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**Journal**

PAPERS OF THE ARCHAEOLOGICAL SOCIETY OF NEW MEXICO, 42

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**Publication Date**

2016

Peer reviewed

# The Life and Times of Tijeras Utility Ware

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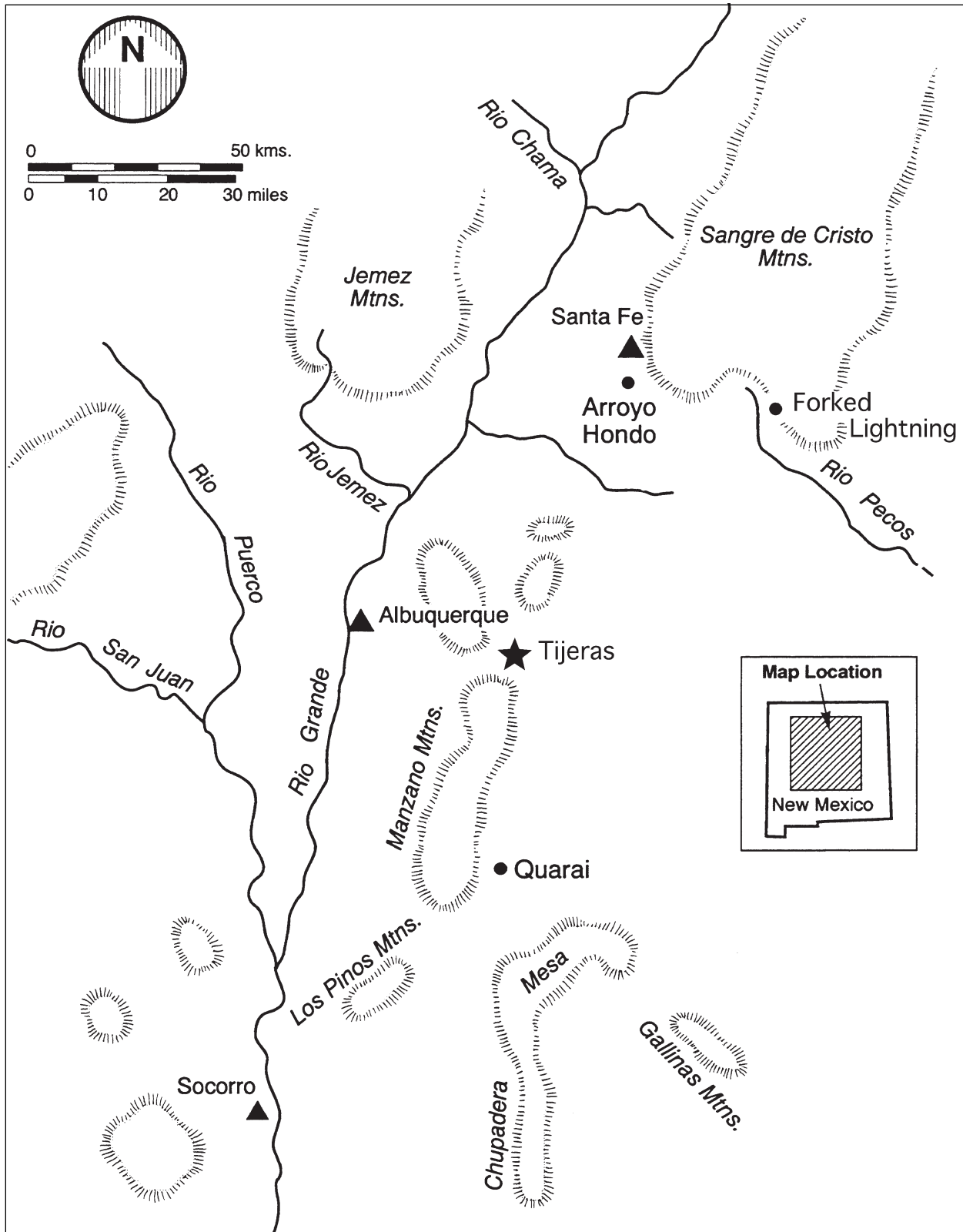
The Tijeras Pueblo Ceramic Project has analyzed over 12,000 fragments of utility ware pottery from the fourteenth century village site of Tijeras Pueblo (LA 581) in the Central Rio Grande region of New Mexico (Figure 1). These analyses suggest that Tijeras Utility Ware, which is commonly found throughout the Albuquerque district of the Central Rio Grande, shares some technological and stylistic affinities to both western Mogollon Brown Wares as well as contemporaneous Northern Rio Grande Gray Wares. However, a unique feature of the utility wares from Tijeras Pueblo is the bimodal distribution of bowl sizes and, in particular, the relatively high frequency of large bowls (> 25 cm diameter). Large bowls are common among various red- and yellow-slipped and polychrome ceramic types found throughout the Southwest and are generally assumed to have been associated with the spread of new religious practices and communal feasting activities during the Pueblo IV period (A.D. 1275-1425) (Crown 1994; Duff 2002; Mills 2007; Potter 2000; Spielmann 1998, 2002). The presence of large utility ware “feast bowls” at Tijeras Pueblo, in association with large local and imported glaze-painted red-slipped and polychrome pottery bowls, indicates that Tijeras Utility Ware vessels may have functioned within a broader range of domestic and ritual contexts than was typical either in the Northern Rio Grande or the Western Pueblo regions during the fourteenth century. Thus, the production, circulation and use of these utility ware vessels likely played a larger role in the social transformation of the Ancestral Eastern Pueblo World during the early Pueblo IV period than has previously been recognized.

