ET-1	FA054	S03541	YRW	c	Y
A-ET-1	FA054	S03543	YRW	g	Y
A-ET-1	FA054	S03546	YRW	g	Y
A-ET-1	FA054	S03547	YRW	g	Y
A-ET-1	FA054	S03549	YRW	g	Y
A-ET-1	FA054	S03550	YRW	g	Y
A-ET-1	FA054	S03551	YRW	g	Y
A-ET-1	FA054	S03552	YRW	g	Y
A-ET-1	FA054	S03553	YRW	g	Y
A-ET-1	FA054	S03554	YRW	g	Y
A-ET-1	FA054	S03555	YRW	g	Y
A-ET-1	FA054	S03556	YRW	g	Y
A-ET-1	FA054	S03557	YRW	g	Y
A-ET-1	FA054	S03558	YRW	g	Y
A-ET-1	FA054	S03559	YRW	g	Y
A-ET-1	FA054	S03560	YauW	g	Y
A-ET-1	FA054	S03561	YRW	g	Y
A-ET-1	FA054	S03562	YRW	g	Y
A-ET-1	FA054	S03563	YRW	g	Y
A-ET-1	FA054	S03564	FGray	q	Y
A-ET-1	FA054	S03565	YRW	j	Y
A-ET-1	FA054	S03576	YRW	b	Y
A-ET-1	FA054	S03579	YRW	o	Y
A-ET-1	FA054	S03583	YauW	k	Y
A-ET-1	FA054	S03594	YauW	b	Y
A-ET-1	FA054	S03601	YauW	b	Y
A-ET-1	FA054	S03602	YauW	b	Y
A-ET-1	FA054	S03603	YauW	b	Y
A-ET-1	FA054	S03612	SJW	b	Y
A-ET-1	FA054	S03613	SJW	b	Y
A-ET-1	FA054	S03614	YauW	b	Y
A-ET-1	FA054	S03620	YauW	o	Y
A-ET-1	FA054	S03621	YauW	o	Y
A-ET-1	FA054	S03622	YauW	o	Y
A-ET-1	FA054	S03623	YauW	o	Y
A-ET-1	FA054	S03624	YauW	o	Y
A-ET-1	FA054	S03625	YauW	o	Y
A-ET-1	FA054	S03628	YauW	q	Y
A-ET-1	FA054	S03661	PotR/B	b	Y
A-ET-1	FA023	S05517	YauW	b	Y
A-ET-1	FA023	S05518	MB	b	Y
A-ET-1	FA023	S05519	MB	r	Y
A-ET-1	FA022	S05578	YauW	b	Y
A-ET-1	FA047	S06011	YauW	c	Y

A-ET-1	FA047	S06013	YauW	c	Y
A-ET-1	FA047	S06014	YauW	c	Y
A-ET-1	FA047	S06015	YauW	c	Y
A-ET-1	FA047	S06016	YRW	c	Y
A-ET-1	FA047	S06017	YRW	c	Y
A-ET-1	FA047	S06018	YRW	c	Y
A-ET-1	FA047	S06019	YRW	c	Y
A-ET-1	FA047	S06020	YRW	c	Y
A-ET-1	FA047	S06021	YRW	c	Y
A-ET-1	FA047	S06022	YRW	c	Y
A-ET-1	FA047	S06023	YRW	c	Y
A-ET-1	FA047	S06024	YRW	c	Y
A-ET-1	FA047	S06026	YRW	c	Y
A-ET-1	FA047	S06027	YRW	c	Y
A-ET-1	FA047	S06028	YRW	ce	Y
A-ET-1	FA047	S06031	YRW	ce	Y
A-ET-1	FA047	S06034	YRW	ce	Y
A-ET-1	FA047	S06035	YRW	ce	Y
A-ET-1	FA047	S06037	YRW	ce	Y
A-ET-1	FA047	S06039	YRW	ce	Y
A-ET-1	FA047	S06040	YRW	ce	Y
A-ET-1	FA047	S06041	YRW	ce	Y
A-ET-1	FA047	S06042	YRW	ce	Y
A-ET-1	FA047	S06045	YRW	ce	Y
A-ET-1	FA047	S06046	YRW	ce	Y
A-ET-1	FA047	S06047	YRW	ce	Y
A-ET-1	FA047	S06048	YRW	ce	Y
A-ET-1	FA047	S06049	YauW	ce	Y
A-ET-1	FA047	S06051	YauW	ce	Y
A-ET-1	FA047	S06052	YauW	ce	Y
A-ET-1	FA047	S06053	YauW	ce	Y
A-ET-1	FA047	S06054	YauW	ce	Y
A-ET-1	FA047	S06056	YRW	c	Y
A-ET-1	FA047	S06058	YRW	c	Y
A-ET-1	FA047	S06060	YRW	c	Y
A-ET-1	FA047	S06062	YRW	c	Y
A-ET-1	FA047	S06063	YRW	c	Y
A-ET-1	FA047	S06064	YRW	c	Y
A-ET-1	FA047	S06069	YRW	r	Y
A-ET-1	FA047	S06073	YRW	o	Y
A-ET-1	FA047	S06074	YRW	o	Y
A-ET-1	FA047	S06075	YRW	o	Y
A-ET-1	FA047	S06076	YRW	o	Y
A-ET-1	FA047	S06077	YRW	o	Y
A-ET-1	FA047	S06078	YRW	o	Y
A-ET-1	FA047	S06079	YRW	o	Y
A-ET-1	FA047	S06080	YRW	o	Y
A-ET-1	FA047	S06081	YRW	o	Y
A-ET-1	FA047	S06082	YRW	o	Y

A-ET-1	FA047	S06083	YRW	o	Y
A-ET-1	FA047	S06084	YRW	o	Y
A-ET-1	FA047	S06087	YRW	b	Y
A-ET-1	FA047	S06092	YRW	b	Y
A-ET-1	FA047	S06093	Xal	b	Y
A-ET-1	FA047	S06096	YRW	b	Y
A-ET-1	FA047	S06100	YauW	h	Y
A-ET-1	FA047	S06101	YauW	h	Y
A-ET-1	FA047	S06102	YauW	h	Y
A-ET-1	FA047	S06104	YauW	i	Y
A-ET-1	FA047	S06105	YauW	i	Y
A-ET-1	FA047	S06106	YauW	h	Y
A-ET-1	FA047	S06110	YauW	o	Y
A-ET-1	FA047	S06111	YauW	o	Y
A-ET-1	FA047	S06112	YauW	c	Y
A-ET-1	FA047	S06119	YauW	k	Y
A-ET-1	FA047	S06120	YauW	k	Y
A-ET-1	FA047	S06121	YauW	k	Y
A-ET-1	FA047	S06137	YauW	b	Y
A-ET-1	FA047	S06138	YauW	b	Y
A-ET-1	FA047	S06139	YauW	b	Y
A-ET-1	FA047	S06140	YauW	b	Y
A-ET-1	FA047	S06141	YauW	b	Y
A-ET-1	FA047	S06142	YauW	b	Y
A-ET-1	FA047	S06143	YauW	b	Y
A-ET-1	FA047	S06145	YauW	b	Y
A-ET-1	FA047	S06151	YRW	c	Y
A-ET-1	FA047	S06152	YRW	c	Y
A-ET-1	FA047	S06157	MB	f	Y
A-ET-1	FA047	S06170	MB	d	Y
A-ET-1	FA047	S06171	MB	d	Y
A-ET-1	FA047	S06172	MB	i	Y
A-ET-1	FA049	S06545	YRW	g	Y
A-ET-1	FA049	S06550	YauW	g	Y
A-ET-1	FA049	S06555	YauW	d	Y
A-ET-1	FA049	S06560	YRW	q	Y
A-ET-1	FA023	S07799	YRW	g	Y
A-ET-1	FA023	S07800	YauW	f	Y
A-ET-1	FA023	S07801	YauW	f	Y
A-ET-1	FA023	S07803	YRW	q	Y
A-ET-1	FA023	S07804	YRW	j	Y
A-ET-1	FA023	S07805	YRW	o	Y
A-ET-1	FA023	S07806	YRW	o	Y
A-ET-1	FA023	S07811	YauW	i	Y
A-ET-1	FA047	S08714	YauW	g	Y
A-ET-1	FA047	S08715	YauW	g	Y
A-ET-1	FA047	S08717	YRW	c	Y
A-ET-1	FA047	S09019	AP	t	Y
A-ET-1	FA049	S09278	AP	t	Y

A-ET-1	FA022	S09542	CenW	s	Y
A-ET-1	FA023	S00001	LagDR+B	t	N
A-ET-2	FA057	S00749	YRW	t	N
A-ET-2	FA057	S00750	YauW	y	N
A-ET-2	FA057	S00751	YauW	y	N
A-ET-2	FA063	S00754	YauW	y	N
A-ET-2	FA057	S00755	LagRSc	v	N
A-ET-2	FA057	S00756	LagRSc	t	N
A-ET-2	FA057	S00757	LagRSc	t	N
A-ET-2	FA063	S00758	LagRSc	t	N
A-ET-2	FA063	S00760	LagDR+B	t	N
A-ET-2	FA057	S00761	AP	v	N
A-ET-2	FA057	S00764	AP	t	N
A-ET-2	FA057	S00765	AP	t	N
A-ET-2	FA057	S00766	AP	t	N
A-ET-2	FA057	S00767	AP	t	N
A-ET-2	FA057	S00768	AP	t	N
A-ET-2	FA057	S00769	AP	t	N
A-ET-2	FA063	S00770	LagDR	t	N
A-ET-2	FA063	S00771	LagDR	t	N
A-ET-2	FA063	S00772	LagDR	y	N
A-ET-2	FA057	S00773	AP	y	N
A-ET-2	FA057	S00774	AP	s	N
A-ET-2	FA057	S00775	AP	v	N
A-ET-2	FA057	S00776	AP	t	N
A-ET-2	FA057	S00777	AP	t	N
A-ET-2	FA057	S00778	AP	t	N
A-ET-2	FA057	S00779	AP	t	N
A-ET-2	FA057	S00780	AP	t	N
A-ET-2	FA057	S00781	AP	t	N
A-ET-2	FA057	S00782	AP	t	N
A-ET-2	FA057	S00783	AP	t	N
A-ET-2	FA057	S00784	AP	t	N
A-ET-2	FA057	S00785	AP	t	N
A-ET-2	FA057	S00786	AP	t	N
A-ET-2	FA057	S00787	AP	t	N
A-ET-2	FA057	S00788	AP	t	N
A-ET-2	FA057	S00789	AP	t	N
A-ET-2	FA063	S00790	AP	t	N
A-ET-2	FA063	S00791	AP	t	N
A-ET-2	FA063	S00792	AP	t	N
A-ET-2	FA063	S00793	AP	t	N
A-ET-2	FA063	S00794	AP	t	N
A-ET-2	FA063	S00795	AP	t	N
A-ET-2	FA063	S00796	AP	t	N
A-ET-2	FA063	S00797	AP	t	N
A-ET-2	FA063	S00798	AP	t	N
A-ET-2	FA063	S00799	AP	t	N
A-ET-2	FA063	S00800	AP	t	N

A-ET-2	FA063	S00801	AP	t	N
A-ET-2	FA063	S00802	AP	t	N
A-ET-2	FA063	S00803	AP	t	N
A-ET-2	FA063	S00804	AP	t	N
A-ET-2	FA063	S00805	AP	t	N
A-ET-2	FA063	S00806	AP	t	N
A-ET-2	FA063	S03360	PotR/B	b	N
A-ET-2	FA057	S03364	YRW	g	N
A-ET-2	FA057	S03390	YRW	b	N
A-ET-2	FA057	S03391	YRW	b	N
A-ET-2	FA063	S03392	YRW	b	N
A-ET-2	FA063	S03394	YRW	b	N
A-ET-2	FA063	S03395	YRW	b	N
A-ET-2	FA063	S03397	YRW	j	N
A-ET-2	FA057	S03398	YRW	j	N
A-ET-2	FA057	S03402	YRW	k	N
A-ET-2	FA063	S03403	YauW	b	N
A-ET-2	FA057	S03404	YauW	b	N
A-ET-2	FA057	S03405	YauW	b	N
A-ET-2	FA057	S03406	YauW	b	N
A-ET-2	FA057	S03407	YauW	b	N
A-ET-2	FA057	S03408	YauW	b	N
A-ET-2	FA057	S03409	YauW	b	N
A-ET-2	FA057	S03410	YauW	b	N
A-ET-2	FA063	S03411	YauW	b	N
A-ET-2	FA063	S03418	YauW	b	N
A-ET-2	FA057	S03420	YauW	b	N
A-ET-2	FA057	S03422	YauW	i	N
A-ET-2	FA057	S03423	YauW	h	N
A-ET-2	FA057	S03424	YauW	h	N
A-ET-2	FA063	S03425	YauW	j	N
A-ET-2	FA063	S03434	YauW	k	N
A-ET-2	FA063	S03435	YauW	k	N
A-ET-2	FA063	S03438	YauW	d	N
A-ET-2	FA063	S03439	YauW	o	N
A-ET-2	FA057	S03442	YauW	r	N
A-ET-2	FA057	S03443	YauW	q	N
A-ET-2	FA057	S03445	LagDR	e	N
A-ET-2	FA057	S03446	LagDR	b	N
A-ET-2	FA057	S03447	LagDR	b	N
A-ET-2	FA057	S03448	LagDR	h	N
A-ET-2	FA063	S03449	LagDR	h	N
A-ET-2	FA057	S03450	AP	f	N
A-ET-2	FA057	S03451	AP	b	N
A-ET-2	FA057	S03452	AP	b	N
A-ET-2	FA063	S03453	AP	b	N
A-ET-2	FA057	S03454	AP	j	N
A-ET-2	FA063	S03456	MB	b	N
A-ET-2	FA057	S03457	AP	h	N

A-ET-2	FA057	S03458	MB	b	N
A-ET-2	FA057	S03459	MB	h	N
A-ET-2	FA057	S03460	MB	h	N
A-ET-2	FA063	S03461	LagDR	b	N
A-ET-2	FA063	S03462	LagDR	b	N
A-ET-2	FA071	S03730	YRW	g	N
A-ET-2	FA071	S03736	YRW	k	N
A-ET-2	FA071	S03739	YRW	b	N
A-ET-2	FA071	S03740	YRW	b	N
A-ET-2	FA071	S03741	YRW	b	N
A-ET-2	FA071	S03742	YRW	k	N
A-ET-2	FA071	S03743	YRW	b	N
A-ET-2	FA071	S03769	YRW	e	N
A-ET-2	FA071	S03846	YauW	k	N
A-ET-2	FA071	S03847	YauW	k	N
A-ET-2	FA071	S03848	YauW	k	N
A-ET-2	FA071	S03849	YauW	k	N
A-ET-2	FA071	S03873	YauW	b	N
A-ET-2	FA071	S03878	YauW	b	N
A-ET-2	FA071	S03879	YauW	b	N
A-ET-2	FA071	S03881	YauW	b	N
A-ET-2	FA071	S03888	YauW	b	N
A-ET-2	FA071	S03889	YauW	b	N
A-ET-2	FA071	S03891	YauW	b	N
A-ET-2	FA071	S03928	PotSRB	h	N
A-ET-2	FA071	S03929	LagR	h	N
A-ET-2	FA071	S03930	LagR	b	N
A-ET-2	FA071	S03931	LagR	b	N
A-ET-2	FA071	S06287	YauW	h	N
A-ET-2	FA071	S06292	YauW	h	N
A-ET-2	FA071	S06294	YauW	h	N
A-ET-2	FA071	S06295	YauW	h	N
A-ET-2	FA071	S06306	YauW	h	N
A-ET-2	FA071	S06307	YauW	h	N
A-ET-2	FA071	S06308	YauW	h	N
A-ET-2	FA071	S06311	YauW	i	N
A-ET-2	FA071	S06325	YauW	p	N
A-ET-2	FA071	S06341	AP	k	N
A-ET-2	FA071	S06348	AP	b	N
A-ET-2	FA071	S06349	AP	b	N
A-ET-2	FA071	S06350	AP	b	N
A-ET-2	FA071	S06351	AP	b	N
A-ET-2	FA071	S06352	AP	b	N
A-ET-2	FA071	S06353	AP	b	N
A-ET-2	FA071	S06354	AP	b	N
A-ET-2	FA071	S06355	AP	b	N
A-ET-2	FA071	S06356	AP	b	N
A-ET-2	FA071	S06370	AP	b	N
A-ET-2	FA071	S06371	AP	b	N

A-ET-2	FA071	S06372	AP	b	N
A-ET-2	FA071	S06373	AP	b	N
A-ET-2	FA071	S06374	AP	b	N
A-ET-2	FA071	S06378	PotR/B	k	N
A-ET-2	FA071	S06379	PotR/B	b	N
A-ET-2	FA071	S06384	MB	b	N
A-ET-2	FA071	S06385	MB	b	N
A-ET-2	FA071	S06395	AP	h	N
A-ET-2	FA071	S06397	AP	e	N
A-ET-2	FA071	S06398	AP	l	N
A-ET-2	FA071	S06406	YauW	e	N
A-ET-2	FA071	S06407	YRW	b	N
A-ET-2	FA071	S09044	YauW	t	N
A-ET-2	FA071	S09057	YauW	s	N
A-ET-2	FA071	S09067	AP	y	N
A-ET-2	FA071	S09072	LagDR	y	N
A-ET-2	FA071	S09073	LagR	x	N
A-ET-2	FA071	S09076	MB	y	N
A-ET-2	FA071	S09077	MB	y	N
A-ET-2	FA071	S09078	MB	y	N
A-ET-2	FA071	S09079	MB	y	N
A-ET-2	FA071	S09081	YauW	y	N
A-ET-2	FA071	S09082	YauW	s	N
A-ET-2	FA071	S09084	LagR	t	N
A-ET-2	FA071	S09089	MB	t	N
A-ET-2	FA071	S09093	AP	t	N
A-ET-2	FA071	S09095	AP	t	N
A-ET-2	FA071	S09096	AP	t	N
A-ET-2	FA071	S09098	AP	v	N
A-ET-2	FA071	S09102	AP	v	N
A-ET-2	FA071	S09104	AP	t	N
A-ET-2	FA071	S09108	LagDR+B	t	N
A-ET-2	FA071	S09116	LagDR+B	t	N
A-ET-2	FA071	S09120	AP	t	N
A-ET-2	FA071	S09121	AP	t	N
A-ET-2	FA071	S09122	AP	t	N
A-ET-2	FA071	S09123	AP	t	N
A-ET-2	FA071	S09160	AP	t	N
A-ET-2	FA071	S09162	AP	t	N
A-ET-2	FA071	S09163	AP	t	N
A-ET-2	FA071	S09164	AP	t	N
A-ET-2	FA071	S09165	AP	t	N
A-ET-2	FA071	S09166	AP	t	N
A-ET-2	FA071	S09167	AP	t	N
A-ET-2	FA071	S09168	YauW	t	N
A-ET-2	FA071	S09171	AP	t	N
A-ET-2	FA071	S09172	AP	t	N
A-ET-2	FA071	S09173	AP	t	N
A-ET-2	FA071	S09202	AP	t	N

A-ET-2	FA071	S09203	AP	t	N
A-ET-2	FA071	S09206	LagDR	t	N
A-ET-2	FA071	S09208	AP	v	N
A-ET-2	FA071	S09218	MB	t	N
A-ET-2	FA071	S10678	AP	t	N
A-ET-2	FA071	S11401	YauW	b	N
A-ET-2	FA057	S00752	YauW	y	Y
A-ET-2	FA057	S00753	YauW	y	Y
A-ET-2	FA057	S00759	MFineB	s	Y
A-ET-2	FA057	S00762	MFineB	t	Y
A-ET-2	FA057	S00763	MFineB	t	Y
A-ET-2	FA057	S03361	YRW	g	Y
A-ET-2	FA057	S03362	YRW	g	Y
A-ET-2	FA063	S03363	YRW	g	Y
A-ET-2	FA057	S03365	YRW	g	Y
A-ET-2	FA063	S03366	YRW	g	Y
A-ET-2	FA057	S03367	YRW	c	Y
A-ET-2	FA057	S03368	YRW	c	Y
A-ET-2	FA057	S03369	YRW	c	Y
A-ET-2	FA057	S03370	YRW	c	Y
A-ET-2	FA057	S03371	YRW	c	Y
A-ET-2	FA057	S03372	YRW	c	Y
A-ET-2	FA057	S03373	YRW	c	Y
A-ET-2	FA057	S03374	YRW	c	Y
A-ET-2	FA057	S03375	YRW	c	Y
A-ET-2	FA057	S03376	YRW	c	Y
A-ET-2	FA057	S03377	YRW	c	Y
A-ET-2	FA057	S03378	YRW	c	Y
A-ET-2	FA057	S03379	YRW	c	Y
A-ET-2	FA057	S03380	YRW	c	Y
A-ET-2	FA057	S03381	YRW	c	Y
A-ET-2	FA063	S03382	YRW	c	Y
A-ET-2	FA057	S03383	YRW	c	Y
A-ET-2	FA057	S03384	YRW	c	Y
A-ET-2	FA063	S03385	YRW	c	Y
A-ET-2	FA057	S03386	YRW	c	Y
A-ET-2	FA063	S03387	YRW	c	Y
A-ET-2	FA063	S03388	YRW	c	Y
A-ET-2	FA057	S03389	YRW	c	Y
A-ET-2	FA063	S03393	YRW	b	Y
A-ET-2	FA057	S03396	YRW	b	Y
A-ET-2	FA057	S03399	YRW	o	Y
A-ET-2	FA057	S03400	YRW	o	Y
A-ET-2	FA057	S03401	YRW	o	Y
A-ET-2	FA063	S03412	YauW	b	Y
A-ET-2	FA063	S03413	YauW	b	Y
A-ET-2	FA057	S03414	YauW	b	Y
A-ET-2	FA057	S03415	YauW	b	Y
A-ET-2	FA057	S03416	YauW	b	Y

A-ET-2	FA063	S03417	YauW	b	Y
A-ET-2	FA063	S03419	YauW	b	Y
A-ET-2	FA057	S03421	YauW	i	Y
A-ET-2	FA063	S03426	YauW	rg	Y
A-ET-2	FA063	S03427	YauW	rg	Y
A-ET-2	FA063	S03428	YauW	rg	Y
A-ET-2	FA057	S03429	YauW	rg	Y
A-ET-2	FA063	S03430	YauW	rg	Y
A-ET-2	FA063	S03431	YauW	rg	Y
A-ET-2	FA057	S03432	YauW	rg	Y
A-ET-2	FA057	S03436	YauW	c	Y
A-ET-2	FA057	S03437	YauW	c	Y
A-ET-2	FA063	S03440	YauW	o	Y
A-ET-2	FA057	S03441	YauW	n	Y
A-ET-2	FA057	S03444	LagDR	l	Y
A-ET-2	FA057	S03455	AP	b	Y
A-ET-2	FA071	S03729	YRW	g	Y
A-ET-2	FA071	S03731	YRW	g	Y
A-ET-2	FA071	S03733	YRW	o	Y
A-ET-2	FA071	S03734	YRW	o	Y
A-ET-2	FA071	S03735	YRW	k	Y
A-ET-2	FA071	S03826	YauW	g	Y
A-ET-2	FA071	S03850	YauW	k	Y
A-ET-2	FA071	S03853	YauW	k	Y
A-ET-2	FA071	S03892	YauW	c	Y
A-ET-2	FA071	S03908	YauW	b	Y
A-ET-2	FA071	S03909	YauW	b	Y
A-ET-2	FA071	S03925	Xal	o	Y
A-ET-2	FA071	S06243	YauW	l	Y
A-ET-2	FA071	S06244	YauW	l	Y
A-ET-2	FA071	S06247	YauW	d	Y
A-ET-2	FA071	S06286	YauW	h	Y
A-ET-2	FA071	S06293	YauW	h	Y
A-ET-2	FA071	S06310	YauW	h	Y
A-ET-2	FA071	S06315	YauW	e	Y
A-ET-2	FA071	S06376	PotR/B	b	Y
A-ET-2	FA071	S09051	YauW	s	Y
A-ET-2	FA071	S09161	AP	t	Y
A-ET-2	FA071	S11400	YauW	f	Y
A-ET-3	FA078	S00896	AP	t	N
A-ET-3	FA078	S00897	AP	t	N
A-ET-3	FA078	S00898	AP	t	N
A-ET-3	FA078	S00899	AP	t	N
A-ET-3	FA078	S00900	AP	t	N
A-ET-3	FA078	S00901	AP	t	N
A-ET-3	FA078	S00902	AP	t	N
A-ET-3	FA078	S00903	AP	t	N
A-ET-3	FA078	S00904	AP	t	N
A-ET-3	FA078	S00905	MB	x	N

A-ET-3	FA078	S00906	LagDR	y	N
A-ET-3	FA078	S00907	LagR	y	N
A-ET-3	FA078	S06002	YauW	g	N
A-ET-3	FA078	S06003	YauW	f	N
A-ET-3	FA078	S06004	YauW	b	N
A-ET-3	FA078	S06005	YauW	b	N
A-ET-3	FA078	S06006	AP	b	N
A-ET-3	FA078	S06007	AP	b	N
A-ET-3	FA078	S06009	AP	l	N
A-ET-3	FA078	S06010	AP	f	N
A-ET-3	FA078	S03994	YRW	o	Y
A-ET-3	FA078	S03995	YRW	c	Y
A-ET-3	FA078	S03996	YRW	c	Y
A-ET-3	FA078	S03997	YRW	g	Y
A-ET-3	FA078	S03998	YRW	g	Y
A-ET-3	FA078	S03999	YRW	f	Y
A-ET-3	FA078	S06000	YRW	c	Y
A-ET-3	FA078	S06001	YauW	g	Y
A-LT-1	FA064	S00607	YauW	y	N
A-LT-1	FA064	S00615	AP	t	N
A-LT-1	FA064	S00616	AP	t	N
A-LT-1	FA064	S00617	AP	t	N
A-LT-1	FA064	S00618	AP	t	N
A-LT-1	FA064	S00620	LagDR	x	N
A-LT-1	FA064	S00621	LagDR	t	N
A-LT-1	FA064	S00628	AP	u	N
A-LT-1	FA064	S00734	MFineB	t	N
A-LT-1	FA064	S00735	AP	t	N
A-LT-1	FA064	S00736	AP	t	N
A-LT-1	FA064	S00737	LagRSc	t	N
A-LT-1	FA064	S00741	AP	t	N
A-LT-1	FA064	S00742	AP	t	N
A-LT-1	FA064	S00743	AP	t	N
A-LT-1	FA064	S00744	AP	t	N
A-LT-1	FA064	S00745	AP	t	N
A-LT-1	FA064	S00746	AP	t	N
A-LT-1	FA064	S00747	AP	t	N
A-LT-1	FA048	S00823	AP	t	N
A-LT-1	FA048	S00825	MB	t	N
A-LT-1	FA048	S00833	LagR	x	N
A-LT-1	FA048	S00835	LagR	y	N
A-LT-1	FA048	S00840	AP	t	N
A-LT-1	FA048	S00860	AP	t	N
A-LT-1	FA048	S00862	LagRSc	t	N
A-LT-1	FA048	S00874	AP	t	N
A-LT-1	FA064	S02930	YauW	l	N
A-LT-1	FA064	S02942	YRW	b	N
A-LT-1	FA064	S02943	YauW	l	N
A-LT-1	FA064	S02944	YauW	b	N

A-LT-1	FA064	S02969	YauW	k	N
A-LT-1	FA064	S02970	AP	h	N
A-LT-1	FA064	S02976	MB	b	N
A-LT-1	FA064	S02977	MB	b	N
A-LT-1	FA064	S02980	AP	b	N
A-LT-1	FA064	S02984	AP	b	N
A-LT-1	FA064	S03329	YRW	g	N
A-LT-1	FA064	S03336	LagDR	k	N
A-LT-1	FA064	S03337	YauW	b	N
A-LT-1	FA064	S03346	SJW	f	N
A-LT-1	FA064	S03349	MB	b	N
A-LT-1	FA064	S03351	MB	b	N
A-LT-1	FA048	S03566	YRW	j	N
A-LT-1	FA048	S03587	YauW	b	N
A-LT-1	FA048	S03615	SJW	g	N
A-LT-1	FA048	S03640	AP	b	N
A-LT-1	FA048	S03932	YRW	c	N
A-LT-1	FA064	S07793	SJW	d	N
A-LT-1	FA064	S07794	MB	d	N
A-LT-1	FA048	S07798	AP	l	N
A-LT-1	FA048	S09809	AP	t	N
A-LT-1	FA048	S09810	LagR	t	N
A-LT-1	FA064	S00633	MB	w	Y
A-LT-1	FA064	S02896	YRW	c	Y
A-LT-1	FA064	S02897	YRW	c	Y
A-LT-1	FA064	S02898	YauW	c	Y
A-LT-1	FA064	S02899	YRW	g	Y
A-LT-1	FA064	S02900	YRW	g	Y
A-LT-1	FA064	S02901	YauW	c	Y
A-LT-1	FA064	S02902	YauW	c	Y
A-LT-1	FA064	S02903	YauW	c	Y
A-LT-1	FA064	S02904	YauW	g	Y
A-LT-1	FA064	S02905	YRW	c	Y
A-LT-1	FA064	S02907	SJW	c	Y
A-LT-1	FA064	S02908	SJW	k	Y
A-LT-1	FA064	S02909	SJW	b	Y
A-LT-1	FA064	S02910	SJW	b	Y
A-LT-1	FA064	S02911	SJW	i	Y
A-LT-1	FA064	S02912	SJW	i	Y
A-LT-1	FA064	S02914	YauW	c	Y
A-LT-1	FA064	S02915	YauW	g	Y
A-LT-1	FA064	S02916	YauW	c	Y
A-LT-1	FA064	S02927	SJW	o	Y
A-LT-1	FA064	S02941	SJW	b	Y
A-LT-1	FA064	S02946	SJW	j	Y
A-LT-1	FA064	S02953	SJW	b	Y
A-LT-1	FA064	S02954	YauW	b	Y
A-LT-1	FA064	S02961	SJW	i	Y
A-LT-1	FA064	S02963	SJW	b	Y