## **Tijeras Pueblo in the Fourteenth Century Ancestral Pueblo World**

The Late Precontact, or Pueblo IV period (A.D. 1275-1425), in the American Southwest was marked by a series of demographic upheavals and mass migrations that led to the displacement and reorganization of local communities and regional social networks, as some areas were completely depopulated, while others received substantial influxes of new populations. At the turn of the fourteenth century, throughout large areas of the Southwest we see the emergence of wholly new aggregated towns. In the Rio Grande Valley, the cultural landscape of the Eastern Pueblos was rapidly transformed, as new identities were forged within and across these emergent communities and new social and economic alliances connected these communities to each other and to more distant areas of the Ancestral Pueblo World. Holding these new communities together was hard work. Novel

forms of sociality, such as new religious rituals and communal feasting activities, are thought to have played a central role in constituting community identities and in (re-)negotiating local and regional social networks (Mills 2007; Potter 2002; Spielmann 1998).

Associated with these demographic transformations we see dramatic changes in decorated ceramic traditions in the Rio Grande area, which were linked to similar changes that were taking place throughout the Southwest. These changes reflect a distinct break with aesthetic and technological traditions of the past and are generally thought to have been associated with the spread of new religious ideas and ritual practices (Crown 1994; Duff 2002). In the Central and Southern Rio Grande regions of New Mexico, the presence of large glaze-painted red-slipped and polychrome bowls at early aggregated village sites have similarly been interpreted as evidence for such feasting and ritual activities (Graves and



**Figure 1.** Map of Northern and Central Rio Grande regions showing location of the Tijeras Pueblo site and several other late precontact sites discussed in the text.

Spielmann 2000; Potter 2000: 479-80; Spielmann 1998). Less attention, however, has been paid to the potential role of utility ware pottery in these integrative social practices.

The site of Tijeras Pueblo (LA 581) is particularly significant because it was one of the earliest of these aggregated towns in the Central Rio Grande region. Tree-ring dates suggest that people began to coalesce at Tijeras Pueblo sometime during the last two decades of the thirteenth century (Cordell and Damp 2010). The initial occupation of the pueblo consisted of a loose aggregation of small room blocks arranged around an open area with a large circular masonry kiva. During the late fourteenth century a more compact U-shaped pueblo was constructed over some of the earlier room blocks (Figure 2). However, several of the smaller dispersed room blocks continued to be occupied and regularly refurbished. By the early fifteenth century the site appears to have been completely depopulated.

Tijeras Pueblo is strategically located within a pass between the Sandia and Manzano Mountains, about seven miles directly east of Albuquerque, New Mexico (see Figure 1). This location placed Tijeras Pueblo on the border between several emerging ethno-linguistic community clusters, including the Tano Pueblos to the north, the Southern Tiwa to the west, and the Eastern Tiwa and Tompiro Pueblos to the south. The nearby Sandia Mountains contain active Zuni shrines and traditional resource areas (Ferguson and Hart 1985), while the Keres of Santa Ana Pueblo claim historical and cultural ties to Tijeras' closest fourteenth century neighbors at Pa'ako (LA 162) and San Antonio (LA 24). Tijeras Pueblo is generally identified as an ancestral Southern Tiwa site and the Pueblo of Isleta is recognized as the closest descendent community. Nevertheless, the possibility that Tijeras Pueblo began in the late thirteenth and early fourteenth century as a coalescent multi-ethnic community seems strong.

For example, an unusual feature of the Tijeras Pueblo site is the presence of significant amounts of Western Pueblo-style glaze-painted polychrome pottery in contexts associated with early settlement

and aggregation at the site around the turn of the fourteenth century. These pottery types, which include St. Johns, Heshotauthla, and Kwakina glaze polychromes, are commonly associated with thirteenth and fourteenth century sites located far to the west of the Rio Grande Valley in the Acoma and Zuni regions of New Mexico. Chemical and mineralogical analyses of Western-style glaze polychromes from Tijeras Pueblo indicate that they represent a mix of imported vessels and local copies of Western types (James, Eckert and Habicht-Mauche 2013). Tijeras Pueblo has also yielded the earliest known tree-ring date (A.D. 1313) (Cordell 1975:27) directly associated with the glaze-painted pottery type, Agua Fria Glaze-on-Red. Agua Fria G/R represents the beginning of the local glaze ware tradition among the Eastern Pueblos—a tradition that continued in the Rio Grande area up through the Pueblo Revolt era in the late seventeenth century.