A-LT-1	FA064	S02964	MB	l	Y
A-LT-1	FA064	S03324	YRW	c	Y
A-LT-1	FA064	S03325	YRW	g	Y
A-LT-1	FA064	S03327	YRW	g	Y
A-LT-1	FA064	S03328	YRW	g	Y
A-LT-1	FA064	S03330	YRW	g	Y
A-LT-1	FA064	S03331	YauW	c	Y
A-LT-1	FA064	S03332	YauW	c	Y
A-LT-1	FA064	S03333	YauW	c	Y
A-LT-1	FA064	S03334	YauW	f	Y
A-LT-1	FA064	S03339	SJW	b	Y
A-LT-1	FA064	S03340	SJW	b	Y
A-LT-1	FA064	S03341	SJW	b	Y
A-LT-1	FA064	S03342	SJW	b	Y
A-LT-1	FA064	S03343	SJW	b	Y
A-LT-1	FA064	S03344	SJW	b	Y
A-LT-1	FA064	S03347	MB	o	Y
A-LT-1	FA064	S03348	MFineB	m	Y
A-LT-1	FA064	S03350	MB	b	Y
A-LT-1	FA048	S03505	YauW	q	Y
A-LT-1	FA048	S03512	YauW	g	Y
A-LT-1	FA048	S03513	YauW	g	Y
A-LT-1	FA048	S03521	YauW	g	Y
A-LT-1	FA048	S03522	YauW	g	Y
A-LT-1	FA048	S03933	PasBW	b	Y
A-LT-1	FA064	S07790	YRW	g	Y
A-LT-1	FA064	S07791	SJW	k	Y
A-LT-1	FA064	S07792	SJW	k	Y
A-LT-1	FA064	S07795	SJW	k	Y
A-LT-1	FA048	S07796	SJW	k	Y
A-LT-1	FA048	S07797	LagR	f	Y
A-LT-2	FA068	S00640	AP	t	N
A-LT-2	FA068	S00641	AP	t	N
A-LT-2	FA068	S00642	LagDR+B	t	N
A-LT-2	FA068	S00644	LagRSc	t	N
A-LT-2	FA068	S00645	LagDR+B	t	N
A-LT-2	FA068	S00647	LagRSc	t	N
A-LT-2	FA068	S00648	LagRSc	t	N
A-LT-2	FA068	S00649	LagRSc	t	N
A-LT-2	FA068	S00650	LagRSc	t	N
A-LT-2	FA068	S00651	LagRSc	t	N
A-LT-2	FA068	S00652	AP	t	N
A-LT-2	FA068	S00653	AP	t	N
A-LT-2	FA068	S00654	AP	t	N
A-LT-2	FA068	S00655	AP	t	N
A-LT-2	FA068	S00656	AP	t	N
A-LT-2	FA068	S00657	AP	t	N
A-LT-2	FA068	S00658	AP	t	N
A-LT-2	FA068	S00659	AP	t	N

A-LT-2	FA068	S00660	AP	t	N
A-LT-2	FA068	S00661	AP	t	N
A-LT-2	FA068	S00662	AP	t	N
A-LT-2	FA068	S00663	AP	t	N
A-LT-2	FA068	S00664	AP	t	N
A-LT-2	FA068	S00665	AP	t	N
A-LT-2	FA068	S00667	AP	t	N
A-LT-2	FA068	S00668	AP	t	N
A-LT-2	FA068	S00670	AP	t	N
A-LT-2	FA068	S00671	AP	t	N
A-LT-2	FA068	S00672	AP	t	N
A-LT-2	FA068	S00673	AP	t	N
A-LT-2	FA068	S00674	AP	t	N
A-LT-2	FA068	S00675	AP	t	N
A-LT-2	FA068	S00676	AP	t	N
A-LT-2	FA068	S00677	AP	t	N
A-LT-2	FA068	S00678	AP	t	N
A-LT-2	FA068	S00679	AP	t	N
A-LT-2	FA068	S00680	AP	t	N
A-LT-2	FA068	S00681	AP	t	N
A-LT-2	FA068	S00682	AP	t	N
A-LT-2	FA068	S00683	AP	t	N
A-LT-2	FA068	S00684	AP	t	N
A-LT-2	FA068	S00685	AP	t	N
A-LT-2	FA068	S00686	AP	t	N
A-LT-2	FA068	S00687	AP	t	N
A-LT-2	FA068	S00688	AP	t	N
A-LT-2	FA068	S00689	AP	t	N
A-LT-2	FA068	S00690	AP	t	N
A-LT-2	FA068	S00691	AP	t	N
A-LT-2	FA068	S00692	AP	t	N
A-LT-2	FA068	S00693	AP	t	N
A-LT-2	FA068	S00694	YauW	t	N
A-LT-2	FA068	S00695	AP	v	N
A-LT-2	FA068	S00696	AP	t	N
A-LT-2	FA068	S00697	AP	t	N
A-LT-2	FA068	S00698	AP	t	N
A-LT-2	FA068	S00699	AP	t	N
A-LT-2	FA068	S00700	AP	t	N
A-LT-2	FA068	S00701	AP	t	N
A-LT-2	FA068	S00702	AP	y	N
A-LT-2	FA068	S00703	AP	x	N
A-LT-2	FA068	S00704	AP	y	N
A-LT-2	FA068	S00706	LagDR	y	N
A-LT-2	FA068	S00707	LagDR	x	N
A-LT-2	FA068	S00712	FGray	t	N
A-LT-2	FA068	S03009	YRW	g	N
A-LT-2	FA068	S03016	YRW	f	N
A-LT-2	FA068	S03019	YRW	c	N

A-LT-2	FA068	S03023	YRW	b	N
A-LT-2	FA068	S03024	YRW	b	N
A-LT-2	FA068	S03025	YRW	k	N
A-LT-2	FA068	S03026	YRW	k	N
A-LT-2	FA068	S03027	YRW	b	N
A-LT-2	FA068	S03028	YRW	b	N
A-LT-2	FA068	S03029	YRW	b	N
A-LT-2	FA068	S03030	YRW	b	N
A-LT-2	FA068	S03031	YRW	b	N
A-LT-2	FA068	S03032	YRW	b	N
A-LT-2	FA068	S03033	YRW	b	N
A-LT-2	FA068	S03034	YRW	k	N
A-LT-2	FA068	S03038	YRW	o	N
A-LT-2	FA068	S03041	YRW	o	N
A-LT-2	FA068	S03053	YauW	c	N
A-LT-2	FA068	S03058	YauW	b	N
A-LT-2	FA068	S03059	YauW	b	N
A-LT-2	FA068	S03060	YauW	b	N
A-LT-2	FA068	S03061	YauW	b	N
A-LT-2	FA068	S03062	YauW	b	N
A-LT-2	FA068	S03064	YauW	k	N
A-LT-2	FA068	S03065	YauW	k	N
A-LT-2	FA068	S03066	YauW	k	N
A-LT-2	FA068	S03067	YauW	k	N
A-LT-2	FA068	S03068	YauW	k	N
A-LT-2	FA068	S03069	YauW	k	N
A-LT-2	FA068	S03070	YauW	k	N
A-LT-2	FA068	S03071	YauW	k	N
A-LT-2	FA068	S03075	YauW	g	N
A-LT-2	FA068	S03088	YauW	g	N
A-LT-2	FA068	S03090	YauW	b	N
A-LT-2	FA068	S03092	YauW	b	N
A-LT-2	FA068	S03093	YauW	b	N
A-LT-2	FA068	S03094	YauW	b	N
A-LT-2	FA068	S03096	YauW	b	N
A-LT-2	FA068	S03098	YauW	b	N
A-LT-2	FA068	S03099	YauW	b	N
A-LT-2	FA068	S03100	YauW	b	N
A-LT-2	FA068	S03101	YauW	b	N
A-LT-2	FA068	S03103	YauW	b	N
A-LT-2	FA068	S03105	YauW	j	N
A-LT-2	FA068	S03106	YauW	j	N
A-LT-2	FA068	S03108	SJW	b	N
A-LT-2	FA068	S03127	YRW	o	N
A-LT-2	FA068	S03136	YauW	q	N
A-LT-2	FA068	S03140	YauW	o	N
A-LT-2	FA068	S03141	YauW	o	N
A-LT-2	FA068	S03142	YauW	o	N
A-LT-2	FA068	S03143	YauW	o	N

A-LT-2	FA068	S03144	YauW	o	N
A-LT-2	FA068	S03145	YauW	o	N
A-LT-2	FA068	S03146	YauW	o	N
A-LT-2	FA068	S03147	LagDR	b	N
A-LT-2	FA068	S03148	LagDR	k	N
A-LT-2	FA068	S03158	AP	b	N
A-LT-2	FA068	S03159	AP	b	N
A-LT-2	FA068	S03160	AP	b	N
A-LT-2	FA068	S03161	AP	k	N
A-LT-2	FA068	S03162	AP	k	N
A-LT-2	FA068	S03164	MB	b	N
A-LT-2	FA068	S03165	MB	b	N
A-LT-2	FA068	S03166	MB	b	N
A-LT-2	FA068	S03167	MB	b	N
A-LT-2	FA068	S03169	YRW	b	N
A-LT-2	FA068	S03177	YauW	h	N
A-LT-2	FA068	S03178	YauW	h	N
A-LT-2	FA068	S03179	YauW	h	N
A-LT-2	FA068	S03180	YauW	h	N
A-LT-2	FA068	S03233	FGray	b	N
A-LT-2	FA068	S03234	FGray	b	N
A-LT-2	FA068	S00709	MB	t	Y
A-LT-2	FA068	S00710	MB	t	Y
A-LT-2	FA068	S03000	YRW	rg	Y
A-LT-2	FA068	S03001	YRW	rg	Y
A-LT-2	FA068	S03002	YRW	rg	Y
A-LT-2	FA068	S03003	YRW	rg	Y
A-LT-2	FA068	S03004	YRW	rg	Y
A-LT-2	FA068	S03005	YRW	rg	Y
A-LT-2	FA068	S03006	YRW	rg	Y
A-LT-2	FA068	S03007	YRW	rg	Y
A-LT-2	FA068	S03008	YRW	rg	Y
A-LT-2	FA068	S03010	YRW	c	Y
A-LT-2	FA068	S03011	YRW	c	Y
A-LT-2	FA068	S03012	YRW	c	Y
A-LT-2	FA068	S03013	YRW	c	Y
A-LT-2	FA068	S03014	YRW	f	Y
A-LT-2	FA068	S03015	YRW	f	Y
A-LT-2	FA068	S03017	YRW	c	Y
A-LT-2	FA068	S03018	YRW	c	Y
A-LT-2	FA068	S03020	YRW	c	Y
A-LT-2	FA068	S03021	YRW	c	Y
A-LT-2	FA068	S03022	YRW	c	Y
A-LT-2	FA068	S03035	YRW	o	Y
A-LT-2	FA068	S03036	YRW	o	Y
A-LT-2	FA068	S03037	YRW	o	Y
A-LT-2	FA068	S03039	YRW	o	Y
A-LT-2	FA068	S03040	YRW	o	Y
A-LT-2	FA068	S03047	YauW	c	Y

A-LT-2	FA068	S03048	YauW	c	Y
A-LT-2	FA068	S03049	YauW	c	Y
A-LT-2	FA068	S03050	YauW	c	Y
A-LT-2	FA068	S03051	YauW	c	Y
A-LT-2	FA068	S03052	YauW	c	Y
A-LT-2	FA068	S03054	YauW	c	Y
A-LT-2	FA068	S03055	YauW	c	Y
A-LT-2	FA068	S03056	YauW	c	Y
A-LT-2	FA068	S03057	YauW	c	Y
A-LT-2	FA068	S03072	YauW	k	Y
A-LT-2	FA068	S03073	YauW	g	Y
A-LT-2	FA068	S03074	YauW	g	Y
A-LT-2	FA068	S03076	YauW	g	Y
A-LT-2	FA068	S03077	YauW	g	Y
A-LT-2	FA068	S03078	YauW	g	Y
A-LT-2	FA068	S03079	YauW	g	Y
A-LT-2	FA068	S03080	YauW	g	Y
A-LT-2	FA068	S03081	YauW	g	Y
A-LT-2	FA068	S03082	YauW	g	Y
A-LT-2	FA068	S03083	YauW	g	Y
A-LT-2	FA068	S03084	YauW	g	Y
A-LT-2	FA068	S03085	YauW	g	Y
A-LT-2	FA068	S03086	YauW	g	Y
A-LT-2	FA068	S03087	YauW	g	Y
A-LT-2	FA068	S03089	YauW	g	Y
A-LT-2	FA068	S03091	YauW	b	Y
A-LT-2	FA068	S03095	YauW	b	Y
A-LT-2	FA068	S03097	YauW	b	Y
A-LT-2	FA068	S03102	YauW	b	Y
A-LT-2	FA068	S03104	YauW	b	Y
A-LT-2	FA068	S03107	SJW	j	Y
A-LT-2	FA068	S03109	SJW	k	Y
A-LT-2	FA068	S03110	SJW	k	Y
A-LT-2	FA068	S03111	SJW	k	Y
A-LT-2	FA068	S03112	SJW	k	Y
A-LT-2	FA068	S03113	SJW	b	Y
A-LT-2	FA068	S03114	SJW	b	Y
A-LT-2	FA068	S03115	SJW	b	Y
A-LT-2	FA068	S03116	SJW	b	Y
A-LT-2	FA068	S03117	SJW	b	Y
A-LT-2	FA068	S03118	SJW	b	Y
A-LT-2	FA068	S03119	SJW	b	Y
A-LT-2	FA068	S03120	SJW	b	Y
A-LT-2	FA068	S03121	SJW	b	Y
A-LT-2	FA068	S03122	SJW	b	Y
A-LT-2	FA068	S03123	SJW	b	Y
A-LT-2	FA068	S03124	SJW	b	Y
A-LT-2	FA068	S03125	SJW	b	Y
A-LT-2	FA068	S03126	SJW	b	Y

A-LT-2	FA068	S03128	YauW	d	Y
A-LT-2	FA068	S03129	YauW	q	Y
A-LT-2	FA068	S03130	YauW	b	Y
A-LT-2	FA068	S03131	YauW	r	Y
A-LT-2	FA068	S03132	YauW	r	Y
A-LT-2	FA068	S03133	YauW	r	Y
A-LT-2	FA068	S03134	YauW	r	Y
A-LT-2	FA068	S03135	YauW	r	Y
A-LT-2	FA068	S03137	YauW	m	Y
A-LT-2	FA068	S03138	YauW	g	Y
A-LT-2	FA068	S03139	YauW	o	Y
A-LT-2	FA068	S03171	YauW	o	Y
A-LT-2	FA068	S03172	YauW	i	Y
A-LT-2	FA068	S03173	YauW	i	Y
A-LT-2	FA068	S03174	YauW	i	Y
A-LT-2	FA068	S03175	YauW	i	Y
A-LT-2	FA068	S03176	YauW	h	Y
A-LT-3	FA066	S00713	LagRSc	t	N
A-LT-3	FA067	S00714	LagRSc	t	N
A-LT-3	FA066	S00715	LagDR	t	N
A-LT-3	FA066	S00717	AP	v	N
A-LT-3	FA066	S00718	AP	v	N
A-LT-3	FA066	S00719	AP	v	N
A-LT-3	FA067	S00720	LagRSc	t	N
A-LT-3	FA067	S00721	AP	t	N
A-LT-3	FA066	S00722	AP	t	N
A-LT-3	FA067	S00724	AP	v	N
A-LT-3	FA066	S00725	AP	t	N
A-LT-3	FA066	S00726	AP	t	N
A-LT-3	FA066	S00727	AP	t	N
A-LT-3	FA067	S00728	AP	t	N
A-LT-3	FA067	S00729	AP	t	N
A-LT-3	FA066	S00732	AP	y	N
A-LT-3	FA067	S00733	LagDR	x	N
A-LT-3	FA066	S03235	SJW	b	N
A-LT-3	FA066	S03243	YauW	o	N
A-LT-3	FA067	S03244	YauW	o	N
A-LT-3	FA067	S03245	MFineB	b	N
A-LT-3	FA067	S03246	MFineB	b	N
A-LT-3	FA067	S03247	MFineB	b	N
A-LT-3	FA066	S03249	MB	k	N
A-LT-3	FA067	S03250	MB	k	N
A-LT-3	FA066	S03251	MB	b	N
A-LT-3	FA066	S03252	MB	b	N
A-LT-3	FA067	S03254	MB	b	N
A-LT-3	FA067	S03255	MB	b	N
A-LT-3	FA066	S03258	LagDR	b	N
A-LT-3	FA066	S03259	LagDR	b	N
A-LT-3	FA066	S03262	YauW	b	N

A-LT-3	FA066	S03263	YauW	b	N
A-LT-3	FA067	S03268	YauW	b	N
A-LT-3	FA067	S03270	YauW	b	N
A-LT-3	FA067	S03271	YauW	b	N
A-LT-3	FA067	S03276	YauW	b	N
A-LT-3	FA067	S03277	YauW	b	N
A-LT-3	FA067	S03278	YauW	b	N
A-LT-3	FA067	S03279	YauW	b	N
A-LT-3	FA067	S03280	YauW	b	N
A-LT-3	FA067	S03281	YauW	b	N
A-LT-3	FA066	S03285	PotR/B	b	N
A-LT-3	FA066	S03286	YauW	b	N
A-LT-3	FA067	S03287	YauW	b	N
A-LT-3	FA066	S03304	YRW	b	N
A-LT-3	FA067	S03305	YRW	b	N
A-LT-3	FA067	S03306	YRW	b	N
A-LT-3	FA067	S03309	YRW	g	N
A-LT-3	FA067	S03316	AP	b	N
A-LT-3	FA073	S03691	YRW	g	N
A-LT-3	FA073	S03695	YRW	g	N
A-LT-3	FA073	S03696	YRW	g	N
A-LT-3	FA073	S03703	YRW	g	N
A-LT-3	FA073	S03705	YRW	j	N
A-LT-3	FA073	S03706	YRW	j	N
A-LT-3	FA073	S03707	YRW	b	N
A-LT-3	FA073	S03709	YRW	b	N
A-LT-3	FA073	S03710	YRW	b	N
A-LT-3	FA073	S03711	YRW	b	N
A-LT-3	FA073	S03713	YRW	j	N
A-LT-3	FA073	S03714	YRW	b	N
A-LT-3	FA073	S03715	YRW	j	N
A-LT-3	FA073	S03716	YRW	b	N
A-LT-3	FA073	S03717	YRW	j	N
A-LT-3	FA073	S03718	YRW	b	N
A-LT-3	FA073	S03719	YRW	b	N
A-LT-3	FA073	S03720	YRW	b	N
A-LT-3	FA073	S03722	YRW	k	N
A-LT-3	FA073	S03723	YRW	k	N
A-LT-3	FA073	S03745	YRW	c	N
A-LT-3	FA073	S03746	YRW	c	N
A-LT-3	FA073	S03752	YRW	c	N
A-LT-3	FA073	S03754	YRW	c	N
A-LT-3	FA073	S03756	YRW	c	N
A-LT-3	FA073	S03758	YRW	c	N
A-LT-3	FA073	S03759	YRW	c	N
A-LT-3	FA073	S03760	YRW	c	N
A-LT-3	FA073	S03761	YRW	c	N
A-LT-3	FA073	S03762	YRW	c	N
A-LT-3	FA073	S03770	YRW	c	N

A-LT-3	FA073	S03771	YRW	c	N
A-LT-3	FA073	S03778	YRW	f	N
A-LT-3	FA073	S03780	YRW	f	N
A-LT-3	FA073	S03786	SJW	d	N
A-LT-3	FA073	S03808	YauW	g	N
A-LT-3	FA073	S03811	YauW	g	N
A-LT-3	FA073	S03835	YauW	g	N
A-LT-3	FA073	S03837	YauW	k	N
A-LT-3	FA073	S03838	YauW	k	N
A-LT-3	FA073	S03839	YauW	k	N
A-LT-3	FA073	S03840	YauW	k	N
A-LT-3	FA073	S03842	YauW	k	N
A-LT-3	FA073	S03843	YauW	k	N
A-LT-3	FA073	S03844	YauW	k	N
A-LT-3	FA073	S03855	YauW	o	N
A-LT-3	FA073	S03856	YauW	o	N
A-LT-3	FA073	S03857	YauW	o	N
A-LT-3	FA073	S03858	YauW	o	N
A-LT-3	FA073	S03859	YauW	o	N
A-LT-3	FA073	S03870	YauW	b	N
A-LT-3	FA073	S03872	YauW	b	N
A-LT-3	FA073	S03874	YauW	b	N
A-LT-3	FA073	S03882	YRW	b	N
A-LT-3	FA073	S03883	YauW	b	N
A-LT-3	FA073	S03884	YauW	b	N
A-LT-3	FA073	S03885	YauW	b	N
A-LT-3	FA073	S03886	YauW	b	N
A-LT-3	FA073	S03887	YauW	b	N
A-LT-3	FA073	S03890	YauW	b	N
A-LT-3	FA073	S03898	YauW	c	N
A-LT-3	FA073	S03915	YRW	j	N
A-LT-3	FA073	S03918	LagR	b	N
A-LT-3	FA073	S03919	LagR	b	N
A-LT-3	FA073	S03920	LagR	b	N
A-LT-3	FA073	S03921	PotR/B	h	N
A-LT-3	FA073	S03923	LagDR	h	N
A-LT-3	FA073	S03924	LagDR	h	N
A-LT-3	FA073	S03927	Xal	o	N
A-LT-3	FA073	S06248	YauW	d	N
A-LT-3	FA073	S06257	YauW	d	N
A-LT-3	FA073	S06262	YauW	b	N
A-LT-3	FA073	S06263	YauW	b	N
A-LT-3	FA073	S06264	YauW	b	N
A-LT-3	FA073	S06265	YauW	b	N
A-LT-3	FA073	S06266	YauW	b	N
A-LT-3	FA073	S06267	YauW	b	N
A-LT-3	FA073	S06268	YauW	b	N
A-LT-3	FA073	S06269	YauW	b	N
A-LT-3	FA073	S06270	YauW	b	N

A-LT-3	FA073	S06271	YauW	b	N
A-LT-3	FA073	S06272	YauW	b	N
A-LT-3	FA073	S06273	YauW	b	N
A-LT-3	FA073	S06275	YRW	b	N
A-LT-3	FA073	S06277	YauW	f	N
A-LT-3	FA073	S06279	YauW	f	N
A-LT-3	FA073	S06280	YauW	f	N
A-LT-3	FA073	S06281	YauW	f	N
A-LT-3	FA073	S06282	YauW	o	N
A-LT-3	FA073	S06284	YauW	k	N
A-LT-3	FA073	S06296	YauW	h	N
A-LT-3	FA073	S06298	YauW	h	N
A-LT-3	FA073	S06299	YauW	h	N
A-LT-3	FA073	S06301	YauW	h	N
A-LT-3	FA073	S06302	YauW	h	N
A-LT-3	FA073	S06303	YauW	h	N
A-LT-3	FA073	S06305	YauW	h	N
A-LT-3	FA073	S06317	YauW	f	N
A-LT-3	FA073	S06318	YauW	f	N
A-LT-3	FA073	S06319	YauW	f	N
A-LT-3	FA073	S06320	YauW	g	N
A-LT-3	FA073	S06321	YauW	b	N
A-LT-3	FA073	S06322	YauW	b	N
A-LT-3	FA073	S06339	AP	k	N
A-LT-3	FA073	S06340	AP	k	N
A-LT-3	FA073	S06357	AP	b	N
A-LT-3	FA073	S06358	AP	b	N
A-LT-3	FA073	S06359	AP	b	N
A-LT-3	FA073	S06360	AP	b	N
A-LT-3	FA073	S06361	AP	b	N
A-LT-3	FA073	S06362	AP	b	N
A-LT-3	FA073	S06363	AP	j	N
A-LT-3	FA073	S06364	AP	b	N
A-LT-3	FA073	S06365	YauW	j	N
A-LT-3	FA073	S06366	AP	b	N
A-LT-3	FA073	S06367	AP	b	N
A-LT-3	FA073	S06368	AP	b	N
A-LT-3	FA073	S06369	AP	b	N
A-LT-3	FA073	S06375	PotR/B	b	N
A-LT-3	FA073	S06377	PotR/B	b	N
A-LT-3	FA073	S06382	MB	k	N
A-LT-3	FA073	S06386	MB	j	N
A-LT-3	FA073	S06387	PotR/B	b	N
A-LT-3	FA073	S06390	MFineB	b	N
A-LT-3	FA073	S06396	AP	h	N
A-LT-3	FA073	S06402	MB	h	N
A-LT-3	FA073	S06404	MB	e	N
A-LT-3	FA073	S06405	MB	l	N
A-LT-3	FA073	S09043	YauW	y	N

A-LT-3	FA073	S09045	YauW	t	N
A-LT-3	FA073	S09048	YauW	t	N
A-LT-3	FA073	S09052	YauW	s	N
A-LT-3	FA073	S09053	YauW	s	N
A-LT-3	FA073	S09055	YauW	s	N
A-LT-3	FA073	S09056	YauW	s	N
A-LT-3	FA073	S09065	AP	t	N
A-LT-3	FA073	S09066	AP	y	N
A-LT-3	FA073	S09068	AP	y	N
A-LT-3	FA073	S09069	AP	y	N
A-LT-3	FA073	S09070	AP	y	N
A-LT-3	FA073	S09071	AP	y	N
A-LT-3	FA073	S09074	LagR	y	N
A-LT-3	FA073	S09085	MB	t	N
A-LT-3	FA073	S09086	MB	t	N
A-LT-3	FA073	S09087	MB	t	N
A-LT-3	FA073	S09088	MB	t	N
A-LT-3	FA073	S09090	MB	v	N
A-LT-3	FA073	S09091	MB	v	N
A-LT-3	FA073	S09092	MB	v	N
A-LT-3	FA073	S09094	AP	t	N
A-LT-3	FA073	S09097	AP	s	N
A-LT-3	FA073	S09099	AP	v	N
A-LT-3	FA073	S09100	AP	v	N
A-LT-3	FA073	S09101	AP	v	N
A-LT-3	FA073	S09105	AP	t	N
A-LT-3	FA073	S09106	LagDR+B	t	N
A-LT-3	FA073	S09107	LagDR+B	t	N
A-LT-3	FA073	S09109	LagDR+B	t	N
A-LT-3	FA073	S09110	LagDR+B	t	N
A-LT-3	FA073	S09111	LagDR+B	t	N
A-LT-3	FA073	S09112	LagDR+B	t	N
A-LT-3	FA073	S09113	LagDR+B	t	N
A-LT-3	FA073	S09114	LagDR+B	t	N
A-LT-3	FA073	S09115	LagDR+B	t	N
A-LT-3	FA073	S09117	LagDR+B	t	N
A-LT-3	FA073	S09124	AP	t	N
A-LT-3	FA073	S09125	AP	t	N
A-LT-3	FA073	S09126	AP	t	N
A-LT-3	FA073	S09127	AP	t	N
A-LT-3	FA073	S09128	AP	t	N
A-LT-3	FA073	S09129	AP	t	N
A-LT-3	FA073	S09130	AP	t	N
A-LT-3	FA073	S09131	AP	t	N
A-LT-3	FA073	S09132	AP	t	N
A-LT-3	FA073	S09133	AP	t	N
A-LT-3	FA073	S09134	AP	t	N
A-LT-3	FA073	S09135	AP	t	N
A-LT-3	FA073	S09136	AP	t	N

A-LT-3	FA073	S09137	AP	t	N
A-LT-3	FA073	S09138	AP	t	N
A-LT-3	FA073	S09139	AP	t	N
A-LT-3	FA073	S09140	AP	t	N
A-LT-3	FA073	S09142	AP	t	N
A-LT-3	FA073	S09143	AP	t	N
A-LT-3	FA073	S09144	AP	t	N
A-LT-3	FA073	S09145	AP	t	N
A-LT-3	FA073	S09146	AP	t	N
A-LT-3	FA073	S09147	LagDR+B	t	N
A-LT-3	FA073	S09148	AP	t	N
A-LT-3	FA073	S09149	AP	t	N
A-LT-3	FA073	S09150	AP	t	N
A-LT-3	FA073	S09151	AP	t	N
A-LT-3	FA073	S09152	AP	t	N
A-LT-3	FA073	S09153	AP	t	N
A-LT-3	FA073	S09154	AP	t	N
A-LT-3	FA073	S09155	AP	t	N
A-LT-3	FA073	S09156	AP	t	N
A-LT-3	FA073	S09157	AP	t	N
A-LT-3	FA073	S09158	AP	t	N
A-LT-3	FA073	S09159	AP	t	N
A-LT-3	FA073	S09169	LagR	t	N
A-LT-3	FA073	S09174	AP	t	N
A-LT-3	FA073	S09175	AP	t	N
A-LT-3	FA073	S09176	AP	t	N
A-LT-3	FA073	S09177	AP	t	N
A-LT-3	FA073	S09178	AP	t	N
A-LT-3	FA073	S09179	AP	t	N
A-LT-3	FA073	S09180	AP	t	N
A-LT-3	FA073	S09181	AP	t	N
A-LT-3	FA073	S09182	AP	t	N
A-LT-3	FA073	S09183	AP	t	N
A-LT-3	FA073	S09184	AP	t	N
A-LT-3	FA073	S09185	AP	t	N
A-LT-3	FA073	S09186	AP	t	N
A-LT-3	FA073	S09187	AP	t	N
A-LT-3	FA073	S09188	AP	t	N
A-LT-3	FA073	S09189	AP	t	N
A-LT-3	FA073	S09190	AP	t	N
A-LT-3	FA073	S09191	AP	t	N
A-LT-3	FA073	S09192	AP	t	N
A-LT-3	FA073	S09193	AP	t	N
A-LT-3	FA073	S09194	AP	t	N
A-LT-3	FA073	S09195	AP	t	N
A-LT-3	FA073	S09196	AP	t	N
A-LT-3	FA073	S09197	AP	t	N
A-LT-3	FA073	S09199	AP	t	N
A-LT-3	FA073	S09200	AP	t	N