Overall, our studies of early glaze-painted pottery from Tijeras Pueblo suggest that community formation at this village was likely the result of the coalescence of local populations and Western Pueblo immigrants. The presence of imported Western-style glaze wares indicates that these immigrant groups probably maintained contacts and alliances with their natal villages, while the identification of local copies of these Western types at Tijeras Pueblo suggests that these immigrants were likely responsible for introducing glaze technology to the Central Rio Grande, along with the ideas and practices associated with the appropriate use of these pots in specific social and ritual contexts. However, this introduced suite of technologies and practices was rapidly transformed within less than a single generation. Fourteenth century Eastern Pueblo communities, such as Tijeras Pueblo, creatively re-interpreted these new ideas, technologies, and practices to meet their own cultural and aesthetic tastes and emerging social and ideological needs.

Glaze-painted bichrome and polychrome pottery rapidly replaced earlier locally made black-on-white pottery types as the dominant decorated pottery in the Central Rio Grande during the early

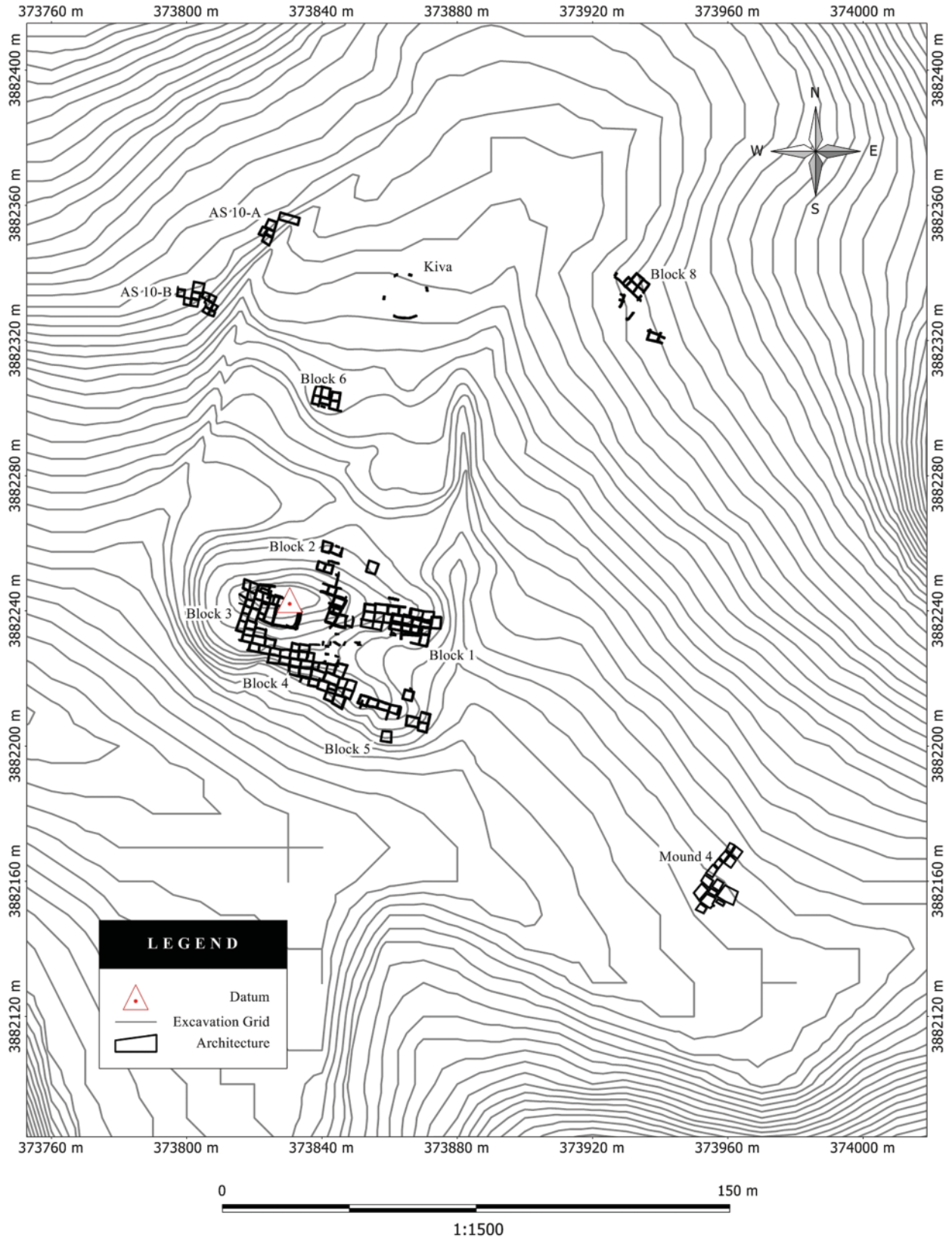


Figure 2. Archaeological map of the site of Tijeras Pueblo (LA 581) showing major excavated room blocks and large kiva.



fourteenth century. Glaze wares were produced alongside utility wares that reflect continuing technological and cultural ties to earlier ceramic traditions in the central and southern Rio Grande Valley. In turn, these utility wares show some general affinities to the Mogollon Brown Ware ceramic tradition that characterized broad regions of the southern Southwest for over a millennium. The presence of these two distinct ceramic traditions at Tijeras Pueblo and other Central Rio Grande towns indicates something of the complex history of origins, identities, and relationships that constituted these emerging coalescent communities in the fourteenth century.