A-LT-3	FA073	S09201	AP	t	N
A-LT-3	FA073	S09204	LagDR	t	N
A-LT-3	FA073	S09205	LagDR	t	N
A-LT-3	FA073	S09207	YauW	t	N
A-LT-3	FA073	S09210	MFineB	t	N
A-LT-3	FA073	S09211	MFineB	t	N
A-LT-3	FA073	S09214	MFineB	w	N
A-LT-3	FA073	S09215	MB	t	N
A-LT-3	FA073	S09216	MB	t	N
A-LT-3	FA073	S09219	MB	t	N
A-LT-3	FA073	S09220	AP	s	N
A-LT-3	FA073	S09221	AP	t	N
A-LT-3	FA073	S09222	PasBW	t	N
A-LT-3	FA073	S10673	MB	v	N
A-LT-3	FA067	S00731	YauW	w	Y
A-LT-3	FA067	S03236	SJW	b	Y
A-LT-3	FA067	S03238	SJW	b	Y
A-LT-3	FA066	S03239	SJW	b	Y
A-LT-3	FA067	S03240	SJW	k	Y
A-LT-3	FA067	S03241	YauW	r	Y
A-LT-3	FA067	S03242	YauW	r	Y
A-LT-3	FA067	S03256	YauW	r	Y
A-LT-3	FA067	S03257	LagDR	k	Y
A-LT-3	FA067	S03261	PotR/B	m	Y
A-LT-3	FA067	S03269	YauW	b	Y
A-LT-3	FA067	S03274	YauW	b	Y
A-LT-3	FA067	S03275	YauW	b	Y
A-LT-3	FA067	S03282	YauW	b	Y
A-LT-3	FA066	S03288	YauW	k	Y
A-LT-3	FA067	S03289	YauW	k	Y
A-LT-3	FA066	S03292	YauW	e	Y
A-LT-3	FA067	S03293	YauW	h	Y
A-LT-3	FA067	S03294	YauW	c	Y
A-LT-3	FA067	S03295	YauW	c	Y
A-LT-3	FA067	S03296	YauW	c	Y
A-LT-3	FA067	S03297	YauW	g	Y
A-LT-3	FA067	S03299	YauW	g	Y
A-LT-3	FA067	S03300	YauW	g	Y
A-LT-3	FA067	S03301	YauW	g	Y
A-LT-3	FA067	S03302	YauW	g	Y
A-LT-3	FA067	S03311	YRW	g	Y
A-LT-3	FA066	S03312	YRW	c	Y
A-LT-3	FA067	S03313	YRW	c	Y
A-LT-3	FA067	S03314	YRW	c	Y
A-LT-3	FA073	S03679	YRW	o	Y
A-LT-3	FA073	S03680	YRW	o	Y
A-LT-3	FA073	S03681	YRW	o	Y
A-LT-3	FA073	S03682	YRW	o	Y
A-LT-3	FA073	S03683	YRW	o	Y

A-LT-3	FA073	S03684	YRW	o	Y
A-LT-3	FA073	S03685	YRW	o	Y
A-LT-3	FA073	S03686	YRW	o	Y
A-LT-3	FA073	S03687	YRW	o	Y
A-LT-3	FA073	S03688	YRW	te	Y
A-LT-3	FA073	S03689	YRW	te	Y
A-LT-3	FA073	S03690	YRW	te	Y
A-LT-3	FA073	S03692	YRW	te	Y
A-LT-3	FA073	S03693	YRW	te	Y
A-LT-3	FA073	S03694	YRW	te	Y
A-LT-3	FA073	S03697	YRW	te	Y
A-LT-3	FA073	S03698	YRW	te	Y
A-LT-3	FA073	S03699	YRW	te	Y
A-LT-3	FA073	S03700	YRW	te	Y
A-LT-3	FA073	S03701	YRW	te	Y
A-LT-3	FA073	S03702	YRW	te	Y
A-LT-3	FA073	S03704	YRW	b	Y
A-LT-3	FA073	S03708	YRW	b	Y
A-LT-3	FA073	S03721	YRW	b	Y
A-LT-3	FA073	S03724	YRW	j	Y
A-LT-3	FA073	S03725	YRW	j	N
A-LT-3	FA073	S03744	YRW	c	Y
A-LT-3	FA073	S03747	YRW	c	Y
A-LT-3	FA073	S03748	YRW	c	Y
A-LT-3	FA073	S03749	YRW	c	Y
A-LT-3	FA073	S03750	YRW	c	Y
A-LT-3	FA073	S03751	YRW	c	Y
A-LT-3	FA073	S03753	YRW	c	Y
A-LT-3	FA073	S03755	YRW	c	Y
A-LT-3	FA073	S03757	YRW	c	Y
A-LT-3	FA073	S03763	YRW	c	Y
A-LT-3	FA073	S03764	YRW	c	Y
A-LT-3	FA073	S03765	YRW	c	Y
A-LT-3	FA073	S03766	YRW	c	Y
A-LT-3	FA073	S03767	YRW	c	Y
A-LT-3	FA073	S03768	YRW	c	Y
A-LT-3	FA073	S03772	YRW	f	Y
A-LT-3	FA073	S03773	YRW	f	Y
A-LT-3	FA073	S03776	YRW	f	Y
A-LT-3	FA073	S03777	YRW	f	Y
A-LT-3	FA073	S03779	YRW	f	Y
A-LT-3	FA073	S03781	YRW	c	Y
A-LT-3	FA073	S03782	SJW	o	Y
A-LT-3	FA073	S03785	SJW	d	Y
A-LT-3	FA073	S03787	SJW	k	Y
A-LT-3	FA073	S03788	SJW	k	Y
A-LT-3	FA073	S03789	SJW	b	Y
A-LT-3	FA073	S03790	SJW	b	Y
A-LT-3	FA073	S03791	SJW	b	Y

A-LT-3	FA073	S03792	SJW	k	Y
A-LT-3	FA073	S03793	SJW	b	Y
A-LT-3	FA073	S03794	SJW	b	Y
A-LT-3	FA073	S03795	SJW	b	Y
A-LT-3	FA073	S03796	SJW	b	Y
A-LT-3	FA073	S03797	SJW	b	Y
A-LT-3	FA073	S03798	SJW	b	Y
A-LT-3	FA073	S03799	YauW	re	Y
A-LT-3	FA073	S03800	YauW	re	Y
A-LT-3	FA073	S03801	YauW	re	Y
A-LT-3	FA073	S03802	YauW	re	Y
A-LT-3	FA073	S03803	YauW	re	Y
A-LT-3	FA073	S03804	YauW	re	Y
A-LT-3	FA073	S03805	YauW	re	Y
A-LT-3	FA073	S03806	YauW	re	Y
A-LT-3	FA073	S03807	YauW	re	Y
A-LT-3	FA073	S03809	YauW	re	Y
A-LT-3	FA073	S03810	YauW	re	Y
A-LT-3	FA073	S03812	YauW	re	Y
A-LT-3	FA073	S03813	YauW	re	Y
A-LT-3	FA073	S03814	YauW	re	Y
A-LT-3	FA073	S03815	YauW	re	Y
A-LT-3	FA073	S03816	YauW	re	Y
A-LT-3	FA073	S03818	YauW	re	Y
A-LT-3	FA073	S03819	YauW	re	Y
A-LT-3	FA073	S03820	YauW	re	Y
A-LT-3	FA073	S03821	YauW	re	Y
A-LT-3	FA073	S03822	YauW	re	Y
A-LT-3	FA073	S03823	YauW	re	Y
A-LT-3	FA073	S03824	YauW	re	Y
A-LT-3	FA073	S03825	YauW	re	Y
A-LT-3	FA073	S03827	YauW	re	Y
A-LT-3	FA073	S03829	YauW	re	Y
A-LT-3	FA073	S03830	YauW	re	Y
A-LT-3	FA073	S03831	YauW	re	Y
A-LT-3	FA073	S03832	YauW	re	Y
A-LT-3	FA073	S03833	YauW	re	Y
A-LT-3	FA073	S03834	YauW	re	Y
A-LT-3	FA073	S03836	YauW	j	Y
A-LT-3	FA073	S03841	YauW	k	Y
A-LT-3	FA073	S03852	YauW	k	Y
A-LT-3	FA073	S03854	YauW	k	Y
A-LT-3	FA073	S03860	YauW	o	Y
A-LT-3	FA073	S03861	YauW	o	Y
A-LT-3	FA073	S03862	YauW	b	Y
A-LT-3	FA073	S03863	YauW	b	Y
A-LT-3	FA073	S03864	YauW	b	Y
A-LT-3	FA073	S03865	YauW	b	Y
A-LT-3	FA073	S03868	YauW	b	Y

A-LT-3	FA073	S03869	YauW	b	Y
A-LT-3	FA073	S03871	YauW	b	Y
A-LT-3	FA073	S03894	YauW	c	Y
A-LT-3	FA073	S03895	YauW	c	Y
A-LT-3	FA073	S03896	YauW	c	Y
A-LT-3	FA073	S03897	YauW	c	Y
A-LT-3	FA073	S03899	YauW	c	Y
A-LT-3	FA073	S03900	YauW	c	Y
A-LT-3	FA073	S03901	YauW	c	Y
A-LT-3	FA073	S03902	YauW	c	Y
A-LT-3	FA073	S03903	YauW	c	Y
A-LT-3	FA073	S03904	YauW	c	Y
A-LT-3	FA073	S03905	YauW	c	Y
A-LT-3	FA073	S03906	YauW	c	Y
A-LT-3	FA073	S03907	YauW	c	Y
A-LT-3	FA073	S03910	YauW	g	Y
A-LT-3	FA073	S03911	YauW	d	Y
A-LT-3	FA073	S03912	YRW	r	Y
A-LT-3	FA073	S03913	YauW	q	Y
A-LT-3	FA073	S03914	YauW	n	Y
A-LT-3	FA073	S03922	PotSRB	c	Y
A-LT-3	FA073	S03926	Xal	o	Y
A-LT-3	FA073	S06249	YauW	d	Y
A-LT-3	FA073	S06250	YauW	d	Y
A-LT-3	FA073	S06251	YauW	d	Y
A-LT-3	FA073	S06252	YauW	d	Y
A-LT-3	FA073	S06253	YauW	d	Y
A-LT-3	FA073	S06254	YauW	d	Y
A-LT-3	FA073	S06255	YauW	d	Y
A-LT-3	FA073	S06256	YauW	d	Y
A-LT-3	FA073	S06258	YauW	d	Y
A-LT-3	FA073	S06259	YauW	d	Y
A-LT-3	FA073	S06260	YauW	d	Y
A-LT-3	FA073	S06261	YRW	d	Y
A-LT-3	FA073	S06274	YauW	c	Y
A-LT-3	FA073	S06276	YRW	k	Y
A-LT-3	FA073	S06278	YauW	f	Y
A-LT-3	FA073	S06283	YauW	o	Y
A-LT-3	FA073	S06297	YauW	h	Y
A-LT-3	FA073	S06300	YauW	h	Y
A-LT-3	FA073	S06304	YauW	h	Y
A-LT-3	FA073	S06312	YauW	i	Y
A-LT-3	FA073	S06313	YauW	i	Y
A-LT-3	FA073	S06314	YauW	i	Y
A-LT-3	FA073	S06323	YauW	b	Y
A-LT-3	FA073	S06326	YauW	p	Y
A-LT-3	FA073	S06327	YRW	q	Y
A-LT-3	FA073	S06328	YauW	p	Y
A-LT-3	FA073	S06329	YauW	p	Y

A-LT-3	FA073	S06330	YauW	p	Y
A-LT-3	FA073	S06331	YRW	p	Y
A-LT-3	FA073	S06336	YauW	r	Y
A-LT-3	FA073	S06393	MFineB	d	Y
A-LT-3	FA073	S09054	YauW	s	Y
A-LT-3	FA073	S09198	AP	t	Y
A-LT-3	FA073	S09209	MFineB	t	Y
A-LT-3	FA073	S09212	MFineB	t	Y
A-LT-3	FA073	S09213	MFineB	s	Y
A-LT-3	FA073	S09217	MB	t	Y
A-LT-3	FA073	S09223	MB	t	Y
A-LT-4	FA060	S06594	SJW	d	N
A-LT-4	FA060	S06597	YRW	l	N
A-LT-4	FA060	S06598	YRW	b	N
A-LT-4	FA060	S06599	YRW	b	N
A-LT-4	FA060	S06602	YRW	g	N
A-LT-4	FA060	S06606	YRW	g	N
A-LT-4	FA060	S06607	YRW	g	N
A-LT-4	FA060	S06608	YRW	g	N
A-LT-4	FA060	S06612	YRW	c	N
A-LT-4	FA060	S06613	YauW	b	N
A-LT-4	FA060	S06614	YauW	b	N
A-LT-4	FA060	S06618	YauW	d	N
A-LT-4	FA060	S06619	YauW	d	N
A-LT-4	FA060	S06620	YauW	h	N
A-LT-4	FA060	S06621	YauW	h	N
A-LT-4	FA060	S06622	YauW	h	N
A-LT-4	FA060	S06623	YauW	h	N
A-LT-4	FA060	S06625	YauW	i	N
A-LT-4	FA060	S06626	YauW	f	N
A-LT-4	FA060	S06630	YauW	p	N
A-LT-4	FA060	S06631	YauW	o	N
A-LT-4	FA060	S06633	YauW	o	N
A-LT-4	FA060	S06634	YauW	o	N
A-LT-4	FA060	S06640	YauW	g	N
A-LT-4	FA060	S06641	YauW	g	N
A-LT-4	FA060	S06652	YauW	c	N
A-LT-4	FA060	S06656	YauW	c	N
A-LT-4	FA060	S06657	YauW	c	N
A-LT-4	FA060	S06658	YauW	c	N
A-LT-4	FA060	S06659	YauW	c	N
A-LT-4	FA060	S06661	YauW	k	N
A-LT-4	FA060	S06662	YauW	k	N
A-LT-4	FA060	S06663	YauW	k	N
A-LT-4	FA060	S06664	YauW	k	N
A-LT-4	FA060	S06665	YauW	b	N
A-LT-4	FA060	S06666	YauW	b	N
A-LT-4	FA060	S06667	YauW	b	N
A-LT-4	FA060	S06668	YauW	b	N

A-LT-4	FA060	S06669	YauW	b	N
A-LT-4	FA060	S06670	YauW	b	N
A-LT-4	FA060	S06671	YauW	b	N
A-LT-4	FA060	S06672	YauW	b	N
A-LT-4	FA060	S06673	YauW	b	N
A-LT-4	FA060	S06674	YauW	b	N
A-LT-4	FA060	S06677	YauW	b	N
A-LT-4	FA060	S06678	YauW	b	N
A-LT-4	FA060	S06679	YauW	b	N
A-LT-4	FA060	S06680	YauW	b	N
A-LT-4	FA060	S06681	YauW	b	N
A-LT-4	FA060	S06684	YauW	b	N
A-LT-4	FA060	S06685	YauW	b	N
A-LT-4	FA060	S06686	YauW	b	N
A-LT-4	FA060	S06703	AP	k	N
A-LT-4	FA060	S06704	AP	b	N
A-LT-4	FA060	S06705	AP	b	N
A-LT-4	FA060	S06706	AP	j	N
A-LT-4	FA060	S06707	PotR/B	e	N
A-LT-4	FA060	S06708	LagDR	k	N
A-LT-4	FA060	S06709	LagR	b	N
A-LT-4	FA060	S06710	LagR	b	N
A-LT-4	FA060	S06711	MB	h	N
A-LT-4	FA060	S06712	MB	f	N
A-LT-4	FA060	S06713	MB	f	N
A-LT-4	FA060	S06714	MB	d	N
A-LT-4	FA060	S06716	MB	b	N
A-LT-4	FA060	S06718	MB	b	N
A-LT-4	FA060	S09315	YauW	t	N
A-LT-4	FA060	S09346	AP	t	N
A-LT-4	FA060	S09347	AP	t	N
A-LT-4	FA060	S09348	AP	t	N
A-LT-4	FA060	S09349	AP	t	N
A-LT-4	FA060	S09350	AP	t	N
A-LT-4	FA060	S09351	AP	t	N
A-LT-4	FA060	S09352	AP	t	N
A-LT-4	FA060	S09353	AP	u	N
A-LT-4	FA060	S09354	AP	v	N
A-LT-4	FA060	S09355	AP	v	N
A-LT-4	FA060	S09356	AP	t	N
A-LT-4	FA060	S09357	AP	t	N
A-LT-4	FA060	S09358	AP	t	N
A-LT-4	FA060	S09359	AP	t	N
A-LT-4	FA060	S09360	AP	t	N
A-LT-4	FA060	S09361	AP	t	N
A-LT-4	FA060	S09362	AP	t	N
A-LT-4	FA060	S09363	AP	t	N
A-LT-4	FA060	S09364	AP	t	N
A-LT-4	FA060	S09365	AP	t	N

A-LT-4	FA060	S09366	AP	t	N
A-LT-4	FA060	S09367	AP	t	N
A-LT-4	FA060	S09368	AP	t	N
A-LT-4	FA060	S09369	AP	t	N
A-LT-4	FA060	S09370	AP	t	N
A-LT-4	FA060	S09371	AP	t	N
A-LT-4	FA060	S09372	AP	t	N
A-LT-4	FA060	S09373	PotR/B	t	N
A-LT-4	FA060	S09374	LagDR+B	t	N
A-LT-4	FA060	S09375	LagDR+B	t	N
A-LT-4	FA060	S09376	LagDR+B	t	N
A-LT-4	FA060	S09377	LagDR+B	t	N
A-LT-4	FA060	S09378	LagDR+B	t	N
A-LT-4	FA060	S09379	LagR	t	N
A-LT-4	FA060	S09380	LagR	t	N
A-LT-4	FA060	S09381	LagDR	t	N
A-LT-4	FA060	S09382	LagDR	t	N
A-LT-4	FA060	S09383	MB	w	N
A-LT-4	FA060	S09384	LagDR	x	N
A-LT-4	FA060	S09385	LagDR	y	N
A-LT-4	FA060	S09386	AP	x	N
A-LT-4	FA060	S09387	AP	x	N
A-LT-4	FA060	S06593	SJW	d	Y
A-LT-4	FA060	S06595	YRW	o	Y
A-LT-4	FA060	S06596	YRW	o	Y
A-LT-4	FA060	S06600	YRW	c	Y
A-LT-4	FA060	S06601	YRW	gg	Y
A-LT-4	FA060	S06603	YRW	gg	Y
A-LT-4	FA060	S06604	YRW	gg	Y
A-LT-4	FA060	S06605	YRW	gg	Y
A-LT-4	FA060	S06609	YRW	gg	Y
A-LT-4	FA060	S06610	YRW	c	Y
A-LT-4	FA060	S06611	YRW	c	Y
A-LT-4	FA060	S06615	YauW	d	Y
A-LT-4	FA060	S06616	YauW	d	Y
A-LT-4	FA060	S06617	YauW	d	Y
A-LT-4	FA060	S06624	YauW	i	Y
A-LT-4	FA060	S06627	YauW	f	Y
A-LT-4	FA060	S06628	YauW	f	Y
A-LT-4	FA060	S06629	YauW	f	Y
A-LT-4	FA060	S06632	YauW	o	Y
A-LT-4	FA060	S06635	YauW	gg	Y
A-LT-4	FA060	S06636	YauW	gg	Y
A-LT-4	FA060	S06637	YauW	gg	Y
A-LT-4	FA060	S06638	YauW	gg	Y
A-LT-4	FA060	S06639	YauW	gg	Y
A-LT-4	FA060	S06642	YauW	gg	Y
A-LT-4	FA060	S06643	YauW	gg	Y
A-LT-4	FA060	S06644	YauW	gg	Y

A-LT-4	FA060	S06645	YauW	gg	Y
A-LT-4	FA060	S06646	YauW	gg	Y
A-LT-4	FA060	S06647	YauW	gg	Y
A-LT-4	FA060	S06648	YauW	gg	Y
A-LT-4	FA060	S06649	YauW	gg	Y
A-LT-4	FA060	S06650	YauW	c	Y
A-LT-4	FA060	S06651	YauW	c	Y
A-LT-4	FA060	S06653	YauW	c	Y
A-LT-4	FA060	S06654	YauW	c	Y
A-LT-4	FA060	S06655	YauW	c	Y
A-LT-4	FA060	S06660	YauW	c	Y
A-LT-4	FA060	S06675	YauW	b	Y
A-LT-4	FA060	S06676	YauW	b	Y
A-LT-4	FA060	S06682	YauW	b	Y
A-LT-4	FA060	S06683	YauW	b	Y
A-LT-4	FA060	S06715	MB	d	Y
A-LT-4	FA060	S06717	MB	b	Y
A-LT-4	FA060	S09314	YauW	s	Y
A-LT-4	FA060	S09316	YauW	t	Y
A-LT-5	FA074	S06420	YauW	g	N
A-LT-5	FA074	S06421	YauW	g	N
A-LT-5	FA074	S06425	YauW	h	N
A-LT-5	FA074	S06426	YauW	c	N
A-LT-5	FA074	S06427	YauW	c	N
A-LT-5	FA074	S06430	YauW	e	N
A-LT-5	FA074	S06431	YRW	b	N
A-LT-5	FA074	S06432	YRW	b	N
A-LT-5	FA074	S06436	LagDR	b	N
A-LT-5	FA074	S06437	LagDR	b	N
A-LT-5	FA074	S06438	MB	b	N
A-LT-5	FA074	S06439	MB	b	N
A-LT-5	FA074	S06440	LagDR	f	N
A-LT-5	FA074	S06441	MB	e	N
A-LT-5	FA074	S06442	MB	h	N
A-LT-5	FA074	S06461	AP	b	N
A-LT-5	FA074	S06462	AP	b	N
A-LT-5	FA074	S06463	AP	b	N
A-LT-5	FA074	S06464	AP	b	N
A-LT-5	FA074	S06498	YauW	l	N
A-LT-5	FA074	S06501	YauW	l	N
A-LT-5	FA074	S06503	YauW	b	N
A-LT-5	FA074	S06504	YauW	b	N
A-LT-5	FA074	S06505	YauW	b	N
A-LT-5	FA074	S06506	YauW	b	N
A-LT-5	FA074	S06507	YauW	b	N
A-LT-5	FA074	S06508	YauW	b	N
A-LT-5	FA074	S06510	YauW	b	N
A-LT-5	FA074	S06511	YauW	b	N
A-LT-5	FA074	S06512	YauW	b	N

A-LT-5	FA074	S06513	YauW	b	N
A-LT-5	FA074	S06514	YauW	b	N
A-LT-5	FA074	S06516	YauW	b	N
A-LT-5	FA074	S06517	YauW	b	N
A-LT-5	FA074	S06518	YauW	b	N
A-LT-5	FA074	S06519	YauW	b	N
A-LT-5	FA074	S06520	YauW	b	N
A-LT-5	FA074	S06521	YauW	b	N
A-LT-5	FA074	S06523	YauW	b	N
A-LT-5	FA074	S09224	LagDR+B	t	N
A-LT-5	FA074	S09225	LagDR+B	t	N
A-LT-5	FA074	S09226	LagDR+B	t	N
A-LT-5	FA074	S09227	LagDR+B	t	N
A-LT-5	FA074	S09228	AP	t	N
A-LT-5	FA074	S09234	AP	v	N
A-LT-5	FA074	S09235	AP	v	N
A-LT-5	FA074	S09236	AP	v	N
A-LT-5	FA074	S09252	AP	t	N
A-LT-5	FA074	S09253	AP	t	N
A-LT-5	FA074	S09254	AP	t	N
A-LT-5	FA074	S09256	AP	y	N
A-LT-5	FA074	S09257	AP	y	N
A-LT-5	FA074	S09259	LagDR	y	N
A-LT-5	FA074	S09267	YauW	w	N
A-LT-5	FA074	S09268	YauW	s	N
A-LT-5	FA074	S09269	MB	t	N
A-LT-5	FA074	S09270	AP	v	N
A-LT-5	FA074	S06418	YauW	k	Y
A-LT-5	FA074	S06419	YauW	f	Y
A-LT-5	FA074	S06422	YauW	i	Y
A-LT-5	FA074	S06423	YauW	i	Y
A-LT-5	FA074	S06424	YauW	h	Y
A-LT-5	FA074	S06428	YauW	c	Y
A-LT-5	FA074	S06429	YauW	e	Y
A-LT-5	FA074	S06433	YRW	d	Y
A-LT-5	FA074	S06434	YRW	q	Y
A-LT-5	FA074	S06435	PotR/B	b	Y
A-LT-5	FA074	S06502	YauW	l	Y
A-LT-5	FA074	S06509	YauW	b	Y
A-LT-5	FA074	S06515	YauW	b	Y
A-LT-5	FA074	S06522	YauW	b	Y
A-TZ-1	FA046	S00570	PotSRB	v	N
A-TZ-1	FA046	S00571	PotSRB	v	N
A-TZ-1	FA046	S00572	AP	t	N
A-TZ-1	FA046	S00573	AP	s	N
A-TZ-1	FA046	S00575	CenW	s	N
A-TZ-1	FA046	S00576	AP	v	N
A-TZ-1	FA046	S00577	AP	v	N
A-TZ-1	FA046	S00578	AP	v	N

A-TZ-1	FA046	S00579	AP	t	N
A-TZ-1	FA046	S00580	AP	v	N
A-TZ-1	FA046	S00581	AP	y	N
A-TZ-1	FA046	S00582	AP	v	N
A-TZ-1	FA046	S00583	AP	v	N
A-TZ-1	FA046	S00584	AP	v	N
A-TZ-1	FA046	S00585	AP	v	N
A-TZ-1	FA046	S00586	AP	v	N
A-TZ-1	FA046	S00587	AP	v	N
A-TZ-1	FA046	S00588	AP	v	N
A-TZ-1	FA046	S00589	AP	v	N
A-TZ-1	FA046	S00590	AP	v	N
A-TZ-1	FA046	S00591	AP	v	N
A-TZ-1	FA046	S00592	AP	v	N
A-TZ-1	FA046	S00593	AP	v	N
A-TZ-1	FA046	S00594	AP	v	N
A-TZ-1	FA046	S00595	AP	v	N
A-TZ-1	FA046	S00596	AP	v	N
A-TZ-1	FA046	S00597	AP	v	N
A-TZ-1	FA046	S00598	AP	v	N
A-TZ-1	FA046	S00599	AP	v	N
A-TZ-1	FA046	S00600	AP	v	N
A-TZ-1	FA046	S00601	AP	v	N
A-TZ-1	FA046	S00602	AP	v	N
A-TZ-1	FA046	S00603	AP	v	N
A-TZ-1	FA046	S00604	AP	v	N
A-TZ-1	FA046	S00605	AP	v	N
A-TZ-1	FA046	S00606	AP	y	N
A-TZ-1	FA046	S00608	AP	w	N
A-TZ-1	FA046	S00609	YauW	w	N
A-TZ-1	FA046	S00610	YauW	t	N
A-TZ-1	FA046	S00611	AP	v	N
A-TZ-1	FA046	S00613	YauW	s	N
A-TZ-1	FA046	S00614	AP	v	N
A-TZ-1	FA046	S00619	AP	v	N
A-TZ-1	FA046	S00622	AP	y	N
A-TZ-1	FA046	S00630	AP	x	N
A-TZ-1	FA046	S00631	AP	y	N
A-TZ-1	FA046	S02906	YauW	c	N
A-TZ-1	FA046	S02918	YauW	f	N
A-TZ-1	FA046	S02922	YauW	l	N
A-TZ-1	FA046	S02923	YauW	l	N
A-TZ-1	FA046	S02926	YauW	l	N
A-TZ-1	FA046	S02928	YauW	b	N
A-TZ-1	FA046	S02929	PasBW	b	N
A-TZ-1	FA046	S02937	YauW	k	N
A-TZ-1	FA046	S02938	YauW	k	N
A-TZ-1	FA046	S02939	YauW	p	N
A-TZ-1	FA046	S02940	PasBW	g	N

A-TZ-1	FA046	S02948	AP	b	N
A-TZ-1	FA046	S02950	AP	b	N
A-TZ-1	FA046	S02952	MB	b	N
A-TZ-1	FA046	S02957	AP	b	N
A-TZ-1	FA046	S02958	MB	h	N
A-TZ-1	FA046	S02960	MB	k	N
A-TZ-1	FA046	S02962	PotSRB	h	N
A-TZ-1	FA046	S02965	MB	b	N
A-TZ-1	FA046	S02966	MB	b	N
A-TZ-1	FA046	S02968	MB	c	N
A-TZ-1	FA046	S02971	AP	k	N
A-TZ-1	FA046	S02972	AP	k	N
A-TZ-1	FA046	S02973	AP	k	N
A-TZ-1	FA046	S02974	MB	b	N
A-TZ-1	FA046	S02975	AP	b	N
A-TZ-1	FA046	S02978	AP	k	N
A-TZ-1	FA046	S02979	AP	b	N
A-TZ-1	FA046	S02981	AP	b	N
A-TZ-1	FA046	S02982	AP	b	N
A-TZ-1	FA046	S02985	AP	b	N
A-TZ-1	FA046	S02986	AP	b	N
A-TZ-1	FA046	S02987	AP	b	N
A-TZ-1	FA046	S02988	YauW	p	N
A-TZ-1	FA046	S02989	YauW	p	N
A-TZ-1	FA046	S02990	YauW	p	N
A-TZ-1	FA046	S02991	PotSRB	k	N
A-TZ-1	FA046	S02992	PasBW	p	N
A-TZ-1	FA046	S02993	YauW	p	N
A-TZ-1	FA046	S00574	YauW	t	Y
A-TZ-1	FA046	S00612	YauW	s	Y
A-TZ-1	FA046	S00625	PasBW	t	Y
A-TZ-1	FA046	S00627	YauW	s	Y
A-TZ-1	FA046	S00629	MB	s	Y
A-TZ-1	FA046	S02913	CenW	g	Y
A-TZ-1	FA046	S02917	YRW	k	Y
A-TZ-1	FA046	S02919	YauW	l	Y
A-TZ-1	FA046	S02920	YauW	l	Y
A-TZ-1	FA046	S02921	YauW	l	Y
A-TZ-1	FA046	S02924	YauW	l	Y
A-TZ-1	FA046	S02925	YauW	l	Y
A-TZ-1	FA046	S02931	YauW	b	Y
A-TZ-1	FA046	S02932	YauW	l	Y
A-TZ-1	FA046	S02933	YauW	b	Y
A-TZ-1	FA046	S02934	YauW	l	Y
A-TZ-1	FA046	S02935	YauW	o	Y
A-TZ-1	FA046	S02936	YauW	k	Y
A-TZ-1	FA046	S02945	YauW	l	Y
A-TZ-1	FA046	S02955	YauW	h	Y
A-TZ-1	FA046	S02956	YauW	i	Y

A-TZ-1	FA046	S02959	YauW	b	Y
A-TZ-1	FA046	S02967	MB	b	Y
T-ET-1	FA012	S00263	YauW	t	N
T-ET-1	FA012	S00264	YauW	t	N
T-ET-1	FA012	S00265	AP	x	N
T-ET-1	FA012	S00266	AP	x	N
T-ET-1	FA012	S00267	AP	u	N
T-ET-1	FA012	S00268	AP	t	N
T-ET-1	FA012	S00269	AP	t	N
T-ET-1	FA012	S00270	AP	t	N
T-ET-1	FA012	S00271	AP	t	N
T-ET-1	FA012	S00272	AP	t	N
T-ET-1	FA012	S00273	AP	t	N
T-ET-1	FA012	S00274	AP	t	N
T-ET-1	FA012	S00275	AP	t	N
T-ET-1	FA012	S00276	AP	t	N
T-ET-1	FA012	S00277	AP	v	N
T-ET-1	FA012	S00278	LagRSc	v	N
T-ET-1	FA012	S00279	LagRSc	t	N
T-ET-1	FA012	S00280	LagDR+B	t	N
T-ET-1	FA012	S00322	LagRSc	t	N
T-ET-1	FA012	S01918	YRW	gg	N
T-ET-1	FA012	S01919	YRW	gg	N
T-ET-1	FA012	S01920	YRW	gg	N
T-ET-1	FA012	S01921	YRW	gg	N
T-ET-1	FA012	S01922	YRW	gg	N
T-ET-1	FA012	S01923	YRW	gg	N
T-ET-1	FA012	S01924	YRW	gg	N
T-ET-1	FA012	S01925	YRW	gg	N
T-ET-1	FA012	S01926	YRW	gg	N
T-ET-1	FA012	S01928	YRW	gg	N
T-ET-1	FA012	S01932	YauW	c	N
T-ET-1	FA012	S01933	YauW	c	N
T-ET-1	FA012	S01947	YRW	j	N
T-ET-1	FA012	S01949	YRW	j	N
T-ET-1	FA012	S01950	YRW	j	N
T-ET-1	FA012	S01953	YauW	k	N
T-ET-1	FA012	S01954	YauW	k	N
T-ET-1	FA012	S01955	YauW	k	N
T-ET-1	FA012	S01956	YauW	k	N
T-ET-1	FA012	S01961	YRW	j	N
T-ET-1	FA012	S01963	YauW	o	N
T-ET-1	FA012	S01967	MB	d	N
T-ET-1	FA012	S01969	MB	h	N
T-ET-1	FA012	S01970	MB	h	N
T-ET-1	FA012	S01971	MB	h	N
T-ET-1	FA012	S01972	MB	h	N
T-ET-1	FA012	S01973	MB	b	N
T-ET-1	FA012	S01974	MB	k	N

T-ET-1	FA012	S01975	MB	b	N
T-ET-1	FA012	S01976	LagDR	b	N
T-ET-1	FA012	S01977	LagDR	b	N
T-ET-1	FA012	S01986	YRW	f	N
T-ET-1	FA012	S01987	YRW	b	N
T-ET-1	FA012	S01988	YRW	f	N
T-ET-1	FA012	S05318	LagRSc	t	N
T-ET-1	FA012	S05544	MB	e	N
T-ET-1	FA012	S10808	LagRSc	t	N
T-ET-1	FA012	S10822	YauW	s	N
T-ET-1	FA012	S11717	AP	b	N
T-ET-1	FA012	S11718	AP	b	N
T-ET-1	FA012	S01912	SJW	g	Y
T-ET-1	FA012	S01913	YauW	g	Y
T-ET-1	FA012	S01914	YauW	g	Y
T-ET-1	FA012	S01915	YauW	g	Y
T-ET-1	FA012	S01916	YauW	f	Y
T-ET-1	FA012	S01917	YauW	f	Y
T-ET-1	FA012	S01927	YRW	g	Y
T-ET-1	FA012	S01929	YRW	c	Y
T-ET-1	FA012	S01930	YRW	c	Y
T-ET-1	FA012	S01931	YRW	c	Y
T-ET-1	FA012	S01934	YauW	c	Y
T-ET-1	FA012	S01935	YauW	c	Y
T-ET-1	FA012	S01936	YauW	c	Y
T-ET-1	FA012	S01937	YRW	c	Y
T-ET-1	FA012	S01938	YauW	c	Y
T-ET-1	FA012	S01939	YRW	c	Y
T-ET-1	FA012	S01940	YRW	c	Y
T-ET-1	FA012	S01942	YRW	c	Y
T-ET-1	FA012	S01943	YRW	c	Y
T-ET-1	FA012	S01944	YRW	c	Y
T-ET-1	FA012	S01945	YRW	c	Y
T-ET-1	FA012	S01946	SJW	d	Y
T-ET-1	FA012	S01948	YauW	b	Y
T-ET-1	FA012	S01951	YRW	m	Y
T-ET-1	FA012	S01952	YauW	b	Y
T-ET-1	FA012	S01957	YauW	b	Y
T-ET-1	FA012	S01958	YRW	j	Y
T-ET-1	FA012	S01959	YauW	m	Y
T-ET-1	FA012	S01960	YRW	j	Y
T-ET-1	FA012	S01962	YauW	o	Y
T-ET-1	FA012	S01964	YRW	o	Y
T-ET-1	FA012	S01965	YRW	o	Y
T-ET-1	FA012	S01966	YRW	r	Y
T-ET-1	FA012	S01968	MB	p	Y
T-ET-1	FA012	S01989	YRW	f	Y
T-ET-1	FA012	S05319	YRW	y	Y
T-ET-1	FA012	S05545	MB	q	Y

T-ET-1	FA012	S11712	PotR/B	q	Y
T-ET-1	FA012	S11714	PotR/B	e	Y
T-LT-1	FA004	S00113	AP	t	N
T-LT-1	FA004	S00114	AP	t	N
T-LT-1	FA004	S00115	AP	t	N
T-LT-1	FA004	S00116	AP	t	N
T-LT-1	FA004	S00117	AP	t	N
T-LT-1	FA004	S00118	AP	t	N
T-LT-1	FA004	S00119	AP	t	N
T-LT-1	FA004	S00120	AP	t	N
T-LT-1	FA004	S00121	AP	t	N
T-LT-1	FA004	S00122	AP	t	N
T-LT-1	FA004	S00123	AP	t	N
T-LT-1	FA004	S00124	AP	t	N
T-LT-1	FA004	S00125	AP	t	N
T-LT-1	FA004	S00126	AP	t	N
T-LT-1	FA004	S00128	AP	t	N
T-LT-1	FA004	S00129	AP	t	N
T-LT-1	FA004	S00130	AP	t	N
T-LT-1	FA004	S00131	AP	t	N
T-LT-1	FA004	S00132	AP	t	N
T-LT-1	FA004	S00133	AP	t	N
T-LT-1	FA004	S00134	AP	t	N
T-LT-1	FA004	S00135	AP	t	N
T-LT-1	FA004	S00136	AP	t	N
T-LT-1	FA004	S00137	AP	t	N
T-LT-1	FA004	S00138	AP	t	N
T-LT-1	FA004	S00139	AP	t	N
T-LT-1	FA004	S00140	AP	t	N
T-LT-1	FA004	S00141	AP	t	N
T-LT-1	FA004	S00143	AP	t	N
T-LT-1	FA004	S00144	AP	t	N
T-LT-1	FA004	S00145	AP	t	N
T-LT-1	FA004	S00146	AP	t	N
T-LT-1	FA004	S00147	AP	t	N
T-LT-1	FA004	S00148	AP	t	N
T-LT-1	FA004	S00149	AP	t	N
T-LT-1	FA004	S00150	AP	t	N
T-LT-1	FA004	S00151	AP	t	N
T-LT-1	FA004	S00152	AP	t	N
T-LT-1	FA004	S00153	AP	t	N
T-LT-1	FA004	S00154	AP	t	N
T-LT-1	FA004	S00155	AP	t	N
T-LT-1	FA004	S00156	AP	t	N
T-LT-1	FA004	S00157	AP	t	N
T-LT-1	FA004	S00158	AP	t	N
T-LT-1	FA004	S00159	LagDR	t	N
T-LT-1	FA004	S00160	LagDR	x	N
T-LT-1	FA004	S00161	LagRSc	t	N

T-LT-1	FA004	S00162	LagRSc	t	N
T-LT-1	FA004	S00163	LagRSc	t	N
T-LT-1	FA004	S00164	LagRSc	t	N
T-LT-1	FA004	S00165	LagRSc	t	N
T-LT-1	FA004	S00166	LagRSc	t	N
T-LT-1	FA004	S00167	LagRSc	t	N
T-LT-1	FA004	S00168	LagRSc	t	N
T-LT-1	FA004	S00169	LagR	t	N
T-LT-1	FA004	S01514	YRW	c	N
T-LT-1	FA004	S01522	YauW	g	N
T-LT-1	FA004	S01526	SJW	g	N
T-LT-1	FA004	S01528	YauW	g	N
T-LT-1	FA004	S01537	YRW	g	N
T-LT-1	FA004	S01539	YRW	g	N
T-LT-1	FA004	S01543	YRW	g	N
T-LT-1	FA004	S01544	YRW	g	N
T-LT-1	FA004	S01546	YRW	g	N
T-LT-1	FA004	S01554	YauW	b	N
T-LT-1	FA004	S01555	YRW	b	N
T-LT-1	FA004	S01557	YauW	b	N
T-LT-1	FA004	S01559	YauW	j	N
T-LT-1	FA004	S01578	YauW	y	N
T-LT-1	FA004	S01580	YRW	j	N
T-LT-1	FA004	S01608	SJW	d	N
T-LT-1	FA004	S01622	YRW	q	N
T-LT-1	FA004	S01623	YauW	k	N
T-LT-1	FA004	S01628	YRW	o	N
T-LT-1	FA004	S01631	YauW	b	N
T-LT-1	FA004	S01650	MB	d	N
T-LT-1	FA004	S01657	PotR/B	g	N
T-LT-1	FA004	S01660	LagDR	m	N
T-LT-1	FA004	S01662	LagDR	k	N
T-LT-1	FA004	S01665	LagR	t	N
T-LT-1	FA004	S01666	PotR/B	q	N
T-LT-1	FA004	S01667	SJW	d	N
T-LT-1	FA004	S01668	SJW	d	N
T-LT-1	FA004	S01669	MB	e	N
T-LT-1	FA004	S01670	MFineB	k	N
T-LT-1	FA004	S01671	MFineB	k	N
T-LT-1	FA004	S01675	MFineB	q	N
T-LT-1	FA004	S01689	MFineB	r	N
T-LT-1	FA004	S01790	YauW	k	N
T-LT-1	FA004	S01791	YauW	l	N
T-LT-1	FA004	S01793	YauW	l	N
T-LT-1	FA004	S01794	YauW	k	N
T-LT-1	FA004	S01795	Xal	c	N
T-LT-1	FA004	S01797	YauW	c	N
T-LT-1	FA004	S01803	YauW	f	N
T-LT-1	FA004	S01806	YauW	f	N

T-LT-1	FA004	S01807	YauW	f	N
T-LT-1	FA004	S09853	YauW	s	N
T-LT-1	FA004	S00127	AP	t	Y
T-LT-1	FA004	S00142	AP	t	Y
T-LT-1	FA004	S01471	SJW	c	Y
T-LT-1	FA004	S01473	SJW	c	Y
T-LT-1	FA004	S01474	YauW	c	Y
T-LT-1	FA004	S01477	YauW	c	Y
T-LT-1	FA004	S01481	YRW	c	Y
T-LT-1	FA004	S01483	YauW	c	Y
T-LT-1	FA004	S01484	YauW	c	Y
T-LT-1	FA004	S01485	YauW	c	Y
T-LT-1	FA004	S01486	YauW	c	Y
T-LT-1	FA004	S01487	YauW	c	Y
T-LT-1	FA004	S01488	YauW	c	Y
T-LT-1	FA004	S01491	YauW	c	Y
T-LT-1	FA004	S01496	YauW	c	Y
T-LT-1	FA004	S01499	YauW	c	Y
T-LT-1	FA004	S01500	YauW	c	Y
T-LT-1	FA004	S01502	YauW	c	Y
T-LT-1	FA004	S01503	YauW	c	Y
T-LT-1	FA004	S01507	YauW	c	Y
T-LT-1	FA004	S01511	YauW	g	Y
T-LT-1	FA004	S01512	YauW	c	Y
T-LT-1	FA004	S01513	SJW	c	Y
T-LT-1	FA004	S01515	YRW	c	Y
T-LT-1	FA004	S01519	SJW	c	Y
T-LT-1	FA004	S01520	YauW	f	Y
T-LT-1	FA004	S01521	YauW	g	Y
T-LT-1	FA004	S01523	YauW	f	Y
T-LT-1	FA004	S01524	YauW	g	Y
T-LT-1	FA004	S01525	YauW	g	Y
T-LT-1	FA004	S01527	YauW	f	Y
T-LT-1	FA004	S01529	YauW	g	Y
T-LT-1	FA004	S01530	YauW	g	Y
T-LT-1	FA004	S01534	YRW	g	Y
T-LT-1	FA004	S01535	YRW	g	Y
T-LT-1	FA004	S01536	YRW	g	Y
T-LT-1	FA004	S01538	YRW	g	Y
T-LT-1	FA004	S01540	YRW	g	Y
T-LT-1	FA004	S01542	YRW	g	Y
T-LT-1	FA004	S01545	YRW	g	Y
T-LT-1	FA004	S01547	YRW	g	Y
T-LT-1	FA004	S01556	YRW	b	Y
T-LT-1	FA004	S01558	YRW	b	Y
T-LT-1	FA004	S01561	YauW	b	Y
T-LT-1	FA004	S01562	YauW	k	Y
T-LT-1	FA004	S01563	YRW	b	Y
T-LT-1	FA004	S01569	SJW	k	Y

T-LT-1	FA004	S01570	SJW	k	Y
T-LT-1	FA004	S01571	SJW	b	Y
T-LT-1	FA004	S01572	SJW	k	Y
T-LT-1	FA004	S01573	SJW	b	Y
T-LT-1	FA004	S01574	SJW	k	Y
T-LT-1	FA004	S01575	SJW	k	Y
T-LT-1	FA004	S01586	SJW	k	Y
T-LT-1	FA004	S01589	SJW	k	Y
T-LT-1	FA004	S01592	SJW	d	Y
T-LT-1	FA004	S01593	SJW	d	Y
T-LT-1	FA004	S01598	SJW	d	Y
T-LT-1	FA004	S01601	YauW	d	Y
T-LT-1	FA004	S01602	YauW	d	Y
T-LT-1	FA004	S01609	SJW	d	Y
T-LT-1	FA004	S01610	SJW	d	Y
T-LT-1	FA004	S01613	SJW	d	Y
T-LT-1	FA004	S01615	YauW	g	Y
T-LT-1	FA004	S01616	YauW	g	Y
T-LT-1	FA004	S01617	YauW	g	Y
T-LT-1	FA004	S01626	YRW	o	Y
T-LT-1	FA004	S01646	SJW	d	Y
T-LT-1	FA004	S01647	YRW	c	Y
T-LT-1	FA004	S01648	MB	c	Y
T-LT-1	FA004	S01649	YauW	c	Y
T-LT-1	FA004	S01651	YauW	c	Y
T-LT-1	FA004	S01653	MFineB	r	Y
T-LT-1	FA004	S01654	MB	e	Y
T-LT-1	FA004	S01655	LagDR	y	Y
T-LT-1	FA004	S01658	LagDR	q	Y
T-LT-1	FA004	S01659	LagR	g	Y
T-LT-1	FA004	S01661	LagDR	k	Y
T-LT-1	FA004	S01663	LagDR	k	Y
T-LT-1	FA004	S01664	LagR	r	Y
T-LT-1	FA004	S01672	MFineB	n	Y
T-LT-1	FA004	S01674	MFineB	n	Y
T-LT-1	FA004	S01677	MFineB	m	Y
T-LT-1	FA004	S01678	MFineB	n	Y
T-LT-1	FA004	S01679	MFineB	m	Y
T-LT-1	FA004	S01682	MFineB	m	Y
T-LT-1	FA004	S01686	MFineB	q	Y
T-LT-1	FA004	S01687	MFineB	q	Y
T-LT-1	FA004	S01688	MFineB	q	Y
T-LT-1	FA004	S01789	SJW	i	Y
T-LT-1	FA004	S01792	YauW	b	Y
T-LT-1	FA004	S01805	YauW	k	Y
T-LT-1	FA004	S05508	YauW	g	Y
T-LT-1	FA004	S05550	YauW	o	Y
T-LT-1	FA004	S05551	YauW	i	Y
T-LT-2	FA019	S06193	SJW	f	N

T-LT-2	FA019	S06195	SJW	d	N
T-LT-2	FA019	S06196	SJW	d	N
T-LT-2	FA019	S06199	YRW	c	N
T-LT-2	FA019	S06202	YRW	c	N
T-LT-2	FA019	S06210	YauW	b	N
T-LT-2	FA019	S06211	YauW	o	N
T-LT-2	FA019	S06212	YauW	o	N
T-LT-2	FA019	S06215	AP	b	N
T-LT-2	FA019	S09026	AP	t	N
T-LT-2	FA019	S09027	AP	t	N
T-LT-2	FA019	S09028	AP	t	N
T-LT-2	FA019	S09029	AP	t	N
T-LT-2	FA019	S09030	AP	t	N
T-LT-2	FA019	S09031	AP	t	N
T-LT-2	FA019	S09033	PotR/B	t	N
T-LT-2	FA019	S09034	YauW	y	N
T-LT-2	FA019	S06194	SJW	m	Y
T-LT-2	FA019	S06197	SJW	b	Y
T-LT-2	FA019	S06198	LagDR	b	Y
T-LT-2	FA019	S06200	YRW	c	Y
T-LT-2	FA019	S06201	YRW	c	Y
T-LT-2	FA019	S06203	YauW	c	Y
T-LT-2	FA019	S06204	YauW	c	Y
T-LT-2	FA019	S06205	YauW	c	Y
T-LT-2	FA019	S06206	YauW	g	Y
T-LT-2	FA019	S06207	YauW	g	Y
T-LT-2	FA019	S06208	YauW	g	Y
T-LT-2	FA019	S06209	YauW	g	Y
T-LT-2	FA019	S06213	SJW	l	Y
T-LT-2	FA019	S06216	FGray	p	Y
T-LT-2	FA019	S09032	AP	t	Y
T-TX-1	FA011	S00110	YauW	t	N
T-TX-1	FA011	S00111	YauW	t	N
T-TX-1	FA011	S00170	LagRSc	t	N
T-TX-1	FA011	S00171	LagRSc	t	N
T-TX-1	FA011	S00172	LagRSc	t	N
T-TX-1	FA011	S00173	LagRSc	t	N
T-TX-1	FA011	S00174	LagRSc	t	N
T-TX-1	FA011	S00175	LagRSc	t	N
T-TX-1	FA011	S00176	LagRSc	t	N
T-TX-1	FA011	S00177	LagRSc	t	N
T-TX-1	FA011	S00178	LagRSc	t	N
T-TX-1	FA011	S00179	LagRSc	u	N
T-TX-1	FA011	S00180	LagRSc	u	N
T-TX-1	FA011	S00181	LagRSc	u	N
T-TX-1	FA011	S00182	LagRSc	u	N
T-TX-1	FA011	S00183	LagRSc	t	N
T-TX-1	FA011	S00184	LagRSc	t	N
T-TX-1	FA011	S00185	LagRSc	t	N

T-TX-1	FA011	S00186	LagRSc	t	N
T-TX-1	FA011	S00187	LagRSc	t	N
T-TX-1	FA011	S00188	LagRSc	t	N
T-TX-1	FA011	S00189	LagRSc	t	N
T-TX-1	FA011	S00190	LagRSc	t	N
T-TX-1	FA011	S00191	LagRSc	t	N
T-TX-1	FA011	S00192	LagRSc	t	N
T-TX-1	FA011	S00193	LagRSc	t	N
T-TX-1	FA011	S00194	LagRSc	t	N
T-TX-1	FA011	S00195	LagRSc	t	N
T-TX-1	FA011	S00196	MB	t	N
T-TX-1	FA011	S00197	LagRSc	t	N
T-TX-1	FA011	S00198	LagRSc	t	N
T-TX-1	FA011	S00199	LagRSc	t	N
T-TX-1	FA011	S00200	LagRSc	t	N
T-TX-1	FA011	S00201	LagRSc	t	N
T-TX-1	FA011	S00202	LagRSc	t	N
T-TX-1	FA011	S00203	LagRSc	t	N
T-TX-1	FA011	S00204	LagRSc	t	N
T-TX-1	FA011	S00205	LagRSc	t	N
T-TX-1	FA011	S00206	LagRSc	t	N
T-TX-1	FA011	S00207	LagRSc	t	N
T-TX-1	FA011	S00208	LagRSc	t	N
T-TX-1	FA011	S00209	LagRSc	t	N
T-TX-1	FA011	S00210	LagRSc	t	N
T-TX-1	FA011	S00211	LagRSc	t	N
T-TX-1	FA011	S00212	LagRSc	t	N
T-TX-1	FA011	S00213	LagRSc	t	N
T-TX-1	FA011	S00214	LagRSc	t	N
T-TX-1	FA011	S00215	LagRSc	t	N
T-TX-1	FA011	S00216	LagR	t	N
T-TX-1	FA011	S00217	LagR	u	N
T-TX-1	FA011	S00218	LagDR	x	N
T-TX-1	FA011	S00219	LagDR	x	N
T-TX-1	FA011	S00220	MB	x	N
T-TX-1	FA011	S00221	AP	t	N
T-TX-1	FA011	S00222	AP	u	N
T-TX-1	FA011	S00223	AP	t	N
T-TX-1	FA011	S00224	AP	t	N
T-TX-1	FA011	S00225	AP	t	N
T-TX-1	FA011	S00226	MB	u	N
T-TX-1	FA011	S00232	LagR	t	N
T-TX-1	FA011	S00233	MB	s	N
T-TX-1	FA011	S00235	AP	t	N
T-TX-1	FA010	S00236	LagRSc	t	N
T-TX-1	FA010	S00237	LagRSc	t	N
T-TX-1	FA010	S00238	LagRSc	t	N
T-TX-1	FA010	S00239	LagRSc	t	N
T-TX-1	FA010	S00240	LagRSc	t	N

T-TX-1	FA010	S00241	LagRSc	t	N
T-TX-1	FA010	S00242	LagRSc	u	N
T-TX-1	FA010	S00243	LagRSc	t	N
T-TX-1	FA010	S00244	LagRSc	t	N
T-TX-1	FA010	S00245	LagRSc	t	N
T-TX-1	FA010	S00246	LagRSc	t	N
T-TX-1	FA010	S00247	LagRSc	t	N
T-TX-1	FA010	S00248	LagRSc	t	N
T-TX-1	FA010	S00249	LagDR	x	N
T-TX-1	FA010	S00250	AP	t	N
T-TX-1	FA010	S00251	LagRSc	t	N
T-TX-1	FA010	S00252	LagRSc	t	N
T-TX-1	FA010	S00253	LagR	y	N
T-TX-1	FA010	S00254	MB	x	N
T-TX-1	FA010	S00255	AP	x	N
T-TX-1	FA010	S00256	MB	t	N
T-TX-1	FA010	S00258	AP	t	N
T-TX-1	FA010	S00259	AP	t	N
T-TX-1	FA010	S00260	AP	t	N
T-TX-1	FA010	S00262	YauW	t	N
T-TX-1	FA015	S00284	LagRSc	t	N
T-TX-1	FA015	S00285	LagRSc	t	N
T-TX-1	FA015	S00286	LagRSc	t	N
T-TX-1	FA015	S00287	LagRSc	t	N
T-TX-1	FA015	S00288	LagRSc	t	N
T-TX-1	FA015	S00289	LagRSc	t	N
T-TX-1	FA015	S00290	LagRSc	t	N
T-TX-1	FA015	S00291	LagRSc	t	N
T-TX-1	FA015	S00292	LagRSc	t	N
T-TX-1	FA015	S00293	LagRSc	t	N
T-TX-1	FA015	S00294	LagRSc	t	N
T-TX-1	FA015	S00295	LagRSc	t	N
T-TX-1	FA015	S00296	LagRSc	t	N
T-TX-1	FA015	S00297	LagRSc	t	N
T-TX-1	FA015	S00298	LagRSc	t	N
T-TX-1	FA015	S00299	LagRSc	u	N
T-TX-1	FA015	S00300	LagDR	y	N
T-TX-1	FA015	S00301	LagRSc	u	N
T-TX-1	FA015	S00302	LagRSc	u	N
T-TX-1	FA015	S00303	LagRSc	t	N
T-TX-1	FA015	S00304	LagRSc	t	N
T-TX-1	FA015	S00305	LagRSc	t	N
T-TX-1	FA015	S00306	LagRSc	t	N
T-TX-1	FA015	S00307	LagRSc	t	N
T-TX-1	FA015	S00308	LagRSc	t	N
T-TX-1	FA015	S00309	LagRSc	t	N
T-TX-1	FA015	S00310	LagRSc	t	N
T-TX-1	FA015	S00311	LagRSc	t	N
T-TX-1	FA015	S00312	LagRSc	t	N

T-TX-1	FA015	S00313	LagRSc	t	N
T-TX-1	FA015	S00314	LagRSc	t	N
T-TX-1	FA015	S00315	LagRSc	t	N
T-TX-1	FA015	S00316	LagRSc	t	N
T-TX-1	FA015	S00317	LagRSc	t	N
T-TX-1	FA015	S00318	LagRSc	t	N
T-TX-1	FA015	S00319	LagRSc	t	N
T-TX-1	FA015	S00320	LagRSc	t	N
T-TX-1	FA015	S00323	AP	u	N
T-TX-1	FA015	S00324	AP	t	N
T-TX-1	FA015	S00325	AP	t	N
T-TX-1	FA015	S00326	AP	t	N
T-TX-1	FA015	S00327	AP	t	N
T-TX-1	FA015	S00328	AP	t	N
T-TX-1	FA015	S00329	AP	t	N
T-TX-1	FA015	S00330	AP	t	N
T-TX-1	FA015	S00331	AP	t	N
T-TX-1	FA010	S00332	AP	t	N
T-TX-1	FA015	S00333	AP	t	N
T-TX-1	FA015	S00336	AP	t	N
T-TX-1	FA015	S00339	AP	t	N
T-TX-1	FA015	S00340	Xal	s	N
T-TX-1	FA015	S00341	LagDR	s	N
T-TX-1	FA015	S00342	LagR	x	N
T-TX-1	FA015	S00343	LagR	x	N
T-TX-1	FA015	S00346	LagR	y	N
T-TX-1	FA015	S00347	LagR	y	N
T-TX-1	FA015	S00348	LagR	y	N
T-TX-1	FA015	S00349	LagR	y	N
T-TX-1	FA015	S00350	LagR	y	N
T-TX-1	FA015	S00351	LagR	y	N
T-TX-1	FA015	S00356	AP	t	N
T-TX-1	FA015	S00569	LagRSc	t	N
T-TX-1	FA011	S01501	YauW	l	N
T-TX-1	FA011	S01548	YRW	g	N
T-TX-1	FA011	S01564	YauW	k	N
T-TX-1	FA011	S01566	YRW	j	N
T-TX-1	FA011	S01568	YauW	k	N
T-TX-1	FA011	S01581	YauW	j	N
T-TX-1	FA011	S01614	SJW	d	N
T-TX-1	FA011	S01619	Xal	q	N
T-TX-1	FA011	S01620	Xal	q	N
T-TX-1	FA011	S01621	YauW	q	N
T-TX-1	FA011	S01624	YauW	o	N
T-TX-1	FA011	S01629	Xal	m	N
T-TX-1	FA011	S01630	PasBW	f	N
T-TX-1	FA011	S01634	Palmas	l	N
T-TX-1	FA011	S01636	Xal	q	N
T-TX-1	FA011	S01638	SJW	k	N