### **Archaeology at Tijeras Pueblo (LA 581)**

Tijeras Pueblo (LA 581) has been the subject of a number of both small and large-scale archaeological projects, beginning in the 1930s. Most significantly, from 1971 to 1973, the University of New Mexico Summer Field School in Archaeology excavated at Tijeras Pueblo under the direction of W. James Judge (Judge 1974). Field school excavations continued at the site under the direction of Linda Cordell through 1976 (Cordell 1975; 1977a; 1977b; 1980; 1989). The UNM field schools in the 1970s excavated about a third of the site, making this series of excavations the most extensive and best-documented archaeological work at the site. Collections, site records, field notes, photographs, and other documentation from the UNM field schools are housed at the Maxwell Museum at the University of New Mexico. A total of 461 tree-ring dates were obtained from the site and the original tree-ring samples are archived at the Laboratory of Tree-Ring Research at the University of Arizona (Cordell and Damp 2010; Robinson and Cameron 1991).

### **The Tijeras Pueblo Ceramics Project**

Since 2009, Habicht-Mauche has been studying the pottery collections from the site of Tijeras Pueblo. The focus of this on-going project is to examine

how changes in pottery technology, production, and distribution were connected to large-scale regional and inter-regional social processes, such as migration, population aggregation and community formation during the Pueblo IV period in the American Southwest. In particular, the project aims to illuminate how the origin and spread of glaze-painted pottery technology among the Eastern Pueblos of the Central Rio Grande was associated with these dynamic social processes on a local and regional scale. In 2010, the first author spent six months (April through October) as a visiting researcher at the Maxwell Museum in Albuquerque examining pottery from the 1970s UNM field school excavations at Tijeras Pueblo.

The pottery sherds selected for analysis came primarily from the excavated fill of rooms associated with cutting or near cutting structural tree-ring dates. We choose rooms that represented a fairly even mix of early and late phase construction dates (Cordell and Damp 2007; Cordell et al. 2009) and that were widely distributed across both the main mound and the more dispersed room blocks at the site. In addition, the fill of two rooms that did not have associated tree-ring dates, but were identified in excavation reports as showing a transition from pure black-on-white decorated assemblages at floor contact to more mixed assemblages of black-on-white and glaze-painted pottery in their upper fill were also analyzed. Finally, the pottery from a deep test pit, designated 30N 20W T1, dug through a trash midden on the north side of the main mound was also included in the sample. This trench exhibited the full pottery sequence from the site in clear stratigraphic order. A total of approximately 3000 decorated sherds and 12,000 utility ware sherds were examined for the project. This sample represents about ten percent of the archived ceramic assemblage from the 1970s UNM field school excavations at the site.

One of the expectations of this sampling strategy was that we would be able to divide the pottery assemblage from the site into early and late components based on the structural tree-ring dates associated with the rooms from which the sherds were recovered. The idea was that this would allow

us to examine changes in the assemblage through time. Unfortunately, our analyses to date have not revealed any significant differences between pottery assemblages from the fill of early versus late construction phase rooms at Tijeras Pueblo. It may still be possible to temporally segregate our ceramic sample from the site by doing a more fine-grained seriation based on the relative frequency of temporally sensitive decorated ceramic types from individual excavation levels and features within the fill of each room. However, in the current study we examine the pottery analyzed from the site as a single undifferentiated sample.

While at the Maxwell Museum, Habicht-Mauche was assisted by a small group of volunteers recruited from the Friends of Tijeras Pueblo avocational archaeology group. These volunteers recorded data on the Tijeras Utility Ware ceramics from the sampled proveniences, while Habicht-Mauche worked on the decorated wares. Values for around 30 specific technological, formal, and stylistic attributes were recorded for each sherd in the sample. Sherds that refitted or clearly came from the same vessel were only recorded once. For decorated sherds, attribute data was entered directly into a FileMaker Pro® database; for utility ware sherds data was first recorded on standardized paper forms and later entered into the computer database.

Some of the attributes recorded include pottery ware and type, surface treatment and color, slip consistency and color, paint composition and color, rim orientation and lip form, rim diameter, vessel form and element, decorative elements and motifs, paste color, and visual temper identification. Surface, paste, and paint colors were recorded using a Munsell® Soil Color chart for rim sherds only. Currently, summary statistics are being generated, using Excel®, for each attribute for every pottery type or ware. This paper summarizes some initial results from our analyses of the Tijeras Utility Ware data, with a particular focus on paste composition, surface and paste color, surface treatment, vessel form, and vessel size (rim diameter). These utility ware data were collated and analyzed by Burgess as part of his senior thesis project in fulfillment of the requirements for the Bachelor of Arts degree

in Anthropology at the University of California, Santa Cruz. This work was performed in the Ceramic Materials Laboratory at UCSC under the supervision of Habicht-Mauche.