T-TX-1	FA011	S01642	YauW	l	N
T-TX-1	FA011	S01699	LagR	o	N
T-TX-1	FA011	S01702	PotR/B	q	N
T-TX-1	FA011	S01703	PotR/B	q	N
T-TX-1	FA011	S01707	LagR	q	N
T-TX-1	FA011	S01708	LagR	q	N
T-TX-1	FA011	S01709	LagR	q	N
T-TX-1	FA011	S01711	LagR	q	N
T-TX-1	FA011	S01712	LagR	q	N
T-TX-1	FA011	S01713	LagR	q	N
T-TX-1	FA011	S01716	YauW	q	N
T-TX-1	FA011	S01718	MB	q	N
T-TX-1	FA011	S01719	PotR/B	e	N
T-TX-1	FA011	S01720	PotR/B	e	N
T-TX-1	FA011	S01721	MB	e	N
T-TX-1	FA011	S01727	LagR	e	N
T-TX-1	FA011	S01730	LagR	e	N
T-TX-1	FA011	S01735	LagR	k	N
T-TX-1	FA011	S01736	LagR	y	N
T-TX-1	FA011	S01737	LagR	b	N
T-TX-1	FA011	S01738	LagR	b	N
T-TX-1	FA011	S01739	LagR	b	N
T-TX-1	FA011	S01740	Gaz	b	N
T-TX-1	FA011	S01741	Gaz	b	N
T-TX-1	FA011	S01742	LagR	b	N
T-TX-1	FA011	S01743	LagR	b	N
T-TX-1	FA011	S01744	PotR/B	k	N
T-TX-1	FA011	S01745	YRW	b	N
T-TX-1	FA011	S01747	LagR	o	N
T-TX-1	FA011	S01749	MB	e	N
T-TX-1	FA011	S01757	MB	e	N
T-TX-1	FA011	S01759	MB	e	N
T-TX-1	FA011	S01762	MB	c	N
T-TX-1	FA011	S01763	MB	h	N
T-TX-1	FA011	S01766	MB	b	N
T-TX-1	FA011	S01769	YRW	j	N
T-TX-1	FA011	S01770	YRW	b	N
T-TX-1	FA011	S01772	AP	b	N
T-TX-1	FA011	S01773	AP	b	N
T-TX-1	FA011	S01774	AP	b	N
T-TX-1	FA011	S01775	AP	b	N
T-TX-1	FA011	S01776	AP	b	N
T-TX-1	FA011	S01777	AP	b	N
T-TX-1	FA011	S01778	AP	b	N
T-TX-1	FA011	S01798	YauW	l	N
T-TX-1	FA011	S01802	YauW	j	N
T-TX-1	FA011	S01810	YauW	q	N
T-TX-1	FA010	S01816	Gaz	b	N
T-TX-1	FA010	S01818	Gaz	b	N

T-TX-1	FA010	S01821	LagDR	b	N
T-TX-1	FA010	S01822	LagDR	b	N
T-TX-1	FA010	S01823	LagDR	b	N
T-TX-1	FA010	S01824	LagR	b	N
T-TX-1	FA010	S01825	LagR	b	N
T-TX-1	FA010	S01826	LagR	b	N
T-TX-1	FA010	S01827	LagR	p	N
T-TX-1	FA010	S01828	Gaz	c	N
T-TX-1	FA010	S01829	LagR	q	N
T-TX-1	FA010	S01830	LagR	q	N
T-TX-1	FA010	S01831	LagR	e	N
T-TX-1	FA010	S01832	LagR	e	N
T-TX-1	FA010	S01837	LagR	e	N
T-TX-1	FA010	S01838	LagR	e	N
T-TX-1	FA010	S01839	LagR	e	N
T-TX-1	FA010	S01841	PotR/B	e	N
T-TX-1	FA010	S01844	Xal	q	N
T-TX-1	FA010	S01845	MB	q	N
T-TX-1	FA010	S01847	MFineB	j	N
T-TX-1	FA010	S01850	MB	f	N
T-TX-1	FA010	S01851	YauW	g	N
T-TX-1	FA010	S01856	MB	e	N
T-TX-1	FA010	S01859	YRW	c	N
T-TX-1	FA010	S01861	MB	e	N
T-TX-1	FA010	S01865	YauW	q	N
T-TX-1	FA010	S01867	SJW	d	N
T-TX-1	FA010	S01871	Gaz	k	N
T-TX-1	FA010	S01872	YauW	b	N
T-TX-1	FA010	S01873	YauW	b	N
T-TX-1	FA010	S01874	YauW	b	N
T-TX-1	FA010	S01875	YauW	b	N
T-TX-1	FA010	S01876	YauW	b	N
T-TX-1	FA010	S01877	YauW	b	N
T-TX-1	FA010	S01878	YauW	b	N
T-TX-1	FA010	S01880	YauW	e	N
T-TX-1	FA010	S01883	YRW	c	N
T-TX-1	FA010	S01885	Xal	c	N
T-TX-1	FA010	S01893	YauW	g	N
T-TX-1	FA010	S01894	YauW	g	N
T-TX-1	FA010	S01895	SJW	f	N
T-TX-1	FA010	S01896	AP	b	N
T-TX-1	FA010	S01897	AP	b	N
T-TX-1	FA010	S01898	AP	b	N
T-TX-1	FA010	S01900	YauW	k	N
T-TX-1	FA010	S01908	YauW	e	N
T-TX-1	FA010	S01909	PotR/B	e	N
T-TX-1	FA010	S01910	LagDR	e	N
T-TX-1	FA015	S02003	YauW	o	N
T-TX-1	FA015	S02004	YauW	o	N

T-TX-1	FA015	S02005	YauW	q	N
T-TX-1	FA015	S02008	YRW	j	N
T-TX-1	FA015	S02009	YauW	q	N
T-TX-1	FA015	S02010	YauW	b	N
T-TX-1	FA015	S02011	YauW	b	N
T-TX-1	FA015	S02012	YauW	b	N
T-TX-1	FA015	S02017	Xal	c	N
T-TX-1	FA015	S02026	YauW	t	N
T-TX-1	FA015	S02027	LagRSc	t	N
T-TX-1	FA015	S02029	YRW	g	N
T-TX-1	FA015	S02032	YRW	g	N
T-TX-1	FA015	S02033	PotR/B	e	N
T-TX-1	FA015	S02034	PotR/B	e	N
T-TX-1	FA015	S02035	PotR/B	e	N
T-TX-1	FA015	S02044	PotR/B	e	N
T-TX-1	FA015	S02053	MB	e	N
T-TX-1	FA015	S02057	YauW	e	N
T-TX-1	FA015	S02062	MB	e	N
T-TX-1	FA015	S02064	MB	e	N
T-TX-1	FA015	S02071	PotR/B	o	N
T-TX-1	FA015	S02072	LagR	j	N
T-TX-1	FA015	S02074	LagR	q	N
T-TX-1	FA015	S02075	Xal	c	N
T-TX-1	FA015	S02076	YRW	b	N
T-TX-1	FA015	S02079	LagDR	e	N
T-TX-1	FA015	S02080	LagDR	b	N
T-TX-1	FA015	S02081	LagDR	b	N
T-TX-1	FA015	S02082	LagDR	b	N
T-TX-1	FA015	S02083	LagDR	b	N
T-TX-1	FA015	S02087	MB	k	N
T-TX-1	FA015	S02089	MB	k	N
T-TX-1	FA015	S02091	MB	b	N
T-TX-1	FA015	S02092	MB	k	N
T-TX-1	FA015	S02093	AP	b	N
T-TX-1	FA015	S02094	MB	b	N
T-TX-1	FA015	S02095	MB	b	N
T-TX-1	FA015	S02096	AP	k	N
T-TX-1	FA015	S02097	MB	k	N
T-TX-1	FA015	S02098	AP	b	N
T-TX-1	FA015	S02099	MB	b	N
T-TX-1	FA015	S02100	LagR	k	N
T-TX-1	FA015	S02101	SJW	b	N
T-TX-1	FA015	S02102	Gaz	m	N
T-TX-1	FA015	S02104	LagR	e	N
T-TX-1	FA015	S02105	MB	q	N
T-TX-1	FA015	S02110	PotR/B	q	N
T-TX-1	FA015	S02111	MB	f	N
T-TX-1	FA015	S02115	SJW	d	N
T-TX-1	FA015	S02117	YauW	c	N

T-TX-1	FA015	S02118	YauW	g	N
T-TX-1	FA015	S02124	YauW	l	N
T-TX-1	FA015	S02125	YauW	t	N
T-TX-1	FA015	S02127	YauW	k	N
T-TX-1	FA015	S02128	YauW	t	N
T-TX-1	FA015	S02129	YauW	q	N
T-TX-1	FA015	S02130	YauW	q	N
T-TX-1	FA015	S02131	PotR/B	q	N
T-TX-1	FA015	S02132	AP	b	N
T-TX-1	FA015	S02133	AP	b	N
T-TX-1	FA015	S02134	AP	b	N
T-TX-1	FA015	S02135	AP	b	N
T-TX-1	FA015	S02136	AP	b	N
T-TX-1	FA015	S02138	AP	b	N
T-TX-1	FA015	S02139	YauW	e	N
T-TX-1	FA015	S02140	YauW	e	N
T-TX-1	FA015	S02142	YauW	q	N
T-TX-1	FA015	S02143	YauW	q	N
T-TX-1	FA015	S02144	YauW	q	N
T-TX-1	FA015	S02145	YauW	q	N
T-TX-1	FA015	S02146	YauW	q	N
T-TX-1	FA015	S02147	YauW	q	N
T-TX-1	FA015	S02148	YauW	q	N
T-TX-1	FA015	S02149	YauW	q	N
T-TX-1	FA015	S02150	YauW	q	N
T-TX-1	FA015	S02151	YauW	q	N
T-TX-1	FA015	S02152	YauW	q	N
T-TX-1	FA015	S02153	YauW	q	N
T-TX-1	FA015	S02154	YauW	q	N
T-TX-1	FA015	S02178	Palmas	l	N
T-TX-1	FA015	S02180	LagDR	b	N
T-TX-1	FA015	S02184	MB	f	N
T-TX-1	FA015	S02891	PotR/B	e	N
T-TX-1	FA015	S02892	AP	k	N
T-TX-1	FA015	S02893	MB	b	N
T-TX-1	FA015	S02894	Xal	e	N
T-TX-1	FA011	S09851	LagR	y	N
T-TX-1	FA011	S10800	LagRSc	t	N
T-TX-1	FA011	S11709	LagR	f	N
T-TX-1	FA011	S00112	YauW	u	Y
T-TX-1	FA011	S00227	MB	u	Y
T-TX-1	FA011	S00230	LagR	y	Y
T-TX-1	FA011	S00231	LagR	y	Y
T-TX-1	FA010	S00257	MB	u	Y
T-TX-1	FA015	S00321	MB	s	Y
T-TX-1	FA015	S00337	MB	y	Y
T-TX-1	FA015	S00338	MB	s	Y
T-TX-1	FA015	S00344	LagR	y	Y
T-TX-1	FA015	S00345	LagR	y	Y

T-TX-1	FA015	S00352	LagR	y	Y
T-TX-1	FA015	S00353	LagR	y	Y
T-TX-1	FA015	S00354	LagR	y	Y
T-TX-1	FA015	S00355	LagR	y	Y
T-TX-1	FA015	S00568	LagRSc	u	Y
T-TX-1	FA011	S01479	YRW	c	Y
T-TX-1	FA011	S01480	YRW	c	Y
T-TX-1	FA011	S01482	YRW	c	Y
T-TX-1	FA011	S01492	YauW	c	Y
T-TX-1	FA011	S01493	YauW	c	Y
T-TX-1	FA011	S01494	YauW	g	Y
T-TX-1	FA011	S01495	YauW	c	Y
T-TX-1	FA011	S01516	YRW	c	Y
T-TX-1	FA011	S01531	YauW	g	Y
T-TX-1	FA011	S01532	YRW	g	Y
T-TX-1	FA011	S01533	YauW	g	Y
T-TX-1	FA011	S01549	YRW	g	Y
T-TX-1	FA011	S01550	YRW	g	Y
T-TX-1	FA011	S01551	YRW	g	Y
T-TX-1	FA011	S01552	Palmas	g	Y
T-TX-1	FA011	S01553	Palmas	g	Y
T-TX-1	FA011	S01565	YRW	j	Y
T-TX-1	FA011	S01567	YauW	b	Y
T-TX-1	FA011	S01576	SJW	k	Y
T-TX-1	FA011	S01577	SJW	k	Y
T-TX-1	FA011	S01582	SJW	j	Y
T-TX-1	FA011	S01590	YauW	x	Y
T-TX-1	FA011	S01594	SJW	d	Y
T-TX-1	FA011	S01618	YauW	g	Y
T-TX-1	FA011	S01625	SJW	k	Y
T-TX-1	FA011	S01627	YRW	o	Y
T-TX-1	FA011	S01632	YauW	n	Y
T-TX-1	FA011	S01635	YRW	j	Y
T-TX-1	FA011	S01637	Xal	m	Y
T-TX-1	FA011	S01640	Palmas	c	Y
T-TX-1	FA011	S01641	YauW	f	Y
T-TX-1	FA011	S01643	LagDR	f	Y
T-TX-1	FA011	S01645	Xal	q	Y
T-TX-1	FA011	S01698	Xal	b	Y
T-TX-1	FA011	S01700	AP	p	Y
T-TX-1	FA011	S01710	Gaz	q	Y
T-TX-1	FA011	S01714	PotR/B	q	Y
T-TX-1	FA011	S01715	PotR/B	q	Y
T-TX-1	FA011	S01717	PotR/B	e	Y
T-TX-1	FA011	S01722	PotR/B	e	Y
T-TX-1	FA011	S01723	PotR/B	e	Y
T-TX-1	FA011	S01724	PotR/B	e	Y
T-TX-1	FA011	S01725	MB	e	Y
T-TX-1	FA011	S01726	LagR	q	Y

T-TX-1	FA011	S01729	LagR	e	Y
T-TX-1	FA011	S01731	PotR/B	q	Y
T-TX-1	FA011	S01732	PotR/B	q	Y
T-TX-1	FA011	S01733	PotR/B	q	Y
T-TX-1	FA011	S01734	MB	q	Y
T-TX-1	FA011	S01746	LagR	o	Y
T-TX-1	FA011	S01748	MB	e	Y
T-TX-1	FA011	S01750	MB	e	Y
T-TX-1	FA011	S01751	MB	e	Y
T-TX-1	FA011	S01752	MB	e	Y
T-TX-1	FA011	S01753	MB	e	Y
T-TX-1	FA011	S01754	MB	e	Y
T-TX-1	FA011	S01755	MB	q	Y
T-TX-1	FA011	S01756	MB	e	Y
T-TX-1	FA011	S01758	MB	q	Y
T-TX-1	FA011	S01760	MB	e	Y
T-TX-1	FA011	S01761	MB	e	Y
T-TX-1	FA011	S01764	MB	o	Y
T-TX-1	FA011	S01765	MB	o	Y
T-TX-1	FA011	S01767	MB	y	Y
T-TX-1	FA011	S01768	MB	y	Y
T-TX-1	FA011	S01771	MB	b	Y
T-TX-1	FA011	S01799	Palmas	q	Y
T-TX-1	FA011	S01801	YauW	f	Y
T-TX-1	FA011	S01811	YRW	f	Y
T-TX-1	FA010	S01812	LagDR	f	Y
T-TX-1	FA010	S01813	Xal	q	Y
T-TX-1	FA010	S01814	PotR/B	g	Y
T-TX-1	FA010	S01815	LagDR	g	Y
T-TX-1	FA010	S01817	Xal	b	Y
T-TX-1	FA010	S01819	Gaz	b	Y
T-TX-1	FA010	S01820	YRW	q	Y
T-TX-1	FA010	S01833	PotR/B	e	Y
T-TX-1	FA010	S01834	PotR/B	e	Y
T-TX-1	FA010	S01835	PotR/B	e	Y
T-TX-1	FA010	S01836	PotR/B	e	Y
T-TX-1	FA010	S01840	PotR/B	e	Y
T-TX-1	FA010	S01842	PotR/B	q	Y
T-TX-1	FA010	S01843	Gaz	q	Y
T-TX-1	FA010	S01846	MB	o	Y
T-TX-1	FA010	S01848	MB	b	Y
T-TX-1	FA010	S01849	MB	k	Y
T-TX-1	FA010	S01852	MB	e	Y
T-TX-1	FA010	S01853	MB	e	Y
T-TX-1	FA010	S01854	MB	e	Y
T-TX-1	FA010	S01855	MB	e	Y
T-TX-1	FA010	S01857	MB	e	Y
T-TX-1	FA010	S01858	MB	e	Y
T-TX-1	FA010	S01860	MB	e	Y

T-TX-1	FA010	S01862	MB	e	Y
T-TX-1	FA010	S01863	MB	e	Y
T-TX-1	FA010	S01864	MB	e	Y
T-TX-1	FA010	S01868	SJW	d	Y
T-TX-1	FA010	S01869	YauW	b	Y
T-TX-1	FA010	S01870	SJW	k	Y
T-TX-1	FA010	S01879	SJW	b	Y
T-TX-1	FA010	S01881	YauW	c	Y
T-TX-1	FA010	S01882	YRW	c	Y
T-TX-1	FA010	S01884	Xal	c	Y
T-TX-1	FA010	S01886	YauW	c	Y
T-TX-1	FA010	S01887	YRW	c	Y
T-TX-1	FA010	S01888	YRW	gg	Y
T-TX-1	FA010	S01889	YRW	gg	Y
T-TX-1	FA010	S01890	YRW	gg	Y
T-TX-1	FA010	S01891	YRW	gg	Y
T-TX-1	FA010	S01892	YauW	gg	Y
T-TX-1	FA015	S02002	YauW	o	Y
T-TX-1	FA015	S02006	YauW	d	Y
T-TX-1	FA015	S02007	Palmas	f	Y
T-TX-1	FA015	S02013	YauW	b	Y
T-TX-1	FA015	S02014	YRW	b	Y
T-TX-1	FA015	S02015	YauW	c	Y
T-TX-1	FA015	S02016	YauW	c	Y
T-TX-1	FA015	S02018	YRW	c	Y
T-TX-1	FA015	S02019	YauW	c	Y
T-TX-1	FA015	S02020	YauW	c	Y
T-TX-1	FA015	S02021	YauW	c	Y
T-TX-1	FA015	S02022	YauW	c	Y
T-TX-1	FA015	S02023	YauW	c	Y
T-TX-1	FA015	S02024	YauW	c	Y
T-TX-1	FA015	S02025	YauW	c	Y
T-TX-1	FA015	S02028	YRW	g	Y
T-TX-1	FA015	S02030	YRW	gg	Y
T-TX-1	FA015	S02031	YauW	gg	Y
T-TX-1	FA015	S02036	PotR/B	e	Y
T-TX-1	FA015	S02037	PotR/B	e	Y
T-TX-1	FA015	S02038	PotR/B	e	Y
T-TX-1	FA015	S02039	PotR/B	e	Y
T-TX-1	FA015	S02040	PotR/B	e	Y
T-TX-1	FA015	S02041	PotR/B	e	Y
T-TX-1	FA015	S02042	PotR/B	e	Y
T-TX-1	FA015	S02043	PotR/B	e	Y
T-TX-1	FA015	S02045	PotR/B	e	Y
T-TX-1	FA015	S02046	PotR/B	e	Y
T-TX-1	FA015	S02047	MB	e	Y
T-TX-1	FA015	S02048	MB	e	Y
T-TX-1	FA015	S02050	MB	e	Y
T-TX-1	FA015	S02051	MB	e	Y

T-TX-1	FA015	S02052	MB	e	Y
T-TX-1	FA015	S02054	MB	e	Y
T-TX-1	FA015	S02055	MB	e	Y
T-TX-1	FA015	S02058	MB	e	Y
T-TX-1	FA015	S02059	MB	e	Y
T-TX-1	FA015	S02060	MB	e	Y
T-TX-1	FA015	S02061	YauW	e	Y
T-TX-1	FA015	S02063	MB	e	Y
T-TX-1	FA015	S02065	MB	e	Y
T-TX-1	FA015	S02066	MB	e	Y
T-TX-1	FA015	S02067	MB	e	Y
T-TX-1	FA015	S02068	MB	e	Y
T-TX-1	FA015	S02069	MB	e	Y
T-TX-1	FA015	S02070	MB	e	Y
T-TX-1	FA015	S02073	LagR	p	Y
T-TX-1	FA015	S02077	MFineB	k	Y
T-TX-1	FA015	S02078	MFineB	b	Y
T-TX-1	FA015	S02084	LagDR	b	Y
T-TX-1	FA015	S02085	LagDR	k	Y
T-TX-1	FA015	S02086	LagDR	b	Y
T-TX-1	FA015	S02088	MB	k	Y
T-TX-1	FA015	S02090	MB	b	Y
T-TX-1	FA015	S02103	Xal	m	Y
T-TX-1	FA015	S02106	PotR/B	q	Y
T-TX-1	FA015	S02107	PotR/B	q	Y
T-TX-1	FA015	S02108	PotR/B	q	Y
T-TX-1	FA015	S02109	PotR/B	q	Y
T-TX-1	FA015	S02112	MB	k	Y
T-TX-1	FA015	S02113	MB	o	Y
T-TX-1	FA015	S02114	MB	k	Y
T-TX-1	FA015	S02116	YRW	c	Y
T-TX-1	FA015	S02119	YauW	c	Y
T-TX-1	FA015	S02120	YauW	c	Y
T-TX-1	FA015	S02121	YauW	c	Y
T-TX-1	FA015	S02122	Palmas	c	Y
T-TX-1	FA015	S02123	SJW	b	Y
T-TX-1	FA015	S02126	SJW	b	Y
T-TX-1	FA015	S02141	YauW	q	Y
T-TX-1	FA015	S02179	PotR/B	q	Y
T-TX-1	FA015	S02895	YauW	q	Y
T-TX-1	FA015	S05549	YRW	g	Y
T-TX-1	FA011	S09850	Gaz	y	Y
T-TX-2	FA016	S00364	LagDR	y	N
T-TX-2	FA016	S00365	LagR	y	N
T-TX-2	FA016	S00366	MB	y	N
T-TX-2	FA016	S00367	AP	y	N
T-TX-2	FA016	S00368	MB	y	N
T-TX-2	FA016	S00369	AP	x	N
T-TX-2	FA016	S00370	AP	x	N

T-TX-2	FA016	S00371	LagR	x	N
T-TX-2	FA016	S00372	LagR	x	N
T-TX-2	FA016	S00373	LagR	x	N
T-TX-2	FA016	S00374	AP	t	N
T-TX-2	FA016	S00375	LagRSc	t	N
T-TX-2	FA016	S00376	LagRSc	t	N
T-TX-2	FA016	S00377	LagRSc	t	N
T-TX-2	FA016	S00378	LagR	s	N
T-TX-2	FA016	S00379	LagR	t	N
T-TX-2	FA016	S00380	LagRSc	u	N
T-TX-2	FA016	S00381	LagRSc	t	N
T-TX-2	FA016	S00382	LagRSc	t	N
T-TX-2	FA016	S00383	LagRSc	t	N
T-TX-2	FA016	S00384	LagRSc	t	N
T-TX-2	FA016	S00385	LagRSc	t	N
T-TX-2	FA016	S00386	AP	t	N
T-TX-2	FA016	S00387	AP	t	N
T-TX-2	FA016	S00388	AP	t	N
T-TX-2	FA016	S00389	AP	t	N
T-TX-2	FA016	S00390	AP	t	N
T-TX-2	FA016	S00391	AP	t	N
T-TX-2	FA016	S00392	AP	t	N
T-TX-2	FA016	S00393	AP	t	N
T-TX-2	FA016	S00394	AP	t	N
T-TX-2	FA016	S00395	AP	t	N
T-TX-2	FA016	S00396	AP	t	N
T-TX-2	FA016	S00397	AP	t	N
T-TX-2	FA016	S00398	AP	t	N
T-TX-2	FA016	S00399	AP	t	N
T-TX-2	FA016	S00400	AP	t	N
T-TX-2	FA016	S02208	YauW	c	N
T-TX-2	FA016	S02213	YauW	b	N
T-TX-2	FA016	S02214	YauW	b	N
T-TX-2	FA016	S02221	YRW	c	N
T-TX-2	FA016	S02227	YRW	f	N
T-TX-2	FA016	S02233	YauW	g	N
T-TX-2	FA016	S02234	YauW	k	N
T-TX-2	FA016	S02235	YauW	b	N
T-TX-2	FA016	S02236	YauW	b	N
T-TX-2	FA016	S02238	YauW	b	N
T-TX-2	FA016	S02239	YauW	b	N
T-TX-2	FA016	S02248	Palmas	d	N
T-TX-2	FA016	S02249	SJW	b	N
T-TX-2	FA016	S02250	SJW	k	N
T-TX-2	FA016	S02252	YRW	j	N
T-TX-2	FA016	S02253	YRW	j	N
T-TX-2	FA016	S02254	YauW	e	N
T-TX-2	FA016	S02256	YauW	o	N
T-TX-2	FA016	S02259	YauW	f	N

T-TX-2	FA016	S02261	YauW	l	N
T-TX-2	FA016	S02262	YauW	l	N
T-TX-2	FA016	S02263	YauW	l	N
T-TX-2	FA016	S02264	YauW	l	N
T-TX-2	FA016	S02265	YauW	l	N
T-TX-2	FA016	S02266	YauW	l	N
T-TX-2	FA016	S02267	YauW	l	N
T-TX-2	FA016	S02268	MB	o	N
T-TX-2	FA016	S02270	MB	o	N
T-TX-2	FA016	S02272	MB	c	N
T-TX-2	FA016	S02274	MB	e	N
T-TX-2	FA016	S02279	MB	q	N
T-TX-2	FA016	S02286	MB	e	N
T-TX-2	FA016	S02287	Palmas	e	N
T-TX-2	FA016	S02292	Palmas	d	N
T-TX-2	FA016	S02296	LagR	f	N
T-TX-2	FA016	S02297	LagR	f	N
T-TX-2	FA016	S02298	LagR	f	N
T-TX-2	FA016	S02299	LagR	q	N
T-TX-2	FA016	S02301	LagR	f	N
T-TX-2	FA016	S02304	PotR/B	q	N
T-TX-2	FA016	S02306	PotR/B	e	N
T-TX-2	FA016	S02307	PotR/B	e	N
T-TX-2	FA016	S02310	AP	b	N
T-TX-2	FA016	S02311	AP	b	N
T-TX-2	FA016	S02312	AP	b	N
T-TX-2	FA016	S02313	Xal	b	N
T-TX-2	FA016	S02314	MB	b	N
T-TX-2	FA016	S02316	MB	o	N
T-TX-2	FA016	S02317	AP	b	N
T-TX-2	FA016	S02318	AP	b	N
T-TX-2	FA016	S02319	AP	b	N
T-TX-2	FA016	S02320	YauW	o	N
T-TX-2	FA016	S02334	MB	o	N
T-TX-2	FA016	S00361	YauW	s	Y
T-TX-2	FA016	S00362	YauW	p	Y
T-TX-2	FA016	S00363	YauW	u	Y
T-TX-2	FA016	S02205	YauW	c	Y
T-TX-2	FA016	S02206	YauW	c	Y
T-TX-2	FA016	S02207	YauW	c	Y
T-TX-2	FA016	S02209	YauW	c	Y
T-TX-2	FA016	S02210	YauW	c	Y
T-TX-2	FA016	S02211	Palmas	c	Y
T-TX-2	FA016	S02212	YauW	c	Y
T-TX-2	FA016	S02215	YRW	c	Y
T-TX-2	FA016	S02216	YRW	c	Y
T-TX-2	FA016	S02217	YRW	c	Y
T-TX-2	FA016	S02218	YRW	c	Y
T-TX-2	FA016	S02219	YRW	c	Y

T-TX-2	FA016	S02220	YRW	c	Y
T-TX-2	FA016	S02222	YRW	c	Y
T-TX-2	FA016	S02223	YauW	c	Y
T-TX-2	FA016	S02224	YauW	c	Y
T-TX-2	FA016	S02225	YauW	c	Y
T-TX-2	FA016	S02226	YauW	c	Y
T-TX-2	FA016	S02228	YauW	f	Y
T-TX-2	FA016	S02229	YauW	f	Y
T-TX-2	FA016	S02230	YauW	f	Y
T-TX-2	FA016	S02231	YauW	g	Y
T-TX-2	FA016	S02232	SJW	g	Y
T-TX-2	FA016	S02237	YRW	b	Y
T-TX-2	FA016	S02240	YRW	j	Y
T-TX-2	FA016	S02241	YauW	b	Y
T-TX-2	FA016	S02242	YauW	b	Y
T-TX-2	FA016	S02243	YauW	c	Y
T-TX-2	FA016	S02244	YauW	d	Y
T-TX-2	FA016	S02245	SJW	d	Y
T-TX-2	FA016	S02246	SJW	b	Y
T-TX-2	FA016	S02247	SJW	d	Y
T-TX-2	FA016	S02251	SJW	b	Y
T-TX-2	FA016	S02255	YauW	f	Y
T-TX-2	FA016	S02257	YauW	o	Y
T-TX-2	FA016	S02258	YauW	f	Y
T-TX-2	FA016	S02260	YauW	f	Y
T-TX-2	FA016	S02269	MB	o	Y
T-TX-2	FA016	S02271	Palmas	f	Y
T-TX-2	FA016	S02273	MB	e	Y
T-TX-2	FA016	S02275	MB	e	Y
T-TX-2	FA016	S02276	MB	q	Y
T-TX-2	FA016	S02277	MB	q	Y
T-TX-2	FA016	S02278	MB	q	Y
T-TX-2	FA016	S02280	MB	q	Y
T-TX-2	FA016	S02281	Palmas	e	Y
T-TX-2	FA016	S02282	MB	e	Y
T-TX-2	FA016	S02283	MB	e	Y
T-TX-2	FA016	S02284	MB	e	Y
T-TX-2	FA016	S02285	MB	e	Y
T-TX-2	FA016	S02288	MB	e	Y
T-TX-2	FA016	S02290	MB	q	Y
T-TX-2	FA016	S02291	MB	q	Y
T-TX-2	FA016	S02293	MB	q	Y
T-TX-2	FA016	S02294	Palmas	g	Y
T-TX-2	FA016	S02295	MB	e	Y
T-TX-2	FA016	S02300	MB	q	Y
T-TX-2	FA016	S02302	PotR/B	q	Y
T-TX-2	FA016	S02303	PotR/B	q	Y
T-TX-2	FA016	S02305	PotR/B	e	Y
T-TX-2	FA016	S02308	YRW	o	Y

T-TX-2	FA016	S02309	PotR/B	q	Y
T-TX-2	FA016	S02315	MB	l	Y

APPENDIX B

Motif Data by Rim Sherd

Appendix B provides motif information for each decorated rim sherd in the sample. In Table B.1, Column 1 lists the household unit designation, Column 2 lists the unique sherd number that each rim sherd received during analysis (which can be linked to the rim sherd numbers in Table A.1), Column 3 provides the motif number (see Figures 5.1 through 5.27 for illustrations), Column 4 provides the motif category (see Figure 5.28 and Table 5.2 for descriptions), Column 5 lists the zone of the vessel where the motif is located, and Column 6 indicates the decorative technique used to execute the motif.