### **Characterizing Tijeras Utility Ware Communities of Practice**

Southwestern utility ware pottery consists of coarse, unslipped and unpainted vessels, usually jars, with plain or textured surfaces that are assumed to have been used primarily for food preparation, cooking, and storage. Utility ware pottery has long been the poor stepchild of Southwestern ceramic studies (Habicht-Mauche 1993). Even in extensive and detailed site reports the description and analysis of utility wares is often limited to a few brief and cursory paragraphs. Unpainted ceramics have traditionally been neglected by Southwestern archaeologists because they generally reflect much slower rates of formal and stylistic change and have fewer easily observable and measurable attributes. These characteristics have made it more difficult to segregate utility pottery into neat taxonomic units or types and have limited the ware's usefulness for establishing relative chronologies or tracking diachronic culture change (Habicht-Mauche 1993:13; Neuzil 2008:28-29). However, utility ware sherds are usually many times more abundant than decorated sherds on Southwestern village sites, even taking into consideration that individual utility ware vessels were often larger and more brittle and broke into many more fragments than decorated vessels. Southwestern utility ware pots reflect long-standing, stable technological traditions that functioned as an integral part of Ancestral Pueblo daily life for hundreds of years. Our analyses of Tijeras Utility Ware suggest that these often overlooked sherds are capable of providing much more detailed information on technological and social communities of practice than is generally realized. For example, shared technological attributes may reflect networks of communication, interaction, and learning among utility ware potters at various scales (Peeples 2011:174). Additionally,

more detailed studies of utility ware function and context of use have the potential to complicate and disrupt our assumptions about the social lives of pots in Ancestral Pueblo communities, which are often derived solely from the study of decorated pottery (e.g., Habicht-Mauche et al. 2006).

Traditionally, Ancestral Pueblo utility ware pottery has been divided into two broad ware categories; gray wares that are generally associated with the northern Southwest and what used to be defined as the Anasazi Culture Area and brown wares that were considered diagnostic of the Mogollon Culture Area of the southern Southwest. While these wares share certain basic technological characteristics, such as being formed by coiling, thinned by scraping on the interior, and having textured or “corrugated” exterior surfaces, they are distinguished by differences in resource selection preferences and firing regimes. Gray wares were generally made from clays with low iron content that were fired in a neutral to reducing atmosphere to produce gray to white surface colors. Brown ware potters, on the other hand, preferred iron-rich clays that fired reddish brown to brownish gray in oxidizing atmospheres (Peeples 2011:175). However, use of these vessels for cooking often leads to extensive sooting of the exteriors, which obscures their original surface colors often making both gray wares and brown wares appear dark gray or black. Wilson (1994; Wilson and Severts 1999) has argued that these regional differences in the choice of raw materials and processing techniques were largely dictated by the geologic distribution of clays across the Southwest and the specific performance characteristics of those clays. While not denying these basic geological and material constraints, others (e.g., Peeples 2011:178) have countered that consistent differences in technological, formal, and stylistic attributes between brown wares and gray wares indicate that the potters who made these wares were working within distinct communities of practice that track historically deep and more or less stable networks of interaction across broad areas of the precontact Southwest.

In the Rio Grande Valley, on the eastern periphery of the Ancestral Pueblo World, these

distinctions tend to break down to some degree, possibly due to differences in available clay sources. However, in general, utility wares in the Northern Rio Grande appear to be more closely associated with the northern gray ware tradition, while utility wares in the Southern Rio Grande show greater affinities to Mogollon Brown Wares. As we will demonstrate below, the distinction between “brown” and “gray” ware becomes somewhat ambiguous when considering Tijeras Utility Wares from the Albuquerque District of the Central Rio Grande. However, several technological and formal characteristics indicate some broad connections to the brown ware traditions of the southern Southwest.

A.V. Kidder presented one of the most comprehensive studies of utility ware pottery from the Rio Grande region of the Southwest in his report on the pottery from the sites of Pecos (LA 625) and Forked Lightning (LA 672) (Kidder and Shepard 1936). Kidder used descriptive terminology to sort utility ware pottery on the basis of differences in exterior surface treatment (i.e., Indented Corrugated, Indented Blind Corrugated, etc.). While some later researchers have tried to bring the classification of Rio Grande utility wares into compliance with the standard binomial type name system commonly used in the Southwest, such schemes have met with only limited success and have largely been abandoned. Mera (1935), for example, tried to define named types for the north central Rio Grande area based on a combination of paste characteristics (e.g., micaceous versus non-micaceous) and surface treatment. However, in practice these types proved unworkable, since multiple combinations of exterior surface treatments often occur on the same vessel and these surface treatments crosscut both micaceous and non-micaceous paste types. As a result, most researchers working in the Rio Grande continue to use some form of descriptive terminology similar to Kidder’s. These descriptive categories (Indented Corrugated, Smeared Indented Corrugated, Banded, etc.) are not equivalent to ceramic “types,” but are merely useful and convenient sherd sorting groups.