When more than one motif is depicted on a single rim sherd, that sherd receives two or more lines in the table, marked by adding a lowercase letter to the end of the sherd number. For example, rim sherd S00489 depicts two motifs. Motif 452 appears on the exterior of the vessel, and Motif 4 appears on the exterior rim of the vessel. Thus, rim sherd S00489 receives two separate lines in Table B.1, the first listed as S00489a (for Motif 452) and the second listed as S00489b (for Motif 4).

The following abbreviations were used in Table B.1:

Household Unit:

A-ET-1 = Amomoloc, Early Tlatempa, Household Unit 1

A-ET-2 = Amomoloc, Early Tlatempa, Household Unit 2

A-ET-3 = Amomoloc, Early Tlatempa, Household Unit 3

A-LT-1 = Amomoloc, Late Tlatempa, Household Unit 1

A-LT-2 = Amomoloc, Late Tlatempa, Household Unit 2

A-LT-3 = Amomoloc, Late Tlatempa, Household Unit 3

A-LT-4 = Amomoloc, Late Tlatempa, Household Unit 4

A-LT-5 = Amomoloc, Late Tlatempa, Household Unit 5

A-TZ-1 = Amomoloc, Tzompantepec, Household Unit 1

T-ET-1 = Tetel, Early Tlatempa, Household Unit 1

T-LT-1 = Tetel, Late Tlatempa, Household Unit 1

T-LT-2 = Tetel, Late Tlatempa, Household Unit 2

T-TX-1 = Tetel, Texoloc, Household Unit 1

T-TX-2 = Tetel, Texoloc, Household Unit 2

Motif category (see Figure 5.28):

A = Upcurving

B = Downcurving

C = Double upcurving

D = Double downcurving

E = One curving up, one curving down

F = Zig-zag or stepped

G = Scalloping

H = Filled half circle

I = Vertical line

J = Fluting (to resemble a gourd)

K = Star, cross, or quatrefoil

L = Block

M = Block with two or more parallel lines extending from it in the
same direction

N = Block with one line extending from it (no vertical stacking of
blocks)

O = Circle

P = Non-continuous parallel, horizontal lines

Q = Arrow

R = Diagonal line

S = Scroll

ST = Stamping

star? = Possible star design on interior base of vessel but too
fragmentary to identify with certainty

T = “V”, inverted “V” and/or triangle

U = Cross-hatching

X = Continuous parallel, horizontal lines only

Where?:

ext = Exterior of vessel

extrim = Exterior rim of vessel

int = Interior of vessel

intrim = Interior rim of vessel

lip = Lip of vessel

How executed?:

EX = Excising, i.e., “decorating a ware by carving out a portion of the surface,” a pre-firing decorative technique (Flannery and Marcus 1994:17)

G = Grooving, i.e., “wide incising, here used to indicate a form of incising slightly deeper and wider” than the typically fine scratching associated with incising (Cyphers Guillén 1987:250)

I = Incising, i.e., “freehand decoration by pressing or cutting lines” into the leather-hard vessel surface, a pre-firing decorative technique (Cyphers Guillén 1987:250, following Shepard 1963:195-203)

P = Painting, i.e., the use of contrasting paint or slip to achieve a design motif

Table B.1 Motif data by rim sherd for Amomoloc and Tetel. See Appendix B for explanation of abbreviations.

Household Unit	Sherd #	Motif #	Motif category	Where?	How executed?
A-ET-1	S00073	M001	X	lip	G
A-ET-1	S00488	M396	T	ext	I
A-ET-1	S00489a	M452	J	ext	EX
A-ET-1	S00489b	M004	X	extrim	I
A-ET-1	S00909	M065	B	ext	EX
A-ET-1	S00909	M452	J	ext	EX
A-ET-1	S00910	M448	J	ext	EX
A-ET-1	S00912	M004	X	intrim	G
A-ET-1	S01041a	M404	T	ext	G
A-ET-1	S01041b	M004	X	intrim	I
A-ET-1	S01043	M237	H	intrim	EX,P
A-ET-1	S01044	M457	A, G	intrim	G
A-ET-1	S01045	M230	H	intrim	P

A-ET-1	S01047	M223	H	intrim	P
A-ET-1	S01049	M041	A	intrim	I
A-ET-1	S01050	M273	L	intrim	EX
A-ET-1	S01056	M383	S	extrim	I
A-ET-1	S01057	M135	F	extrim	G
A-ET-1	S01058	M571	G, N	intrim	EX
A-ET-1	S01059	M041	A	intrim	G
A-ET-1	S01060	M425	X	intrim	I,P
A-ET-1	S01064	M060	B	intrim	I
A-ET-1	S01065	M004	X	intrim	G
A-ET-1	S01067	M096	D	intrim	EX
A-ET-1	S01068	M004	X	extrim	I
A-ET-1	S01069	M177	G	extrim	I
A-ET-1	S01070	M401	T	extrim	I
A-ET-1	S01071	M004	X	extrim	I
A-ET-1	S01142	M004	X	intrim	G
A-ET-1	S01148	M004	X	intrim	G
A-ET-1	S01159	M316	N	intrim	EX
A-ET-1	S01160	M004	X	intrim	G
A-ET-1	S01162	M004	X	intrim	G
A-ET-1	S01165	M005	X	intrim	I
A-ET-1	S01179	M004	X	int	G
A-ET-1	S01182	M004	X	ext	G
A-ET-1	S01185	M004	X	ext	EX
A-ET-1	S01186	M004	X	ext	G
A-ET-1	S01187	M004	X	ext	EX
A-ET-1	S01215	M004	X	ext	G
A-ET-1	S01239	M351	Q	ext	G
A-ET-1	S01270	M137	F	intrim	I
A-ET-1	S01271	M005	X	intrim	G
A-ET-1	S01276	M217	H	intrim	P
A-ET-1	S01277	M246	H, K	intrim	I,P
A-ET-1	S01279	M427	X	intrim	G,P
A-ET-1	S01282a	M421	X	intrim	P
A-ET-1	S01282b	M441	I	ext	P
A-ET-1	S01283	M349	P	intrim	I
A-ET-1	S01285	M071	B	intrim	I
A-ET-1	S01286	M217	H	intrim	P
A-ET-1	S01288	M008	X	intrim	I
A-ET-1	S01292	M136	F	intrim	I
A-ET-1	S01293	M227	H	intrim	P
A-ET-1	S01295	M458	A, G	intrim	G
A-ET-1	S01296	M008	X	intrim	I
A-ET-1	S01303	M008	X	intrim	I
A-ET-1	S01309	M004	X	intrim	G
A-ET-1	S01310	M008	X	intrim	G
A-ET-1	S01311	M004	X	intrim	G
A-ET-1	S01312	M004	X	intrim	I
A-ET-1	S01313	M004	X	intrim	I

A-ET-1	S01314	M005	X	intrim	G
A-ET-1	S01315	M008	X	intrim	I
A-ET-1	S01316	M041	A	intrim	I
A-ET-1	S01318	M004	X	intrim	I
A-ET-1	S01323	M097	D	intrim	I
A-ET-1	S01324	M061	B	intrim	I
A-ET-1	S01325	M197	G	intrim	G
A-ET-1	S01328	M041	A	intrim	I
A-ET-1	S01329	M041	A	intrim	I
A-ET-1	S01330	M115	E	intrim	G
A-ET-1	S01331	M101	D	intrim	I
A-ET-1	S01334	M104	D	intrim	I
A-ET-1	S01337	M110	E	intrim	G
A-ET-1	S01339	M008	X	intrim	I
A-ET-1	S01340	M004	X	intrim	I
A-ET-1	S01341	M004	X	intrim	I
A-ET-1	S01344a	M041	A	intrim	I
A-ET-1	S01344b	M440	I	ext	P
A-ET-1	S01347	M201	G	ext	G,P
A-ET-1	S01354	M013	X	intrim	EX
A-ET-1	S01381	M028	A	intrim	EX
A-ET-1	S01382	M004	X	intrim	EX
A-ET-1	S01391	M400	T	extrim	I
A-ET-1	S01392	M044	A	extrim	I
A-ET-1	S01393	M498	B, F, Q	extrim	I
A-ET-1	S01394	M004	X	extrim	I
A-ET-1	S01402	M041	A	extrim	I
A-ET-1	S01403	M045	A	extrim	I
A-ET-1	S01415	M004	X	lip	EX
A-ET-1	S01416	M004	X	extrim	G
A-ET-1	S01419	M004	X	lip	I
A-ET-1	S01420	M004	X	extrim	I
A-ET-1	S01421	M004	X	extrim	G
A-ET-1	S01422	M004	X	extrim	G
A-ET-1	S02620	M004	X	intrim	G
A-ET-1	S02621	M005	X	intrim	G
A-ET-1	S02622	M008	X	intrim	I
A-ET-1	S02623	M004	X	intrim	EX
A-ET-1	S02635	M078	B	ext	P
A-ET-1	S02643	M004	X	extrim	G
A-ET-1	S02644	M001	X	extrim	G
A-ET-1	S02645	M004	X	ext	I
A-ET-1	S03502	M539	F, G	ext	EX,I,P
A-ET-1	S03503	M418	G, K, M, Q	ext	EX,I,P
A-ET-1	S03504	M583	M, N	ext	EX
A-ET-1	S03507	M004	X	lip	I
A-ET-1	S03508	M345	P	intrim	EX
A-ET-1	S03509	M004	X	intrim	G
A-ET-1	S03511	M271	L	intrim	EX

A-ET-1	S03515	M205	H	intrim	EX
A-ET-1	S03516	M210	H	intrim	EX
A-ET-1	S03517	M303	M	intrim	EX
A-ET-1	S03518	M550	G, H	intrim	EX
A-ET-1	S03519a	M412	U	int	EX
A-ET-1	S03519b	M560	G, H, O	intrim	EX
A-ET-1	S03520	M005	X	intrim	EX
A-ET-1	S03525	M004	X	intrim	EX
A-ET-1	S03526	M269	L	intrim	EX
A-ET-1	S03527	M007	X	intrim	EX
A-ET-1	S03529	M312	N	intrim	EX
A-ET-1	S03530	M316	N	intrim	EX,I
A-ET-1	S03531	M289	M	intrim	EX
A-ET-1	S03532	M291	M	intrim	EX
A-ET-1	S03533	M100	D	intrim	G
A-ET-1	S03534	M092	C	intrim	I,P
A-ET-1	S03535	M465	A, G	intrim	I
A-ET-1	S03536	M008	X	intrim	I
A-ET-1	S03537	M008	X	intrim	I
A-ET-1	S03538	M008	X	intrim	I
A-ET-1	S03539	M004	X	intrim	I
A-ET-1	S03541	M158	G	intrim	G
A-ET-1	S03543	M161	G	intrim	EX,P
A-ET-1	S03546	M524	F, H	intrim	EX,P
A-ET-1	S03547	M501	B, L	intrim	EX
A-ET-1	S03549	M500	B, H	intrim	I,P
A-ET-1	S03550	M528	F, H, L	intrim	EX,G,P
A-ET-1	S03550	M528	F, H, L	intrim	EX,G,P
A-ET-1	S03550	M529	H	intrim	EX,G,P
A-ET-1	S03551	M526	F, N	intrim	EX,P
A-ET-1	S03552	M276	L	intrim	EX,P
A-ET-1	S03553	M053	A	intrim	EX,I,P
A-ET-1	S03554	M499	B, H	intrim	I,P
A-ET-1	S03555	M325	N	intrim	EX,P
A-ET-1	S03556	M421	X	intrim	P
A-ET-1	S03557	M281	M	intrim	EX,P
A-ET-1	S03558	M054	A	intrim	EX,P
A-ET-1	S03559	M580	H, L	intrim	EX,P
A-ET-1	S03560	M582	H, M, Q	intrim	EX
A-ET-1	S03561	M531	F, H	intrim	EX,P
A-ET-1	S03561	M532	F, H	intrim	EX,P
A-ET-1	S03562	M531	F, H	intrim	EX,P
A-ET-1	S03563	M533	F, H	intrim	I,P
A-ET-1	S03564	M577	G, U	ext	EX
A-ET-1	S03565	M375	R	int	P
A-ET-1	S03576	M004	X	ext	EX
A-ET-1	S03579	M036	A	extrim	I
A-ET-1	S03583	M247	K	ext	EX
A-ET-1	S03594	M295	M	ext	EX

A-ET-1	S03601	M004	X	lip	I
A-ET-1	S03602	M008	X	ext	EX
A-ET-1	S03603	M004	X	ext	G
A-ET-1	S03612	M344	P	ext	G
A-ET-1	S03613	M001	X	ext	EX
A-ET-1	S03614	M004	X	ext	EX
A-ET-1	S03620	M520	D, N	extrim	EX
A-ET-1	S03621	M004	X	extrim	EX
A-ET-1	S03622	M004	X	extrim	G
A-ET-1	S03623	M004	X	extrim	G
A-ET-1	S03624	M028	A	extrim	G
A-ET-1	S03625	M004	X	extrim	EX
A-ET-1	S03628	M370	R	extrim	G
A-ET-1	S03661	M437	I	ext	EX
A-ET-1	S05517	M460	A, S	ext	EX
A-ET-1	S05518	M001	X	ext	EX
A-ET-1	S05519	M507	C, I	lip	I
A-ET-1	S05578	M004	X	ext	G
A-ET-1	S06011	M004	X	intrim	G
A-ET-1	S06013	M004	X	intrim	G
A-ET-1	S06014	M004	X	intrim	G
A-ET-1	S06015	M004	X	intrim	EX
A-ET-1	S06016	M008	X	intrim	I
A-ET-1	S06017	M004	X	intrim	I
A-ET-1	S06018	M004	X	intrim	G
A-ET-1	S06019	M116	E	intrim	I
A-ET-1	S06020	M009	X	intrim	I
A-ET-1	S06021	M097	D	intrim	I
A-ET-1	S06022	M004	X	intrim	I
A-ET-1	S06023	M004	X	intrim	G
A-ET-1	S06024a	M008	X	intrim	I
A-ET-1	S06024b	M152	F	ext	P
A-ET-1	S06026a	M008	X	intrim	I
A-ET-1	S06026b	M341	N	ext	P
A-ET-1	S06027a	M075	B	intrim	I
A-ET-1	S06027b	M151	F	ext	P
A-ET-1	S06028	M001	X	intrim	I
A-ET-1	S06031	M076	B	intrim	I
A-ET-1	S06034	M217	H	intrim	P
A-ET-1	S06035	M282	M	intrim	EX,P
A-ET-1	S06037	M321	N	intrim	EX,P
A-ET-1	S06039	M217	H	intrim	P
A-ET-1	S06040	M010	X	intrim	I
A-ET-1	S06041	M575	G, H	intrim	G,P
A-ET-1	S06042	M199	G	intrim	G,P
A-ET-1	S06045	M388	S	intrim	P
A-ET-1	S06046	M579	H	intrim	P
A-ET-1	S06047	M226	H	intrim	I,P
A-ET-1	S06048	M234	H	intrim	P

A-ET-1	S06049	M324	N	intrim	EX
A-ET-1	S06051	M288	M	intrim	EX
A-ET-1	S06052	M287	M	intrim	EX
A-ET-1	S06053	M010	X	intrim	EX
A-ET-1	S06054	M208	H	intrim	EX
A-ET-1	S06056	M008	X	intrim	G
A-ET-1	S06058	M224	H	intrim	P
A-ET-1	S06060	M004	X	intrim	G
A-ET-1	S06062	M041	A	intrim	I
A-ET-1	S06063	M068	B	intrim	I
A-ET-1	S06064	M139	F	intrim	G
A-ET-1	S06069a	M211	H	extrim	EX
A-ET-1	S06069b	M412	U	int	EX
A-ET-1	S06069c	M184	G	intrim	I
A-ET-1	S06073	M476	A, S	extrim	I
A-ET-1	S06073	M477	A, S	extrim	I
A-ET-1	S06074	M478	A, T	extrim	G
A-ET-1	S06075	M004	X	extrim	I
A-ET-1	S06076	M004	X	extrim	I
A-ET-1	S06077	M004	X	extrim	I
A-ET-1	S06078	M130	F	extrim	I
A-ET-1	S06079	M131	F	extrim	I
A-ET-1	S06080	M479	A, T	extrim	I
A-ET-1	S06081	M014	X	extrim	I
A-ET-1	S06082	M004	X	extrim	I
A-ET-1	S06083	M385	S	extrim	I
A-ET-1	S06084	M384	S	extrim	I
A-ET-1	S06087	M095	D	ext	EX
A-ET-1	S06092	M001	X	int	I,P
A-ET-1	S06093	M004	X	lip	I
A-ET-1	S06096	M004	X	lip	I
A-ET-1	S06100	M011	X	extrim	EX,I
A-ET-1	S06101	M004	X	extrim	EX
A-ET-1	S06102	M004	X	extrim	EX
A-ET-1	S06104	M004	X	extrim	I
A-ET-1	S06105	M004	X	extrim	G
A-ET-1	S06106	M004	X	extrim	G
A-ET-1	S06110	M097	D	extrim	EX
A-ET-1	S06111	M005	X	extrim	G
A-ET-1	S06112	M004	X	intrim	EX
A-ET-1	S06119	M004	X	ext	EX
A-ET-1	S06120	M004	X	ext	G
A-ET-1	S06121	M004	X	ext	EX
A-ET-1	S06137	M307	M	ext	EX
A-ET-1	S06138	M295	M	ext	EX
A-ET-1	S06139	M327	N	ext	EX
A-ET-1	S06140	M004	X	ext	EX
A-ET-1	S06141	M004	X	ext	G
A-ET-1	S06142	M001	X	ext	G

A-ET-1	S06143	M095	D	ext	G
A-ET-1	S06145	M004	X	int	G
A-ET-1	S06151	M004	X	intrim	I
A-ET-1	S06152	M004	X	intrim	I
A-ET-1	S06157	M001	X	intrim	G
A-ET-1	S06170	M004	X	lip	G
A-ET-1	S06171	M004	X	lip	G
A-ET-1	S06172	M004	X	extrim	I
A-ET-1	S06545	M282	M	intrim	EX,P
A-ET-1	S06550	M326	N	intrim	EX
A-ET-1	S06555	M008	X	lip	G
A-ET-1	S06560	M569	G, M	extrim	EX,I,P
A-ET-1	S07799	M191	G	intrim	G
A-ET-1	S07800	M204	H	intrim	EX
A-ET-1	S07801	M018	A	intrim	G
A-ET-1	S07803	M541	F, O	extrim	G,P
A-ET-1	S07804	M202	G	int	P
A-ET-1	S07805	M508	C, S	extrim	I
A-ET-1	S07806	M428	X	extrim	I,P
A-ET-1	S07811	M096	D	extrim	EX
A-ET-1	S08714	M005	X	intrim	EX
A-ET-1	S08715	M208	H	intrim	EX
A-ET-1	S08717	M004	X	intrim	I
A-ET-1	S09019	M448	J	ext	EX
A-ET-1	S09278	M004	X	intrim	I
A-ET-1	S09542	M008	X	extrim	G
A-ET-2	S00752	M004	X	ext	G
A-ET-2	S00753	M008	X	int	G
A-ET-2	S00759	M454	J	ext	G
A-ET-2	S00762	M065	B	ext	G
A-ET-2	S00763	M058	B	ext	G
A-ET-2	S03361	M576	G, H	intrim	P
A-ET-2	S03362	M420	X	intrim	P
A-ET-2	S03363	M420	X	intrim	P
A-ET-2	S03365	M114	E	intrim	I
A-ET-2	S03366	M277	L	intrim	EX,G,P
A-ET-2	S03367	M029	A	intrim	I
A-ET-2	S03368	M004	X	intrim	I
A-ET-2	S03369	M004	X	intrim	I
A-ET-2	S03370	M004	X	intrim	G
A-ET-2	S03371	M004	X	intrim	I
A-ET-2	S03372	M004	X	intrim	I
A-ET-2	S03373	M008	X	intrim	I
A-ET-2	S03374	M118	E	intrim	I
A-ET-2	S03375	M041	A	intrim	I
A-ET-2	S03376	M077	B	intrim	I
A-ET-2	S03377	M117	E	intrim	I
A-ET-2	S03378	M013	X	intrim	I
A-ET-2	S03379	M200	G	intrim	I,P

A-ET-2	S03380a	M041	A	intrim	I
A-ET-2	S03380b	M463	E	intrim	I
A-ET-2	S03380c	M153	F	ext	P
A-ET-2	S03381	M008	X	intrim	I
A-ET-2	S03382	M008	X	intrim	G
A-ET-2	S03383	M004	X	intrim	G
A-ET-2	S03384	M008	X	intrim	G
A-ET-2	S03385	M170	G	intrim	I
A-ET-2	S03386	M072	B	intrim	I
A-ET-2	S03387	M041	A	intrim	I
A-ET-2	S03388	M004	X	intrim	I
A-ET-2	S03389	M004	X	intrim	I
A-ET-2	S03393	M107	D	ext	EX
A-ET-2	S03396	M231	H	ext	P
A-ET-2	S03399	M475	A	extrim	I
A-ET-2	S03400	M004	X	ext	I
A-ET-2	S03401	M138	F	extrim	I
A-ET-2	S03412	M004	X	ext	EX
A-ET-2	S03413	M004	X	ext	EX
A-ET-2	S03414	M004	X	int	G
A-ET-2	S03415	M004	X	int	I
A-ET-2	S03416	M312	N	ext	EX
A-ET-2	S03417	M120	E	ext	EX
A-ET-2	S03419	M004	X	ext	G
A-ET-2	S03421	M461	A, F	extrim	G
A-ET-2	S03426	M334	N	intrim	EX
A-ET-2	S03427	M208	H	intrim	EX
A-ET-2	S03428	M008	X	intrim	EX
A-ET-2	S03429	M004	X	intrim	I
A-ET-2	S03430	M331	N	intrim	EX
A-ET-2	S03430	M332	N	intrim	EX
A-ET-2	S03431	M004	X	intrim	EX
A-ET-2	S03432	M004	X	intrim	EX
A-ET-2	S03436	M001	X	intrim	EX
A-ET-2	S03437	M033	A	intrim	I
A-ET-2	S03440	M080	C	extrim	G
A-ET-2	S03441	M004	X	ext	I
A-ET-2	S03444	M035	A	intrim	G
A-ET-2	S03455	M438	I	int	P
A-ET-2	S03729	M077	B	intrim	G
A-ET-2	S03731	M004	X	intrim	I
A-ET-2	S03733	M069	B	extrim	I
A-ET-2	S03734	M435	I	extrim	I
A-ET-2	S03735	M215	H	ext	P
A-ET-2	S03826	M037	A	intrim	I
A-ET-2	S03850	M001	X	ext	I
A-ET-2	S03853	M004	X	ext	I
A-ET-2	S03892a	M601	star?	int	EX
A-ET-2	S03892b	M004	X	intrim	G

A-ET-2	S03908	M004	X	ext	EX
A-ET-2	S03909	M449	J	ext	EX
A-ET-2	S03925	M355	Q	extrim	G
A-ET-2	S06243	M004	X	int	G
A-ET-2	S06244	M004	X	int	I
A-ET-2	S06247	M504	B, N	lip	EX
A-ET-2	S06286	M015	X	int	G
A-ET-2	S06293	M004	X	extrim	EX
A-ET-2	S06310	M004	X	extrim	G
A-ET-2	S06315	M029	A	extrim	G
A-ET-2	S06376	M216	H	int	P
A-ET-2	S09051	M409	U	ext	G
A-ET-2	S09161	M001	X	intrim	G
A-ET-2	S11400	M257	K	intrim	EX
A-ET-3	S03994	M366	R	extrim	I
A-ET-3	S03995	M041	A	intrim	I
A-ET-3	S03996	M042	A	intrim	I
A-ET-3	S03997	M008	X	intrim	I
A-ET-3	S03998	M068	B	intrim	G
A-ET-3	S03999	M002	X	intrim	G
A-ET-3	S06000	M008	X	intrim	I
A-ET-3	S06001	M196	G	intrim	EX
A-LT-1	S00633	M448	J	ext	EX
A-LT-1	S02896	M004	X	intrim	I
A-LT-1	S02897	M170	G	intrim	I
A-LT-1	S02898	M073	B	intrim	G
A-LT-1	S02899	M544	F, G	intrim	EX,I,P
A-LT-1	S02900	M510	C, T	intrim	EX,P
A-LT-1	S02901	M005	X	intrim	EX
A-LT-1	S02902	M004	X	intrim	EX
A-LT-1	S02903	M173	G	intrim	EX
A-LT-1	S02904	M162	G	intrim	EX
A-LT-1	S02905	M065	B	intrim	I
A-LT-1	S02907	M004	X	intrim	EX
A-LT-1	S02908	M168	G	ext	EX
A-LT-1	S02909	M049	A	ext	EX,I
A-LT-1	S02910	M018	A	ext	EX,G
A-LT-1	S02911	M156	G	intrim	EX
A-LT-1	S02912	M485	A, F, M	intrim	EX
A-LT-1	S02914	M004	X	intrim	G
A-LT-1	S02915	M250	K	intrim	EX
A-LT-1	S02916	M171	G	intrim	G
A-LT-1	S02927	M048	A	ext	EX
A-LT-1	S02941	M260	K, M, N, O, T	ext	EX
A-LT-1	S02946	M057	B	ext	I
A-LT-1	S02953	M004	X	ext	G
A-LT-1	S02954	M001	X	ext	EX
A-LT-1	S02961	M205	H	intrim	EX
A-LT-1	S02963	M004	X	ext	EX

A-LT-1	S02964	M004	X	ext	G
A-LT-1	S03324	M004	X	intrim	I
A-LT-1	S03325	M061	B	intrim	I
A-LT-1	S03327	M279	L	intrim	G,P
A-LT-1	S03328	M223	H	intrim	P
A-LT-1	S03330	M004	X	intrim	G
A-LT-1	S03331	M311	N	intrim	EX
A-LT-1	S03332	M004	X	intrim	EX
A-LT-1	S03333	M004	X	intrim	G
A-LT-1	S03334	M143	F	intrim	EX
A-LT-1	S03339	M001	X	ext	G
A-LT-1	S03340	M004	X	ext	EX
A-LT-1	S03341	M004	X	ext	EX
A-LT-1	S03342	M001	X	ext	EX
A-LT-1	S03343	M466	A	ext	EX
A-LT-1	S03344	M488	A, O	ext	EX
A-LT-1	S03347	M091	C	extrim	G
A-LT-1	S03348	M004	X	ext	I
A-LT-1	S03350	M001	X	ext	I
A-LT-1	S03505	M213	H	ext	EX
A-LT-1	S03512	M258	K, O	intrim	EX
A-LT-1	S03513	M270	L	intrim	EX,I
A-LT-1	S03521	M010	X	intrim	EX
A-LT-1	S03522	M005	X	intrim	EX
A-LT-1	S03933	M004	X	lip	G
A-LT-1	S07790	M217	H	intrim	P
A-LT-1	S07791	M168	G	ext	EX
A-LT-1	S07792	M492	M	ext	EX
A-LT-1	S07795	M102	D	extrim	G
A-LT-1	S07796	M178	G	ext	EX
A-LT-1	S07797	M004	X	intrim	G
A-LT-2	S00709	M167	G	ext	G
A-LT-2	S00710	M181	G	ext	I,EX
A-LT-2	S03000a	M595	star?	int	G
A-LT-2	S03000b	M235	H	intrim	P
A-LT-2	S03001	M527	F, L	intrim	EX,P
A-LT-2	S03001	M527	F, L	intrim	EX,P
A-LT-2	S03002	M002	X	intrim	G
A-LT-2	S03003	M221	H	intrim	P
A-LT-2	S03004	M183	G	intrim	I
A-LT-2	S03005	M429	X	intrim	G,P
A-LT-2	S03006	M278	L	intrim	EX,I,P
A-LT-2	S03007	M376	R	intrim	P
A-LT-2	S03008	M534	F, L	intrim	EX,G,P
A-LT-2	S03010	M148	F	intrim	P
A-LT-2	S03011a	M594	star?	int	G
A-LT-2	S03011b	M342	N	intrim	P
A-LT-2	S03012	M530	F, H	intrim	P
A-LT-2	S03013	M530	F, H	intrim	P