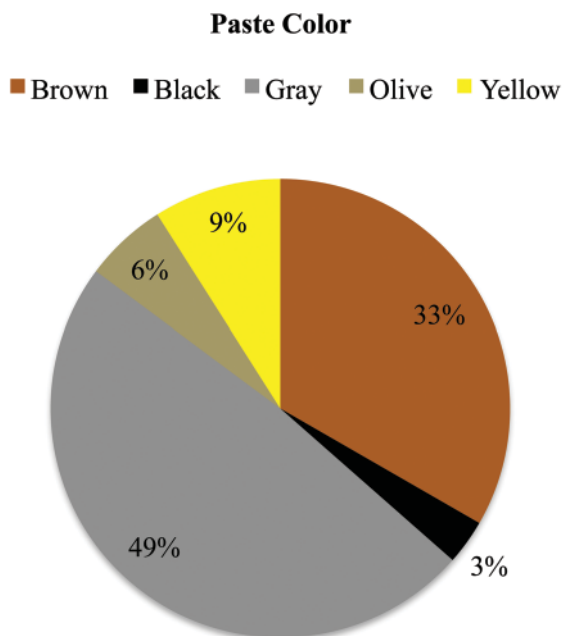
In this study, we have followed these general conventions by assigning the bulk of the utility ware from Tijeras Pueblo to a single broad ware category, Tijeras Utility Ware, based largely on paste composition. Tijeras Utility Ware, named for the type site of Tijeras Pueblo, is the predominant and characteristic utility ware recovered from late precontact sites throughout the Albuquerque Basin in the Central Rio Grande region of New Mexico. Other types of local unpainted brown ware commonly found on thirteenth and fourteenth century sites in the Central Rio Grande region, including the Albuquerque and Socorro districts, are Los Lunas Smudged (bowls) and Pitoche Brown Ware (jars) (Dyer 2008). Los Lunas and Pitoche are more refined, sand-tempered brown wares with clear Mogollon roots. In particular, they appear to be local variants of the finely made patterned corrugated brown wares of the Tularosa/Reserve region (Hegmon et al. 2000; Rinaldo and Bluhm 1956). Los Lunas Smudged bowls, in particular, are quite common at Tijeras Pueblo, but are not included in the current analysis.

In comparison, Tijeras Utility is a much coarser ware. Petrographic studies by Habicht-Mauche have shown that it was produced using residual or primary clays derived from degraded silver muscovite schist/gneiss. Similar metamorphic rocks outcrop along the lower western slopes of the Sandia and Manzano mountains (Kelley and Northrop 1975). Chemical characterization using Neutron Activation Analysis (NAA) of a sample of 30 Tijeras Utility Ware sherds from Tijeras Pueblo indicated that these vessels formed a single, fairly homogeneous compositional group (James et al. 2013). Both the mineralogical and chemical data suggest that Tijeras Utility Ware was produced locally at Tijeras Pueblo, or nearby in the Albuquerque Valley.

Beginning in the fourteenth century, potters throughout the Rio Grande Valley began to favor the use of highly micaceous residual clays to produce utility ware pottery (Habicht-Mauche 1993:14). These micaceous clays allowed for the production of very thin-walled vessels with excellent thermal properties, making them ideal

cooking pots. Micaceous cooking pots continue to be made by Eastern Pueblo, Jicarilla Apache, and Indo-Hispano potters in New Mexico up to the present day and are still highly valued by regional cooks as “bean pots.” Thus, in terms of their choice of raw materials, the potters who made Tijeras Utility Ware were participating in an emerging pan-Rio Grande technological tradition that crosscut earlier north-south divisions in utility ware production practices.

This preference for metamorphic residual clays contrasts markedly with resource selection strategies that characterized the brown ware and gray ware traditions of the earlier Ancestral Pueblos. This shift in resource choice probably explains why Tijeras Utility Ware is not easily characterized as either a “brown” ware or a “gray” ware in the classic sense. For this project, standard Munsell color designations were recorded for both the interior and exterior surfaces of 2525 Tijeras Utility Ware rim sherds from Tijeras Pueblo. Paste color was also recorded from a fresh break on each rim sherd. For ease of presentation, multiple Munsell color codes were combined into broad color categories, such as “Brown,” “Gray,” “Black,” “Olive,” and “Yellow” (Table 1). Since many exterior surfaces were sooted from cooking, masking their original color, the paste colors are probably more representative of the ware overall. Interior surfaces tend to be smudged and polished to a uniform very dark gray or black. As can be seen in Figure 3, while most Tijeras Utility Wares have gray pastes, more than a third appear more brown, olive, or yellow. After refiring to 1000° C and holding for one hour in an oxidizing atmosphere in an electric kiln, Tijeras Utility Ware sherds develop a uniform iron-rich yellowish red color throughout (5YR 5/6, 8; 2.5YR 4, 5, 6/8). This color data suggest that Tijeras Utility Wares were poorly or unevenly oxidized during their original firings or that the original clays were high in organics that were not fully combusted (Rye 1981:114-116). However, they were probably not intentionally fired in neutral or reducing atmospheres. This choice of iron-rich clays and open firing regimes is more reminiscent of the strategies associated with



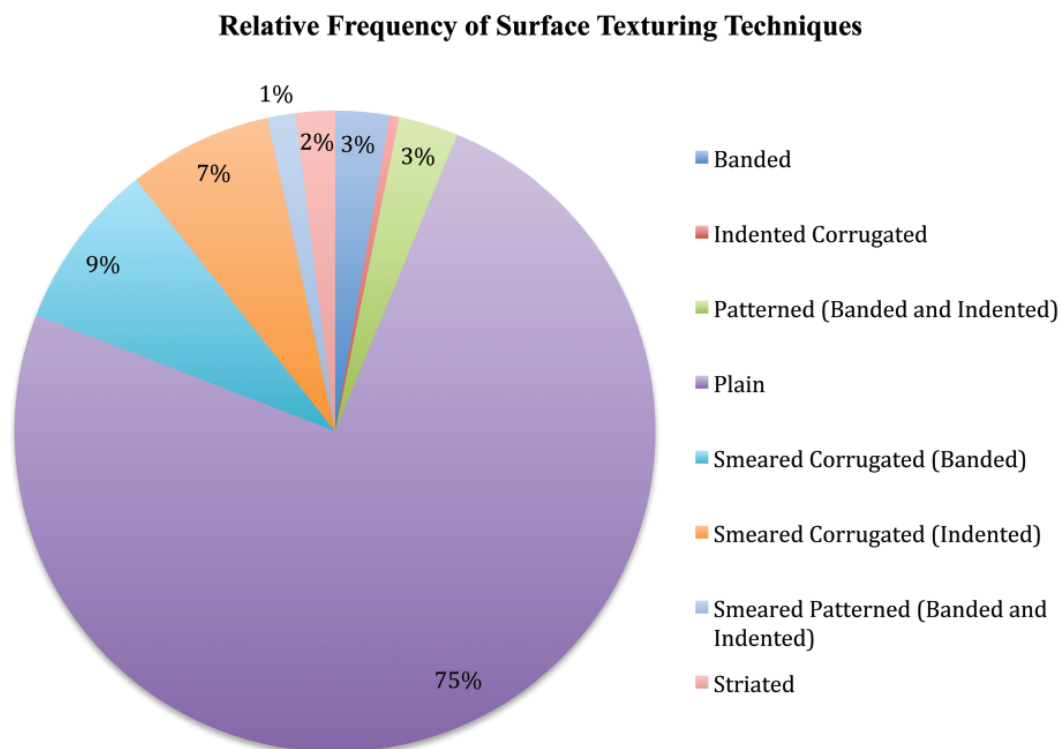
**Figure 3.** Paste colors recorded for Tijeras Utility Ware sherds from Tijeras Pueblo (LA 581).

Mogollon Brown Wares than with the northern gray ware traditions.

Throughout much of the Northern Rio Grande, utility ware pottery with all-over, distinctly corrugated (banded) or indented corrugated surfaces characterizes ceramic assemblages from the eleventh through thirteenth centuries. However, toward the end of the thirteenth century, workmanship began to decline and the partial obliteration or “smearing” of corrugated surfaces became increasingly more common (Habicht-Mauche 1993:13; Kidder and Shepard 1936; Mera 1935). In contrast, the exterior surfaces of fourteenth century Tijeras Utility Ware vessels from the Central Rio Grande, both bowls and jars, are overwhelmingly non-textured or plain (Figures 4-6). As Figure 7 illustrates, even when corrugations are present, they are often limited to a zone from just below the rim to the upper body on jars, leaving the lower body and base plain. In order to get a clearer picture of the ratio of vessels with corrugated, smeared corrugated or patterned surfaces, Figure 4 only summarizes exterior surface