A-LT-2	S03014	M093	C	intrim	P
A-LT-2	S03015	M004	X	intrim	G
A-LT-2	S03017	M058	B	intrim	G
A-LT-2	S03018	M004	X	intrim	I
A-LT-2	S03020	M008	X	intrim	G
A-LT-2	S03021	M010	X	intrim	G
A-LT-2	S03022	M222	H	intrim	P
A-LT-2	S03035	M004	X	ext	I
A-LT-2	S03036	M004	X	ext	EX,P
A-LT-2	S03037	M125	F	extrim	I
A-LT-2	S03039	M004	X	ext	I
A-LT-2	S03040	M132	F	extrim	I
A-LT-2	S03047	M004	X	intrim	EX
A-LT-2	S03048	M565	G, M	intrim	EX
A-LT-2	S03049	M008	X	intrim	G
A-LT-2	S03050	M314	N	intrim	EX
A-LT-2	S03051	M251	K, M	intrim	EX
A-LT-2	S03052	M004	X	intrim	EX
A-LT-2	S03054a	M001	X	int	G
A-LT-2	S03054b	M001	X	intrim	G
A-LT-2	S03055	M004	X	intrim	G
A-LT-2	S03056	M004	X	intrim	EX
A-LT-2	S03057	M001	X	intrim	G
A-LT-2	S03072	M004	X	ext	G
A-LT-2	S03073	M128	F	intrim	G
A-LT-2	S03074	M004	X	intrim	G
A-LT-2	S03076	M521	E, L	intrim	EX
A-LT-2	S03077	M506	B, F, L	intrim	G
A-LT-2	S03077	M505	B, L	intrim	G
A-LT-2	S03078	M487	A, B	intrim	EX
A-LT-2	S03079	M285	M	intrim	EX,G
A-LT-2	S03080	M028	A	intrim	EX
A-LT-2	S03081	M256	K, M, O	intrim	EX
A-LT-2	S03082	M008	X	intrim	EX
A-LT-2	S03083	M268	L	intrim	EX
A-LT-2	S03084	M301	M	intrim	EX
A-LT-2	S03085	M004	X	intrim	G
A-LT-2	S03086	M008	X	intrim	G
A-LT-2	S03087	M346	P	intrim	EX
A-LT-2	S03089	M416	K, M	intrim	EX
A-LT-2	S03091	M004	X	ext	EX
A-LT-2	S03095	M204	H	ext	EX
A-LT-2	S03097	M001	X	ext	EX
A-LT-2	S03102	M001	X	ext	EX
A-LT-2	S03104	M001	X	ext	G
A-LT-2	S03107	M004	X	ext	EX
A-LT-2	S03109	M001	X	ext	EX
A-LT-2	S03110	M337	N	ext	EX
A-LT-2	S03111	M444	O	ext	EX

A-LT-2	S03112	M010	X	ext	EX
A-LT-2	S03113	M546	G, H, O	ext	EX
A-LT-2	S03114	M356	Q	ext	G
A-LT-2	S03115	M004	X	ext	EX
A-LT-2	S03116	M358	Q	ext	EX
A-LT-2	S03117	M397	T	ext	EX
A-LT-2	S03118	M001	X	ext	EX
A-LT-2	S03119	M004	X	ext	G
A-LT-2	S03120	M142	F	ext	EX
A-LT-2	S03121	M352	Q	ext	G
A-LT-2	S03122	M179	G	ext	EX
A-LT-2	S03123	M168	G	ext	G
A-LT-2	S03124	M486	A, B	ext	EX
A-LT-2	S03125	M299	M	ext	EX
A-LT-2	S03126	M361	R	ext	EX
A-LT-2	S03128	M536	F, L	lip	EX
A-LT-2	S03129	M088	C	intrim	G
A-LT-2	S03130	M004	X	ext	EX
A-LT-2	S03131	M308	M	ext	EX
A-LT-2	S03132	M540	F, M, Q	ext	EX
A-LT-2	S03133a	M001	X	ext	EX
A-LT-2	S03133b	M204	H	int	EX
A-LT-2	S03134	M004	X	ext	EX
A-LT-2	S03135	M309	M	ext	EX
A-LT-2	S03137	M559	G, H	ext	EX
A-LT-2	S03138a	M417	K, M	intrim	EX
A-LT-2	S03138b	M598	star?	int	EX
A-LT-2	S03139	M205	H	extrim	EX
A-LT-2	S03171	M004	X	ext	G
A-LT-2	S03172	M204	H	lip	EX
A-LT-2	S03173	M004	X	lip	EX
A-LT-2	S03174	M317	N	lip	EX
A-LT-2	S03175	M270	L	lip	EX
A-LT-2	S03176	M017	A	lip	EX
A-LT-3	S00731	M052	A	extrim	EX
A-LT-3	S03236	M361	R	ext	EX
A-LT-3	S03238	M144	F	ext	EX
A-LT-3	S03239	M004	X	ext	EX
A-LT-3	S03240	M313	N	ext	EX
A-LT-3	S03241	M558	G, H	ext	EX
A-LT-3	S03242	M431	I	ext	EX
A-LT-3	S03256a	M004	X	int	EX
A-LT-3	S03256b	M368	R	extrim	EX
A-LT-3	S03257	M402	T	ext	EX
A-LT-3	S03261	M545	F, O	ext	EX
A-LT-3	S03269	M004	X	ext	EX
A-LT-3	S03274	M175	G	ext	G
A-LT-3	S03275	M459	A, F	ext	G
A-LT-3	S03282	M262	L	int	EX

A-LT-3	S03288	M018	A	ext	G
A-LT-3	S03289	M004	X	ext	G
A-LT-3	S03292	M028	A	ext	EX
A-LT-3	S03293	M004	X	lip	EX
A-LT-3	S03294	M301	M	intrim	EX
A-LT-3	S03294	M586	N	intrim	EX
A-LT-3	S03295	M302	M	intrim	EX
A-LT-3	S03296	M570	G, L, N	intrim	EX
A-LT-3	S03296	M268	L	intrim	EX
A-LT-3	S03297	M267	L	intrim	EX
A-LT-3	S03299	M004	X	intrim	EX
A-LT-3	S03300	M567	G, M	intrim	EX
A-LT-3	S03300	M568	G, M	intrim	EX
A-LT-3	S03301	M121	E	intrim	EX
A-LT-3	S03302	M511	C, M	intrim	EX
A-LT-3	S03311	M423	X	intrim	EX,P
A-LT-3	S03312	M015	X	intrim	I
A-LT-3	S03313	M004	X	intrim	G
A-LT-3	S03314	M217	H	intrim	P
A-LT-3	S03679	M426	X	extrim	EX,P
A-LT-3	S03680	M038	A	extrim	I
A-LT-3	S03681	M063	B	extrim	I
A-LT-3	S03682	M433	I	extrim	I
A-LT-3	S03683	M525	F, L	extrim	EX,G,P
A-LT-3	S03684	M509	C, S	extrim	I
A-LT-3	S03685	M091	C	extrim	I
A-LT-3	S03686	M383	S	extrim	I
A-LT-3	S03687	M004	X	extrim	I
A-LT-3	S03688	M330	N	intrim	EX,I,P
A-LT-3	S03689	M217	H	intrim	P
A-LT-3	S03690	M502	B, L	intrim	EX,I,P
A-LT-3	S03692	M238	H	intrim	EX,P
A-LT-3	S03693	M423	X	intrim	EX,P
A-LT-3	S03694	M209	H	intrim	EX,P
A-LT-3	S03697	M424	X	intrim	EX,P
A-LT-3	S03698	M170	G	intrim	I
A-LT-3	S03699	M004	X	intrim	I
A-LT-3	S03700	M275	L	intrim	I,P
A-LT-3	S03701	M218	H	intrim	P
A-LT-3	S03702	M421	X	intrim	P
A-LT-3	S03704	M421	X	int	P
A-LT-3	S03708	M375	R	int	P
A-LT-3	S03721	M430	X	ext	I,P
A-LT-3	S03724	M148	F	ext	P
A-LT-3	S03744	M001	X	intrim	I
A-LT-3	S03747	M060	B	intrim	I
A-LT-3	S03748	M236	H	intrim	P
A-LT-3	S03749	M170	G	intrim	I
A-LT-3	S03750	M493	A	intrim	P

A-LT-3	S03751	M340	N	intrim	P
A-LT-3	S03753	M149	F	intrim	P
A-LT-3	S03755	M004	X	intrim	I
A-LT-3	S03757	M225	H	intrim	P
A-LT-3	S03763	M217	H	intrim	P
A-LT-3	S03764	M217	H	intrim	P
A-LT-3	S03765	M421	X	intrim	P
A-LT-3	S03766	M339	N	intrim	P
A-LT-3	S03767	M420	X	intrim	P
A-LT-3	S03768	M343	N	intrim	P
A-LT-3	S03772	M001	X	intrim	I
A-LT-3	S03773	M001	X	intrim	I
A-LT-3	S03776	M022	A	intrim	I
A-LT-3	S03777	M219	H	intrim	P
A-LT-3	S03779	M220	H	intrim	P
A-LT-3	S03781	M215	H	intrim	P
A-LT-3	S03782	M547	G	extrim	EX
A-LT-3	S03785	M163	G	lip	EX
A-LT-3	S03787	M001	X	ext	EX
A-LT-3	S03788	M001	X	ext	EX
A-LT-3	S03789	M001	X	ext	EX
A-LT-3	S03790	M004	X	ext	EX
A-LT-3	S03791	M012	X	ext	EX
A-LT-3	S03792	M005	X	ext	EX
A-LT-3	S03793	M001	X	ext	EX
A-LT-3	S03794	M573	G	ext	EX
A-LT-3	S03795	M047	A	ext	EX
A-LT-3	S03796	M319	N	ext	EX
A-LT-3	S03797	M359	M, O, Q, R	ext	EX
A-LT-3	S03798	M008	X	lip	I
A-LT-3	S03799a	M413	U, L	int	EX
A-LT-3	S03799b	M588	M, N	intrim	EX
A-LT-3	S03800	M537	F, G, T	intrim	EX
A-LT-3	S03801	M284	M	intrim	EX
A-LT-3	S03802	M483	A, L	intrim	EX
A-LT-3	S03803	M484	A, N	intrim	EX
A-LT-3	S03804	M305	M	intrim	EX
A-LT-3	S03805	M303	M	intrim	EX
A-LT-3	S03806	M005	X	intrim	EX
A-LT-3	S03807	M268	L	intrim	EX
A-LT-3	S03809	M323	N	intrim	EX
A-LT-3	S03810	M203	H	intrim	EX
A-LT-3	S03812	M013	X	intrim	EX
A-LT-3	S03813	M293	M	intrim	EX
A-LT-3	S03814	M519	D, L	intrim	EX
A-LT-3	S03815	M523	F	intrim	EX
A-LT-3	S03816	M206	H	intrim	EX
A-LT-3	S03818	M310	N	intrim	EX
A-LT-3	S03819	M264	L	intrim	EX

A-LT-3	S03820	M552	G, H	intrim	EX
A-LT-3	S03821	M195	G	intrim	EX
A-LT-3	S03822	M004	X	intrim	G
A-LT-3	S03823	M013	X	intrim	EX
A-LT-3	S03824	M005	X	intrim	EX
A-LT-3	S03825	M303	M	intrim	EX
A-LT-3	S03827	M185	G	intrim	EX
A-LT-3	S03829	M415	K, O	intrim	G
A-LT-3	S03830	M027	A	intrim	EX
A-LT-3	S03831	M050	A	intrim	EX
A-LT-3	S03832	M566	G, M	intrim	EX
A-LT-3	S03833	M306	M	intrim	EX
A-LT-3	S03834	M267	L	intrim	EX
A-LT-3	S03836	M602	J	ext	EX
A-LT-3	S03841	M203	H	ext	EX
A-LT-3	S03852	M004	X	ext	G
A-LT-3	S03854	M292	M	ext	EX
A-LT-3	S03860	M090	C	extrim	EX
A-LT-3	S03861	M004	X	ext	G
A-LT-3	S03862	M164	G	ext	EX
A-LT-3	S03863	M556	G, H	ext	EX
A-LT-3	S03864	M004	X	ext	EX
A-LT-3	S03865	M004	X	ext	EX
A-LT-3	S03868	M004	X	ext	G
A-LT-3	S03869	M449	J	ext	EX
A-LT-3	S03871	M004	X	int	EX
A-LT-3	S03894	M100	D	intrim	G
A-LT-3	S03895	M004	X	intrim	G
A-LT-3	S03896	M004	X	intrim	G
A-LT-3	S03897	M004	X	intrim	I
A-LT-3	S03899	M111	E	intrim	G
A-LT-3	S03900	M029	A	intrim	I
A-LT-3	S03901	M253	K, M	intrim	EX
A-LT-3	S03902	M551	G, O	intrim	EX
A-LT-3	S03903	M013	X	intrim	EX
A-LT-3	S03904	M005	X	intrim	EX
A-LT-3	S03905	M005	X	intrim	EX
A-LT-3	S03906	M252	K, M	intrim	EX
A-LT-3	S03907	M290	M	intrim	EX
A-LT-3	S03910	M261	K, M	intrim	EX
A-LT-3	S03910	M605	K	int	EX
A-LT-3	S03911a	M535	F, L	lip	EX
A-LT-3	S03911b	M591	K	int	EX
A-LT-3	S03912	M419	F, K, M, T	ext	EX,P
A-LT-3	S03913	M259	K, M, O	ext	EX
A-LT-3	S03914	M298	M	ext	EX,I
A-LT-3	S03922	M001	X	intrim	EX
A-LT-3	S03926	M064	B	extrim	EX
A-LT-3	S06249	M004	X	lip	I

A-LT-3	S06250	M297	M	lip	EX
A-LT-3	S06251	M207	H	lip	EX,I
A-LT-3	S06252	M206	H	lip	EX
A-LT-3	S06253	M564	G, L	lip	EX
A-LT-3	S06254	M301	M	lip	EX
A-LT-3	S06255	M062	B	lip	EX
A-LT-3	S06256	M271	L	lip	EX
A-LT-3	S06258	M108	D	lip	EX
A-LT-3	S06259	M004	X	lip	EX
A-LT-3	S06260	M207	H	lip	EX
A-LT-3	S06261	M061	B	lip	I
A-LT-3	S06274	M004	X	intrim	G
A-LT-3	S06276	M160	G	ext	G
A-LT-3	S06278	M298	M	intrim	EX
A-LT-3	S06283	M060	B	extrim	EX
A-LT-3	S06297	M004	X	extrim	I
A-LT-3	S06300	M060	B	extrim	G
A-LT-3	S06304	M004	X	extrim	G
A-LT-3	S06312	M001	X	extrim	G
A-LT-3	S06313	M001	X	extrim	G
A-LT-3	S06314	M004	X	extrim	I
A-LT-3	S06323	M448	J	ext	EX
A-LT-3	S06326	M214	H	extrim	EX
A-LT-3	S06327a	M497	B, G	extrim	EX
A-LT-3	S06327b	M170	G	int	I,P
A-LT-3	S06328a	M004	X	int	EX
A-LT-3	S06328b	M490	A	extrim	EX
A-LT-3	S06329	M004	X	extrim	G
A-LT-3	S06330	M213	H	extrim	EX
A-LT-3	S06331	M435	I	extrim	I
A-LT-3	S06336	M587	M	extrim	EX
A-LT-3	S06393	M001	X	lip	G
A-LT-3	S09054a	M555	G, H	ext	EX
A-LT-3	S09054b	M004	X	intrim	G
A-LT-3	S09198	M001	X	lip	G
A-LT-3	S09209a	M039	A	extrim	I
A-LT-3	S09209b	M043	A	intrim	I
A-LT-3	S09212	M008	X	intrim	I
A-LT-3	S09212	M013	X	extrim	I
A-LT-3	S09213	M001	X	extrim	G
A-LT-3	S09217	M066	B	extrim	EX
A-LT-3	S09223a	M001	X	extrim	I
A-LT-3	S09223b	M008	X	intrim	I
A-LT-4	S06593	M019	A	lip	G
A-LT-4	S06595	M495	B, S	extrim	I
A-LT-4	S06596	M087	C	extrim	I
A-LT-4	S06600	M170	G	intrim	G
A-LT-4	S06601	M065	B	intrim	I
A-LT-4	S06603	M004	X	intrim	I

A-LT-4	S06604	M145	F	intrim	EX,P
A-LT-4	S06605	M221	H	intrim	P
A-LT-4	S06609	M008	X	intrim	I
A-LT-4	S06610	M117	E	intrim	I
A-LT-4	S06611	M420	X	intrim	P
A-LT-4	S06615	M004	X	lip	G
A-LT-4	S06616	M004	X	lip	G
A-LT-4	S06617	M096	D	lip	G
A-LT-4	S06624	M004	X	extrim	G
A-LT-4	S06627	M004	X	intrim	G
A-LT-4	S06628	M298	M	intrim	EX,G
A-LT-4	S06629	M186	G	intrim	I
A-LT-4	S06632	M363	R	extrim	G
A-LT-4	S06635	M301	M	intrim	EX
A-LT-4	S06636	M004	X	intrim	G
A-LT-4	S06637	M585	B, L	intrim	EX
A-LT-4	S06637	M584	M	intrim	EX
A-LT-4	S06638	M008	X	intrim	EX
A-LT-4	S06639	M206	H	intrim	EX
A-LT-4	S06642	M303	M	intrim	EX
A-LT-4	S06643	M192	G	intrim	EX,G
A-LT-4	S06644	M008	X	intrim	G
A-LT-4	S06645	M065	B	intrim	G
A-LT-4	S06646	M491	A, B, G, H	intrim	EX
A-LT-4	S06647	M068	B	intrim	G
A-LT-4	S06648	M004	X	intrim	G
A-LT-4	S06649	M329	N	intrim	EX
A-LT-4	S06650	M004	X	intrim	G
A-LT-4	S06651	M004	X	intrim	I
A-LT-4	S06653a	M004	X	intrim	G
A-LT-4	S06653b	M592	K	int	G
A-LT-4	S06654	M004	X	intrim	I
A-LT-4	S06655	M004	X	intrim	G
A-LT-4	S06660	M117	E	intrim	G
A-LT-4	S06675	M001	X	ext	G
A-LT-4	S06676	M004	X	ext	G
A-LT-4	S06682	M004	X	ext	EX
A-LT-4	S06683	M313	N	ext	EX
A-LT-4	S06715	M122	F	lip	G
A-LT-4	S06717	M025	A	ext	G
A-LT-4	S09314a	M004	X	intrim	G
A-LT-4	S09314b	M399	T	ext	G
A-LT-4	S09316	M085	C	intrim	G
A-LT-5	S06418	M369	R	ext	G
A-LT-5	S06419	M403	O, T	intrim	EX
A-LT-5	S06422	M001	X	extrim	I
A-LT-5	S06423	M001	X	extrim	G
A-LT-5	S06424	M004	X	extrim	G
A-LT-5	S06428	M263	L	intrim	EX

A-LT-5	S06429	M004	X	extrim	G
A-LT-5	S06433	M001	X	lip	G
A-LT-5	S06434	M438	I	extrim	P
A-LT-5	S06435	M439	I	intrim	P
A-LT-5	S06502	M599	star?	int	G
A-LT-5	S06509	M004	X	lip	I
A-LT-5	S06515	M004	X	int	G
A-LT-5	S06522	M001	X	int	EX
A-TZ-1	S00574	M411	U	ext	I
A-TZ-1	S00612	M406	T, U	extrim	I
A-TZ-1	S00625	M449	J	ext	EX
A-TZ-1	S00627	M405	T, U	ext	G
A-TZ-1	S00629	M451	J	ext	EX
A-TZ-1	S02913	M004	X	intrim	I
A-TZ-1	S02917	M408	T	ext	P
A-TZ-1	S02919a	M089	C	intrim	I
A-TZ-1	S02919b	M593	K	int	I
A-TZ-1	S02920	M004	X	intrim	G
A-TZ-1	S02921	M013	X	intrim	I
A-TZ-1	S02924	M001	X	lip	I
A-TZ-1	S02925	M596	star?	int	G
A-TZ-1	S02931	M449	J	ext	EX
A-TZ-1	S02932	M004	X	int	G
A-TZ-1	S02933	M024	A	int	I
A-TZ-1	S02934	M597	star?	int	G
A-TZ-1	S02934	M004	X	int	G
A-TZ-1	S02935	M410	U	extrim	I
A-TZ-1	S02936	M407	O, T	ext	EX,G
A-TZ-1	S02945	M004	X	int	G
A-TZ-1	S02955	M004	X	extrim	EX
A-TZ-1	S02956	M001	X	extrim	I
A-TZ-1	S02959	M001	X	lip	I
A-TZ-1	S02967	M449	J	ext	EX
T-ET-1	S01912	M007	X	intrim	EX
T-ET-1	S01913	M248	K, M	intrim	EX
T-ET-1	S01914	M103	D	intrim	G
T-ET-1	S01915	M315	N	intrim	EX
T-ET-1	S01916	M004	X	intrim	G
T-ET-1	S01917	M008	X	intrim	EX
T-ET-1	S01927	M004	X	intrim	I
T-ET-1	S01929	M008	X	intrim	I
T-ET-1	S01930	M040	A	intrim	G
T-ET-1	S01931	M008	X	intrim	G
T-ET-1	S01934	M004	X	intrim	EX
T-ET-1	S01935	M004	X	intrim	G
T-ET-1	S01936	M249	K, M	intrim	EX
T-ET-1	S01937	M322	N	intrim	EX,G,P
T-ET-1	S01938	M067	B	intrim	G
T-ET-1	S01939	M112	E	intrim	I

T-ET-1	S01940a	M028	A	intrim	I
T-ET-1	S01940b	M150	F	ext	P
T-ET-1	S01942	M097	D	intrim	G
T-ET-1	S01943	M008	X	intrim	G
T-ET-1	S01944	M028	A	intrim	G
T-ET-1	S01945	M097	D	intrim	G
T-ET-1	S01946	M174	G	lip	G
T-ET-1	S01948	M004	X	ext	EX
T-ET-1	S01951	M147	F	ext	I,P
T-ET-1	S01952	M004	X	ext	EX
T-ET-1	S01957	M328	N	ext	EX
T-ET-1	S01958	M055	A	int	P
T-ET-1	S01959	M489	A, Q	ext	EX
T-ET-1	S01960	M379	R	int	P
T-ET-1	S01962	M004	X	extrim	G
T-ET-1	S01964	M004	X	extrim	I
T-ET-1	S01965	M004	X	extrim	I
T-ET-1	S01966a	M212	H	extrim	EX
T-ET-1	S01966b	M169	G	intrim	G
T-ET-1	S01968	M056	B	ext	G
T-ET-1	S01989	M008	X	intrim	I
T-ET-1	S05319	M155	F	ext	P
T-ET-1	S05545a	M392	T	extrim	EX
T-ET-1	S05545b	M467	A, G	intrim	G
T-ET-1	S11712	M395	T	extrim	G
T-ET-1	S11714	M157	G	extrim	EX
T-LT-1	S00127	M001	X	lip	G
T-LT-1	S00142	M001	X	lip	G
T-LT-1	S01471	M156	G	intrim	G
T-LT-1	S01473	M001	X	intrim	EX
T-LT-1	S01474	M089	C	intrim	G
T-LT-1	S01477	M318	N	intrim	EX
T-LT-1	S01481	M378	R	intrim	P
T-LT-1	S01483a	M563	G, M	intrim	EX
T-LT-1	S01483b	M591	K	int	EX
T-LT-1	S01484	M480	A, G, L	intrim	EX
T-LT-1	S01485	M179	G	intrim	EX
T-LT-1	S01485	M562	G, M	intrim	EX
T-LT-1	S01486	M482	A, M	intrim	EX
T-LT-1	S01487	M562	G, M	intrim	EX
T-LT-1	S01487	M562	G, M	intrim	EX
T-LT-1	S01488	M283	M	intrim	EX
T-LT-1	S01491	M004	X	intrim	G
T-LT-1	S01496	M099	D	intrim	G
T-LT-1	S01499	M353	Q	intrim	G
T-LT-1	S01500	M004	X	intrim	G
T-LT-1	S01502	M099	D	intrim	G
T-LT-1	S01503	M004	X	intrim	G
T-LT-1	S01507	M111	E	intrim	G

T-LT-1	S01511	M205	H	intrim	EX
T-LT-1	S01512	M265	L	intrim	EX
T-LT-1	S01513	M174	G	intrim	G
T-LT-1	S01515	M040	A	intrim	I
T-LT-1	S01519	M156	G	intrim	G
T-LT-1	S01520	M051	A	intrim	EX
T-LT-1	S01521	M254	K, M	intrim	EX
T-LT-1	S01523	M005	X	intrim	EX
T-LT-1	S01524	M068	B	intrim	G
T-LT-1	S01525	M003	X	intrim	EX
T-LT-1	S01527	M432	I	intrim	EX
T-LT-1	S01529	M286	M	intrim	EX
T-LT-1	S01530	M304	M	intrim	EX
T-LT-1	S01534	M218	H	intrim	P
T-LT-1	S01535	M223	H	intrim	P
T-LT-1	S01536	M496	B, G	intrim	I
T-LT-1	S01538	M004	X	intrim	I
T-LT-1	S01540	M008	X	intrim	I
T-LT-1	S01542	M030	A	intrim	G
T-LT-1	S01545	M184	G	intrim	G
T-LT-1	S01547	M220	H	intrim	P
T-LT-1	S01556	M381	R	int	P
T-LT-1	S01558	M578	H	int	P
T-LT-1	S01561	M004	X	ext	G
T-LT-1	S01562	M141	F	ext	EX
T-LT-1	S01563	M382	R	int	P
T-LT-1	S01569	M004	X	ext	EX
T-LT-1	S01570	M561	G, M	ext	EX
T-LT-1	S01571	M004	X	ext	G
T-LT-1	S01572	M001	X	ext	G
T-LT-1	S01573	M255	K, M	ext	EX
T-LT-1	S01574	M134	F	ext	EX
T-LT-1	S01575	M004	X	ext	EX
T-LT-1	S01586	M354	Q	ext	EX
T-LT-1	S01589	M336	N	ext	EX
T-LT-1	S01592	M001	X	lip	G
T-LT-1	S01593	M272	L	lip	EX
T-LT-1	S01598	M004	X	lip	G
T-LT-1	S01601	M280	M	lip	G
T-LT-1	S01602	M174	G	lip	G
T-LT-1	S01609	M119	E	lip	EX
T-LT-1	S01610	M503	B, T	lip	G
T-LT-1	S01613	M173	G	lip	G
T-LT-1	S01615	M522	F	intrim	EX
T-LT-1	S01616	M549	G, H	intrim	EX
T-LT-1	S01617	M005	X	intrim	G
T-LT-1	S01626	M004	X	extrim	I
T-LT-1	S01646	M140	F	lip	EX
T-LT-1	S01647	M512	C, G	intrim	G

T-LT-1	S01648	M198	G	intrim	G,P
T-LT-1	S01649	M481	A, L	intrim	EX
T-LT-1	S01651	M004	X	intrim	G
T-LT-1	S01653	M001	X	intrim	I
T-LT-1	S01654	M515	C, G	extrim	EX
T-LT-1	S01655	M028	A	ext	I
T-LT-1	S01658a	M371	R	ext	G
T-LT-1	S01658b	M031	A	intrim	I
T-LT-1	S01659	M133	F	intrim	G
T-LT-1	S01661	M398	T	ext	EX
T-LT-1	S01663	M090	C	ext	EX
T-LT-1	S01664	M001	X	ext	G
T-LT-1	S01672	M364	R	ext	I
T-LT-1	S01674	M001	X	ext	I
T-LT-1	S01677	M001	X	ext	G
T-LT-1	S01678	M542	F, I	ext	I
T-LT-1	S01679	M182	G	ext	EX
T-LT-1	S01682	M129	F	ext	I
T-LT-1	S01686	M035	A	intrim	G
T-LT-1	S01687	M513	C, G	intrim	I
T-LT-1	S01688	M100	D	intrim	I
T-LT-1	S01789	M010	X	lip	G
T-LT-1	S01792	M004	X	int	G
T-LT-1	S01805	M001	X	ext	G
T-LT-1	S05508	M088	C	intrim	EX
T-LT-1	S05550	M058	B	extrim	EX
T-LT-1	S05551	M060	B	extrim	G
T-LT-2	S06194	M338	N, O	ext	EX
T-LT-2	S06197	M004	X	ext	EX
T-LT-2	S06198	M001	X	ext	I
T-LT-2	S06200a	M041	A	intrim	I
T-LT-2	S06200b	M151	F	ext	P
T-LT-2	S06201	M004	X	intrim	G
T-LT-2	S06203	M320	N	intrim	EX
T-LT-2	S06204	M004	X	intrim	G
T-LT-2	S06205	M004	X	intrim	I
T-LT-2	S06206	M333	N	intrim	EX
T-LT-2	S06207	M123	F	intrim	EX
T-LT-2	S06208	M208	H	intrim	EX,I
T-LT-2	S06209	M005	X	intrim	EX
T-LT-2	S06213	M266	L	intrim	EX
T-LT-2	S06216a	M165	G	extrim	G
T-LT-2	S06216b	M436	I	ext	G
T-LT-2	S09032	M001	X	lip	EX
T-TX-1	S00112	M127	F	ext	G
T-TX-1	S00227	M543	B, G	ext	EX
T-TX-1	S00230	M015	X	ext	G
T-TX-1	S00231	M188	G	ext	G
T-TX-1	S00257	M448	J	extrim	EX

T-TX-1	S00321	M167	G	extrim	G
T-TX-1	S00338	M473	B	ext	G
T-TX-1	S00344	M008	X	extrim	G
T-TX-1	S00345	M008	X	extrim	G
T-TX-1	S00352	M008	X	extrim	G
T-TX-1	S00353	M013	X	extrim	G
T-TX-1	S00354	M098	D	extrim	G
T-TX-1	S00355	M348	P	extrim	G
T-TX-1	S00568	M001	X	extrim	EX
T-TX-1	S01479	M004	X	intrim	I
T-TX-1	S01480	M068	B	intrim	I
T-TX-1	S01482	M422	X	intrim	P
T-TX-1	S01492	M008	X	intrim	EX
T-TX-1	S01493	M008	X	intrim	G
T-TX-1	S01494	M001	X	intrim	EX
T-TX-1	S01495	M006	X	intrim	G
T-TX-1	S01516	M060	B	intrim	I
T-TX-1	S01531	M296	M	intrim	EX
T-TX-1	S01532	M335	N	intrim	EX,P
T-TX-1	S01533	M581	H	intrim	EX
T-TX-1	S01549	M274	L	intrim	P
T-TX-1	S01550	M377	R	intrim	P
T-TX-1	S01551	M229	H	intrim	P
T-TX-1	S01552	M244	C, I	intrim	G
T-TX-1	S01553	M165	G	intrim	I
T-TX-1	S01565	M232	H	int	P
T-TX-1	S01567	M008	X	ext	G
T-TX-1	S01576	M010	X	ext	EX
T-TX-1	S01577	M058	B	ext	EX
T-TX-1	S01582	M472	A, I	ext	EX
T-TX-1	S01590	M026	A	ext	G
T-TX-1	S01594	M010	X	ext	I
T-TX-1	S01618	M208	H	intrim	EX
T-TX-1	S01625	M004	X	ext	EX
T-TX-1	S01627	M414	K, O, S	extrim	I
T-TX-1	S01632	M035	A	ext	G
T-TX-1	S01635	M219	H	ext	P
T-TX-1	S01637	M604	J	ext	EX,P
T-TX-1	S01640	M023	A	intrim	G
T-TX-1	S01641a	M001	X	lip	EX
T-TX-1	S01641b	M548	G, H	intrim	EX
T-TX-1	S01643	M047	A	intrim	EX
T-TX-1	S01645	M004	X	intrim	G
T-TX-1	S01698	M445	O	ext	P
T-TX-1	S01700	M590	ST	ext	EX
T-TX-1	S01710	M245	I	extrim	P
T-TX-1	S01714a	M464	A, G	intrim	EX
T-TX-1	S01714b	M572	G, T	extrim	EX
T-TX-1	S01715a	M004	X	intrim	G

T-TX-1	S01715b	M393	T	ext	G
T-TX-1	S01717	M084	C	extrim	G
T-TX-1	S01722	M088	C	extrim	I
T-TX-1	S01723	M172	G	extrim	G
T-TX-1	S01724	M083	C	extrim	G
T-TX-1	S01725	M016	A	extrim	G
T-TX-1	S01726	M172	G	extrim	G
T-TX-1	S01729	M004	X	extrim	I
T-TX-1	S01731a	M389	T	ext	EX
T-TX-1	S01731b	M185	G	intrim	G
T-TX-1	S01732	M456	A, R	intrim	G
T-TX-1	S01733a	M084	C	intrim	G
T-TX-1	S01733b	M372	R	ext	G
T-TX-1	S01734	M041	A	intrim	G
T-TX-1	S01746	M004	X	ext	G
T-TX-1	S01748	M172	G	extrim	EX
T-TX-1	S01750	M081	C	extrim	G
T-TX-1	S01751	M172	G	extrim	G
T-TX-1	S01752	M442	O	extrim	EX
T-TX-1	S01753	M008	X	extrim	G
T-TX-1	S01754	M172	G	int	G
T-TX-1	S01755	M004	X	int	G
T-TX-1	S01756	M046	A	extrim	EX
T-TX-1	S01758a	M008	X	intrim	G
T-TX-1	S01758b	M391	T	extrim	G
T-TX-1	S01760	M029	A	extrim	G
T-TX-1	S01761	M172	G	extrim	G
T-TX-1	S01764	M105	D	extrim	G
T-TX-1	S01765	M386	S	extrim	G
T-TX-1	S01767	M448	J	ext	EX
T-TX-1	S01768	M001	X	ext	G
T-TX-1	S01771	M365	R	ext	EX
T-TX-1	S01799	M241	I	lip	G
T-TX-1	S01801	M005	X	intrim	EX
T-TX-1	S01811	M001	X	intrim	G
T-TX-1	S01812	M001	X	intrim	G
T-TX-1	S01813a	M146	F	ext	EX,P
T-TX-1	S01813b	M004	X	intrim	G
T-TX-1	S01814	M004	X	intrim	G
T-TX-1	S01815a	M360	R	ext	EX
T-TX-1	S01815b	M008	X	intrim	G
T-TX-1	S01817	M446	O	ext	P
T-TX-1	S01819	M154	F	ext	P
T-TX-1	S01820	M176	G	ext	I,P
T-TX-1	S01833	M029	A	extrim	G
T-TX-1	S01834	M004	X	extrim	G
T-TX-1	S01835	M004	X	extrim	I
T-TX-1	S01836	M032	A	extrim	G
T-TX-1	S01840	M004	X	extrim	G

T-TX-1	S01842	M088	C	extrim	G
T-TX-1	S01843	M190	G	ext	P
T-TX-1	S01846	M194	G	extrim	EX
T-TX-1	S01848	M449	J	ext	EX
T-TX-1	S01849	M387	S	ext	EX
T-TX-1	S01852	M447	O	extrim	EX
T-TX-1	S01853	M516	C, G	extrim	G
T-TX-1	S01854	M517	A, G	extrim	G
T-TX-1	S01855	M515	C, G	extrim	G
T-TX-1	S01857	M183	G	extrim	G
T-TX-1	S01858a	M028	A	extrim	G
T-TX-1	S01858b	M434	I	int	I
T-TX-1	S01860	M468	G, I	extrim	G
T-TX-1	S01862a	M016	A	extrim	G
T-TX-1	S01862b	M189	G	int	G
T-TX-1	S01863	M183	G	extrim	EX
T-TX-1	S01864	M059	B	extrim	I
T-TX-1	S01868	M028	A	lip	G
T-TX-1	S01869	M034	A	int	EX
T-TX-1	S01870	M004	X	ext	EX
T-TX-1	S01879	M004	X	ext	EX
T-TX-1	S01881	M004	X	intrim	G
T-TX-1	S01882	M004	X	intrim	I
T-TX-1	S01884	M001	X	int	G
T-TX-1	S01886	M065	B	intrim	G
T-TX-1	S01887	M589	O	intrim	EX
T-TX-1	S01888	M008	X	intrim	I
T-TX-1	S01889	M224	H	intrim	P
T-TX-1	S01890	M227	H	intrim	P
T-TX-1	S01891	M228	H	intrim	P
T-TX-1	S01892	M208	H	intrim	EX
T-TX-1	S02002	M047	A	extrim	EX
T-TX-1	S02006	M007	X	lip	EX
T-TX-1	S02007a	M004	X	int	G
T-TX-1	S02007b	M242	I	lip	G
T-TX-1	S02013	M001	X	ext	G
T-TX-1	S02014	M375	R	ext	P
T-TX-1	S02015	M300	M	intrim	EX
T-TX-1	S02016	M004	X	intrim	EX
T-TX-1	S02018	M004	X	intrim	G
T-TX-1	S02019	M113	E	intrim	G
T-TX-1	S02020	M013	X	intrim	G
T-TX-1	S02021	M013	X	intrim	G
T-TX-1	S02022	M013	X	intrim	G
T-TX-1	S02023	M004	X	intrim	G
T-TX-1	S02024	M180	G	intrim	EX
T-TX-1	S02025	M004	X	intrim	G
T-TX-1	S02028	M494	B	intrim	I,P
T-TX-1	S02030	M065	B	intrim	I

T-TX-1	S02031	M357	Q, T	intrim	EX,G
T-TX-1	S02036a	M001	X	int	G
T-TX-1	S02036b	M110	E	extrim	G
T-TX-1	S02037	M021	A	extrim	G
T-TX-1	S02038	M088	C	extrim	G
T-TX-1	S02039	M172	G	extrim	I
T-TX-1	S02040	M109	E	extrim	I
T-TX-1	S02041	M004	X	extrim	G
T-TX-1	S02042	M004	X	extrim	G
T-TX-1	S02043	M442	O	extrim	EX
T-TX-1	S02045a	M001	X	int	G
T-TX-1	S02045b	M471	A, I	extrim	G
T-TX-1	S02046	M455	A	extrim	I
T-TX-1	S02047	M442	O	extrim	EX
T-TX-1	S02048	M166	G	extrim	G
T-TX-1	S02050	M442	O	extrim	EX
T-TX-1	S02051	M350	P	extrim	G
T-TX-1	S02052	M166	G	extrim	G
T-TX-1	S02054	M004	X	extrim	G
T-TX-1	S02055	M004	X	extrim	G
T-TX-1	S02058	M029	A	extrim	G
T-TX-1	S02059a	M079	C	int	G
T-TX-1	S02059b	M518	C, G	extrim	G
T-TX-1	S02060	M443	O	extrim	EX
T-TX-1	S02061a	M008	X	intrim	G
T-TX-1	S02061b	M239	I	extrim	G
T-TX-1	S02063	M021	A	extrim	I
T-TX-1	S02065	M004	X	extrim	G
T-TX-1	S02066a	M515	C, G	extrim	G
T-TX-1	S02066b	M029	A	int	I
T-TX-1	S02067a	M008	X	extrim	G
T-TX-1	S02067b	M434	I	int	G
T-TX-1	S02068	M004	X	extrim	I
T-TX-1	S02069	M004	X	extrim	G
T-TX-1	S02070	M017	A	extrim	G
T-TX-1	S02073	M187	G	extrim	I
T-TX-1	S02077	M094	D	ext	I
T-TX-1	S02078	M362	R	ext	EX
T-TX-1	S02084	M453	J, P	ext	G
T-TX-1	S02085	M452	J	ext	G
T-TX-1	S02086	M448	J	ext	EX
T-TX-1	S02088	M574	G	ext	EX
T-TX-1	S02090	M004	X	ext	G
T-TX-1	S02103	M215	H	ext	P
T-TX-1	S02106	M347	P	int	G
T-TX-1	S02107	M001	X	int	G
T-TX-1	S02108	M174	G	int	EX
T-TX-1	S02109	M004	X	intrim	I
T-TX-1	S02112	M367	R	ext	EX

T-TX-1	S02113	M193	G	extrim	G
T-TX-1	S02114	M124	F	ext	G
T-TX-1	S02116	M061	B	intrim	I
T-TX-1	S02119	M013	X	intrim	G
T-TX-1	S02120	M013	X	intrim	G
T-TX-1	S02121	M008	X	intrim	G
T-TX-1	S02122	M240	I	intrim	G
T-TX-1	S02122	M001	X	intrim	G
T-TX-1	S02123	M001	X	ext	G
T-TX-1	S02126	M074	B	ext	EX
T-TX-1	S02141	M173	G	lip	G
T-TX-1	S02179	M008	X	extrim	I
T-TX-1	S02895a	M004	X	int	I
T-TX-1	S02895b	M239	I	lip	I
T-TX-1	S05549	M221	H	intrim	P
T-TX-1	S09850	M538	F, G	ext	P
T-TX-2	S00337	M432	I	ext	G
T-TX-2	S00361	M432	I	ext	EX
T-TX-2	S00362	M557	G, H	ext	EX
T-TX-2	S00363	M603	J	ext	EX
T-TX-2	S02205	M004	X	intrim	EX
T-TX-2	S02206	M462	A, G	intrim	G
T-TX-2	S02207	M013	X	intrim	G
T-TX-2	S02209	M004	X	intrim	G
T-TX-2	S02210	M004	X	intrim	G
T-TX-2	S02211	M040	A	intrim	G
T-TX-2	S02212	M041	A	intrim	G
T-TX-2	S02215	M066	B	intrim	G
T-TX-2	S02216	M008	X	intrim	I
T-TX-2	S02217	M171	G	intrim	I
T-TX-2	S02218	M008	X	intrim	I
T-TX-2	S02219	M004	X	intrim	I
T-TX-2	S02220	M008	X	intrim	I
T-TX-2	S02222	M004	X	intrim	I
T-TX-2	S02223	M010	X	intrim	G
T-TX-2	S02224	M126	F	intrim	EX
T-TX-2	S02225	M004	X	intrim	G
T-TX-2	S02226	M207	H	intrim	EX
T-TX-2	S02228	M554	G, H	intrim	EX
T-TX-2	S02229	M079	C	intrim	I
T-TX-2	S02230	M004	X	intrim	G
T-TX-2	S02231	M553	G, H	intrim	EX
T-TX-2	S02232	M070	B	intrim	EX
T-TX-2	S02237	M233	H	ext	P
T-TX-2	S02240	M380	R	int	P
T-TX-2	S02241	M374	N, O, R	ext	EX
T-TX-2	S02242	M004	X	ext	EX
T-TX-2	S02243	M004	X	intrim	G
T-TX-2	S02244	M294	M	lip	EX

T-TX-2	S02245	M174	G	lip	G
T-TX-2	S02246	M004	X	ext	EX
T-TX-2	S02247	M004	X	lip	G
T-TX-2	S02251	M004	X	ext	EX
T-TX-2	S02255	M020	A	intrim	G
T-TX-2	S02257	M159	G	extrim	G
T-TX-2	S02258	M167	G	intrim	EX
T-TX-2	S02260	M004	X	lip	G
T-TX-2	S02269	M373	R	extrim	EX
T-TX-2	S02271a	M056	B	int	G
T-TX-2	S02271b	M470	A, I	lip	G
T-TX-2	S02273	M029	A	extrim	G
T-TX-2	S02275	M106	D	extrim	G
T-TX-2	S02276	M004	X	lip	I
T-TX-2	S02277	M029	A	int	G
T-TX-2	S02278	M079	C	int	I
T-TX-2	S02280	M028	A	lip	G
T-TX-2	S02281a	M004	X	intrim	G
T-TX-2	S02281b	M243	I	extrim	G
T-TX-2	S02282	M082	C	extrim	G
T-TX-2	S02283	M028	A	extrim	G
T-TX-2	S02284	M001	X	extrim	G
T-TX-2	S02285	M086	C	extrim	I
T-TX-2	S02288	M028	A	int	G
T-TX-2	S02290	M166	G	extrim	EX
T-TX-2	S02291	M172	G	extrim	G
T-TX-2	S02293	M172	G	extrim	G
T-TX-2	S02294a	M004	X	int	G
T-TX-2	S02294b	M240	I	intrim	G
T-TX-2	S02295	M172	G	extrim	G
T-TX-2	S02300	M170	G	extrim	G
T-TX-2	S02302	M469	A, G	extrim	G
T-TX-2	S02303a	M004	X	intrim	G
T-TX-2	S02303b	M390	T	ext	G
T-TX-2	S02305a	M166	G	extrim	G
T-TX-2	S02305b	M600	star?	int	I
T-TX-2	S02308	M474	A, B	extrim	I
T-TX-2	S02309a	M590	ST	ext	EX
T-TX-2	S02309b	M172	G	intrim	G
T-TX-2	S02309c	M394	G, T	extrim	G
T-TX-2	S02315	M450	G, J	ext	G

APPENDIX C

Comparing Motif Data from Oaxaca and Tlaxcala

Appendix C provides the data used to compute the Brainerd-Robinson coefficients presented in Tables 7.2 and 7.3. Column 1 lists the design element number assigned by Plog (1976) to double-line-break motif occurrences on Atoyac Yellow-white bowls from the Valley of Oaxaca (Flannery and Marcus 1994:Table 12.1). Column 2 provides the corresponding motif number for Tlaxcala.

Following the methodology outlined by Plog (1976:263-264), the sample from Amomoloc and Tetel was restricted to interior rim decoration on Yauhtentzi White bowls with beveled rims (see Figure 3.1c), bowls with outcurving rims (see Figure 3.1f), and bowls with outcurving rims and a band of interior thickening along the rim (see Figure 3.1g). Simple horizontal line motifs (Motifs 1-15) are not included, since Plog (1976) did not consider them either.

Column 3 assigns each motif to a motif category or categories. Figure 5.28 and Table 5.2 provide examples of these motif categories. The letter designation “Z” below refers to a new category created for any Oaxacan design element that did not fit within the categories created for Tlaxcala.

Columns 4 through 9 list the counts of individual motif occurrences for each site.

The following abbreviations were used in Table C.1:

Amom = Amomoloc count

Tetel = Tetel count

SJM = San José Mogote count

Huit = Huitzo count

TLarg = Tierras Largas count

Abas = Abasolo count

Table C.1 Number of motif and motif category occurrences at Amomoloc, Tetel, San José Mogote, Huitzo, Tierras Largas, and Abasolo. See Appendix C for explanation of abbreviations.

Oaxaca design element	Tlaxcala motif number	Motif category	Amom	Tetel	SJM	Huitz	TLarg	Abas
-	M020	A	0	1	0	0	0	0
-	M029	A	1	0	0	0	0	0
-	M033	A	1	0	0	0	0	0
-	M037	A	1	0	0	0	0	0
-	M041	A	1	1	0	0	0	0
-	M050	A	1	0	0	0	0	0
-	M051	A	0	1	0	0	0	0
-	M065	B	1	1	0	0	0	0
-	M067	B	0	1	0	0	0	0
-	M068	B	1	1	0	0	0	0
-	M073	B	1	0	0	0	0	0
-	M089	C	0	1	0	0	0	0
-	M099	D	0	2	0	0	0	0
-	M100	D	2	0	0	0	0	0
-	M103	D	0	1	0	0	0	0
-	M111	E	1	1	0	0	0	0
-	M113	E	0	1	0	0	0	0
-	M117	E	1	0	0	0	0	0
-	M121	E	1	0	0	0	0	0
-	M123	F	0	1	0	0	0	0
-	M126	F	0	1	0	0	0	0
-	M128	F	1	0	0	0	0	0
-	M143	F	1	0	0	0	0	0
-	M162	G	1	0	0	0	0	0
-	M167	G	0	1	0	0	0	0

-	M171	G	1	0	0	0	0	0
-	M180	G	0	1	0	0	0	0
-	M186	G	1	0	0	0	0	0
-	M192	G	1	0	0	0	0	0
-	M195	G	1	0	0	0	0	0
-	M196	G	1	0	0	0	0	0
-	M203	H	1	0	0	0	0	0
-	M204	H	1	0	0	0	0	0
-	M205	H	1	1	0	0	0	0
-	M206	H	2	0	0	0	0	0
-	M207	H	0	1	0	0	0	0
-	M208	H	3	3	0	0	0	0
-	M210	H	1	0	0	0	0	0
-	M248	K,M	0	1	0	0	0	0
-	M249	K,M	0	1	0	0	0	0
-	M250	K	1	0	0	0	0	0
-	M251	K,M	1	0	0	0	0	0
-	M252	K,M	1	0	0	0	0	0
-	M253	K,M	1	0	0	0	0	0
-	M254	K,M	0	1	0	0	0	0
-	M256	K,M,O	1	0	0	0	0	0
-	M257	K	1	0	0	0	0	0
-	M258	K,O	1	0	0	0	0	0
-	M261	K,M,N, O,T	1	0	0	0	0	0
-	M263	L	1	0	0	0	0	0
-	M264	L	1	0	0	0	0	0
-	M265	L	0	1	0	0	0	0
-	M267	L	2	0	0	0	0	0
-	M268	L	3	0	0	0	0	0
-	M269	L	1	0	0	0	0	0
-	M270	L	1	0	0	0	0	0
-	M271	L	1	0	0	0	0	0
-	M273	L	1	0	0	0	0	0
-	M283	M	0	1	0	0	0	0
-	M284	M	1	0	0	0	0	0
-	M285	M	1	0	0	0	0	0
-	M286	M	0	1	0	0	0	0
-	M287	M	1	0	0	0	0	0
-	M288	M	1	0	0	0	0	0
-	M289	M	1	0	0	0	0	0
-	M290	M	1	0	0	0	0	0
-	M291	M	1	0	0	0	0	0
-	M293	M	1	0	0	0	0	0
-	M296	M	0	1	0	0	0	0
-	M298	M	2	0	0	0	0	0
-	M300	M	0	1	0	0	0	0
-	M301	M	3	0	0	0	0	0
-	M302	M	1	0	0	0	0	0

-	M303	M	4	0	0	0	0	0
-	M304	M	0	1	0	0	0	0
-	M305	M	1	0	0	0	0	0
-	M306	M	1	0	0	0	0	0
-	M310	N	1	0	0	0	0	0
-	M311	N	1	0	0	0	0	0
-	M312	N	1	0	0	0	0	0
-	M314	N	1	0	0	0	0	0
-	M315	N	0	1	0	0	0	0
-	M316	N	2	0	0	0	0	0
-	M318	N	0	1	0	0	0	0
-	M320	N	0	1	0	0	0	0
-	M323	N	1	0	0	0	0	0
-	M324	N	1	0	0	0	0	0
-	M326	N	1	0	0	0	0	0
-	M329	N	1	0	0	0	0	0
-	M331	N	1	0	0	0	0	0
-	M332	N	1	0	0	0	0	0
-	M333	N	0	1	0	0	0	0
-	M334	N	1	0	0	0	0	0
-	M345	N	1	0	0	0	0	0
-	M346	N	1	0	0	0	0	0
-	M353	N	0	1	0	0	0	0
-	M357	Q,T	0	1	0	0	0	0
-	M403	O,T	1	0	0	0	0	0
-	M412	U	1	0	0	0	0	0
-	M413	L,U	1	0	0	0	0	0
-	M415	K,O	1	0	0	0	0	0
-	M416	K,M	1	0	0	0	0	0
-	M417	K,M	1	0	0	0	0	0
-	M432	I	0	1	0	0	0	0
-	M462	A,G	0	1	0	0	0	0
-	M480	A,G	0	1	0	0	0	0
-	M481	A,L	0	1	0	0	0	0
-	M482	A,M	0	1	0	0	0	0
-	M483	A,L	1	0	0	0	0	0
-	M484	A,N	1	0	0	0	0	0
-	M487	A,B	1	0	0	0	0	0
-	M491	A,B,G,H	1	0	0	0	0	0
-	M505	B,L	1	0	0	0	0	0
-	M506	B,F,L	1	0	0	0	0	0
-	M511	C,M	1	0	0	0	0	0
-	M519	D,L	1	0	0	0	0	0
-	M521	E,L	1	0	0	0	0	0
-	M522	F	0	1	0	0	0	0
-	M523	F	1	0	0	0	0	0
-	M537	F,G,T	1	0	0	0	0	0
-	M548	G,H	0	1	0	0	0	0
-	M549	G,H	0	1	0	0	0	0

-	M550	G,H	1	0	0	0	0	0
-	M551	G,O	1	0	0	0	0	0
-	M552	G,H	1	0	0	0	0	0
-	M553	G,H	0	1	0	0	0	0
-	M554	G,H	0	1	0	0	0	0
-	M560	G,H,O	1	0	0	0	0	0
-	M562	G,M	0	2	0	0	0	0
-	M563	G,M	0	1	0	0	0	0
-	M565	G,M	1	0	0	0	0	0
-	M566	G,M	1	0	0	0	0	0
-	M567	G,M	1	0	0	0	0	0
-	M568	G,M	1	0	0	0	0	0
-	M570	G,L,N	1	0	0	0	0	0
-	M571	G,N	1	0	0	0	0	0
-	M581	H	0	1	0	0	0	0
-	M582	H,M,Q	1	0	0	0	0	0
-	M584	M	1	0	0	0	0	0
-	M585	B,L	1	0	0	0	0	0
-	M586	N	1	0	0	0	0	0
-	M588	M,N	1	0	0	0	0	0
1	M018	A	1	0	4	16	8	1
2	-	C	0	0	1	0	0	0
3	-	A,I	0	0	0	11	0	0
4	-	C,I	0	0	4	4	1	0
5	-	A,I	0	0	1	1	0	0
6	-	A,T	0	0	3	0	1	0
7	-	A,T	0	0	0	0	1	0
8	-	C,T	0	0	1	4	0	0
9	-	A	0	0	5	7	0	0
10	-	C,I	0	0	1	4	3	0
10	-	C,I	0	0	1	4	3	0
11	-	C,T	0	0	2	0	0	0
12	-	C,I	0	0	0	1	0	0
13	-	B	0	0	0	1	0	0
14	-	C	0	0	1	0	0	0
15	-	A	0	0	0	1	1	0
16	-	A	0	0	0	1	0	0
17	-	C	0	0	1	0	0	0
18	-	C,T	0	0	0	1	0	0
19	-	I	0	0	2	3	0	0
20	-	I	0	0	0	2	0	0
21	-	A,I	0	0	0	1	0	0
22	-	A	0	0	0	1	0	0
23	-	A	0	0	0	0	0	1
24	M027	A	1	0	0	0	0	1
25	-	T	0	0	0	2	0	0
26	-	I	0	0	0	3	0	0
27	-	I	0	0	0	1	0	0
28	-	I	0	0	0	1	0	0

29	-	C	0	0	0	1	0	0
30	-	A,I	0	0	0	1	0	0
31	-	G	0	0	3	13	0	0
32	-	I	0	0	1	0	0	0
33	-	O	0	0	0	0	1	0
34	-	B	0	0	0	1	0	0
35	M173	G	1	0	2	107	0	0
36	M185	G	1	0	0	2	0	0
37	-	G	0	0	0	2	0	0
38	M179	G	0	1	0	1	0	0
39	-	Z	0	0	0	1	0	0
40	-	U	0	0	1	52	0	0
41	-	I	0	0	1	0	0	0
42	-	R	0	0	0	2	0	0
43	-	T	0	0	0	1	0	0
44	-	A,R	0	0	0	1	0	0
45	-	I	0	0	0	1	0	0
46	-	R	0	0	0	1	0	0
47	M079	C	0	1	0	0	1	1
48	-	A	0	0	1	1	7	0
49	M028	A	2	0	5	0	15	0
50	M088	C	0	1	2	1	17	0
51	-	A	0	0	2	0	8	0
52	-	C	0	0	3	0	9	0
53	-	A	0	0	4	0	8	1
54	-	C	0	0	12	1	11	5
55	-	A	0	0	0	0	2	0
56	-	C	0	0	0	0	1	0
57	-	A,I	0	0	0	0	1	0
58	-	C,I	0	0	0	0	3	0
59	-	C	0	0	0	0	3	0
60	-	A	0	0	0	0	1	0
61	-	C	0	0	1	0	0	0
62	-	C	0	0	1	0	0	0
63	-	C,I	0	0	1	0	0	0
64	-	A	0	0	0	0	4	0
65	-	A	0	0	0	0	1	0
66	-	A	0	0	0	0	1	0
67	-	C	0	0	0	0	4	0
68	-	C,T	0	0	0	0	1	0
69	-	A	0	0	0	0	1	0
70	-	C	0	0	0	0	1	0
71	-	R	0	0	1	0	0	0
72	-	U	0	0	1	0	0	0
73	-	O,T	0	0	1	0	0	0
74	-	A	0	0	0	1	0	0
75	-	A	0	0	0	0	1	0
76	-	I	0	0	0	0	2	0
77	-	I	0	0	1	0	0	0

78	-	I	0	0	1	0	0	0
79	-	I	0	0	1	1	0	0
80	-	D,I	0	0	0	1	0	0
81	-	I,T	0	0	1	0	0	0
82	-	A,Z	0	0	0	1	0	0
83	-	Z	0	0	0	1	0	0
84	-	A,B,K	0	0	0	1	0	0
85	-	Q	0	0	0	1	0	0
86	-	K	0	0	1	0	0	0
87	-	Z	0	0	1	0	0	0
88	-	Z	0	0	1	0	0	0
89	-	T	0	0	0	0	1	0
90	-	G,O,Z	0	0	0	0	0	1
91	-	C	0	0	1	0	0	0
92	-	A	0	0	1	0	0	0
93	-	B	0	0	1	0	0	0
94	-	B	0	0	1	0	0	0
95	-	A,T	0	0	1	0	0	0
96	-	Q	0	0	1	0	0	0
97	-	Z	0	0	0	0	1	0
98	-	A	0	0	0	0	1	0
99	-	E	0	0	1	0	0	0
101	-	R	0	0	0	1	0	0
102	-	P	0	0	1	0	0	0
103	-	P	0	0	0	1	0	0
104	-	G	0	0	0	1	0	0
105	-	I	0	0	0	1	0	0
106	-	T	0	0	2	0	1	0
107	-	O	0	0	1	0	0	0
108	-	A,T	0	0	1	0	0	0
109	-	A	0	0	1	0	0	0
110	-	A,Z	0	0	1	0	0	0
111	-	I	0	0	0	0	1	0
112	-	A,I	0	0	0	0	1	0
113	-	A,Z	0	0	0	0	0	1
114	-	C	0	0	0	0	0	1
115	-	Z	0	0	0	1	0	0
116	-	Z	0	0	0	1	0	0
118	-	A	0	0	0	1	0	0
119	-	I	0	0	0	1	1	0
121	-	Z	0	0	1	0	0	0
122	-	Z	0	0	1	0	0	0
123	-	Q	0	0	0	0	1	0
124	-	T,Z	0	0	0	0	1	0
125	-	Z	0	0	0	0	1	0
127	-	Z	0	0	0	0	1	0
128	-	Z	0	0	0	0	1	0
129	-	Z	0	0	0	0	1	0
130	-	Z	0	0	0	0	1	0

131	-	A	0	0	0	0	1	0
132	-	A	0	0	0	0	1	0
133	-	A	0	0	0	0	1	0
134	-	Z	0	0	0	0	1	0
135	-	P	0	0	0	1	0	0
136	-	P	0	0	0	1	1	0
137	-	P	0	0	1	0	0	0
138	-	A,B	0	0	1	0	0	0
139	-	P	0	0	0	0	1	0
140	-	P	0	0	0	0	1	0
141	-	P	0	0	0	0	2	0
142	-	A	0	0	0	0	1	0
143	-	A,G	0	0	0	1	0	0
TOTAL			122	53	94	274	143	13

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