**Table 1.** Summary of Combined Surface and Paste Color Categories

Color Categories	Munsell Designations
<b>Black</b>	10YR 2/1, 10YR 2.5/1, 10YR 2/1, 7.5YR 2.5/1
<b>Gray</b>	10YR 3/1,10YR 4/1,10YR 6/1,10YR 5/1,10YR 3/1,10YR 3/10,10YR 4/1,10YR 5/1,10YR 6/1,10YR 6/2,10YR 7/1,10YR 7/2,2.5YR3/1,2.5YR 5/1,5YR 3/1,5YR5/1,5YR 4/1,5YR 4/2,5YR 5/1,5YR 7/1,7.5YR 3/1,7.5YR 6/2,7.5YR 4/1,7.5YR 5/1,7.5YR 6/2,7.5YR 3/1,7.5YR 4/1,7.5YR 5/1,7.5YR 6/1,7.5YR 6/2,7.5YR 7/1,7.5YR 7/2,N2.5,N3,N4,N5,N6
<b>White</b>	10YR 8/1,7.5YR 8/2
<b>Brown</b>	10YR 4/4,10YR 5/2,10YR 6/2,10YR 6/3,10YR 7/3,10YR 3/2,10YR 4/2,10YR 4/4,10YR 5/2,10YR 5/3,10YR 5/4,10YR 5/6,10YR 6/3,10YR 6/4,10YR 7/3,10YR 7/4,10YR 8/3,2.5YR 5/2,2.5YR 4/2,2.5YR 5/2,2.5YR 6/4,7.5YR 5/2,7.5YR 5/3,7.5YR 5/4,7.5YR 6/3,7.5YR 5/3,7.5YR 4/2,7.5YR 5/2,7.5YR 5/3,7.5YR 5/4,7.5YR 6/3,7.5YR 6/4
<b>Olive</b>	5YR 4/3,5YR 5/3,5YR 5/4,5YR 6/3,5YR 6/4
<b>Pink</b>	7.5YR 7/4, 7.5YR 8/4
<b>Yellow</b>	2.5YR 6/6,2.5YR 6/8,5YR 6/6,5YR 8/4,7.5YR 6/6,7.5YR 7/6



**Figure 4.** Relative frequency of surface texturing techniques recorded from bowl and jar rim and jar neck sherds of Tijeras Utility Ware.



**Figure 5.** Tijeras Utility Ware jar from Tijeras Pueblo (LA 581) with plain exterior surface texture (78.67.947). Thomas Ocken, Photographer, Maxwell Museum of Anthropology, University of New Mexico.



**Figure 6.** Tijeras Utility Ware bowl from Tijeras Pueblo (LA 581) with plain exterior surface texture (78.67.368). Thomas Ocken, Photographer, Maxwell Museum of Anthropology, University of New Mexico.



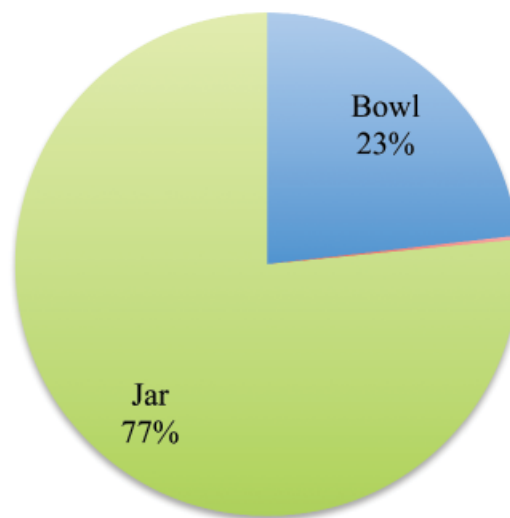
**Figure 7.** Tijeras Utility Ware jar from Tijeras Pueblo with combined smeared corrugated and plain exterior surface textures (78.67.285). Thomas Ocken, Photographer, Maxwell Museum of Anthropology, University of New Mexico.

texture data from rim (bowl and jar) and neck (jar) fragments. While at Tijeras Pueblo, over 70 percent of rim and neck fragments from Tijeras Utility Ware vessels were plain, at the contemporary Northern Rio Grande site of Arroyo Hondo, less than one percent of all analyzed Tesuque Gray Ware sherds had plain exterior surfaces (Habicht-Mauche 1993:16, Table 4). A similar pattern was noted by Kidder at the fourteenth century site of Forked Lightning, near Pecos (Kidder and Shepard 1936:306). These data suggest that utility ware potters in the Central Rio Grande may have favored distinctly different exterior surface texturing strategies compared to their Northern Rio Grande neighbors.

Another way in which Tijeras Utility Ware differs from its Northern Rio Grande counterparts is in its ratio of bowls to jars. In the Northern Rio Grande, virtually all utility ware vessels are jars. Habicht-Mauche (1993:38; Figure 21) reports only one small (13 cm rim diameter) plain ware bowl in the collection of whole vessels from Arroyo Hondo, while Kidder reports finding only two partially restorable vessels and “several fragments” of utility ware bowls at the contemporaneous site of Forked Lightning (Kidder and Shepard 1936:310). In contrast, our analysis revealed a relatively large percentage (23 percent) of Tijeras Utility Ware bowl fragments in our sampled collections from Tijeras Pueblo (Figure 8). This roughly 1:4 bowl to jar ratio is based on a tally of rim and neck sherds only, since these are the only elements from which the form of utility ware vessels can be readily distinguished. Utility ware bowls are also a common feature of late precontact Mogollon Brown Ware assemblages from the Mogollon Rim and Arizona Mountains (Mills 2007; Rinaldo and Bluhm 1956).

Among historic Pueblo groups, utility ware jars were mostly used for cooking and food storage, while bowls (mostly decorated) were predominantly used as serving and eating vessels. Thus, this north-south distinction in the production and use of utility ware bowls probably reflects regional differences in foodway practices among the late precontact Ancestral Pueblos. The vessel

### Frequency of Jars to Bowls

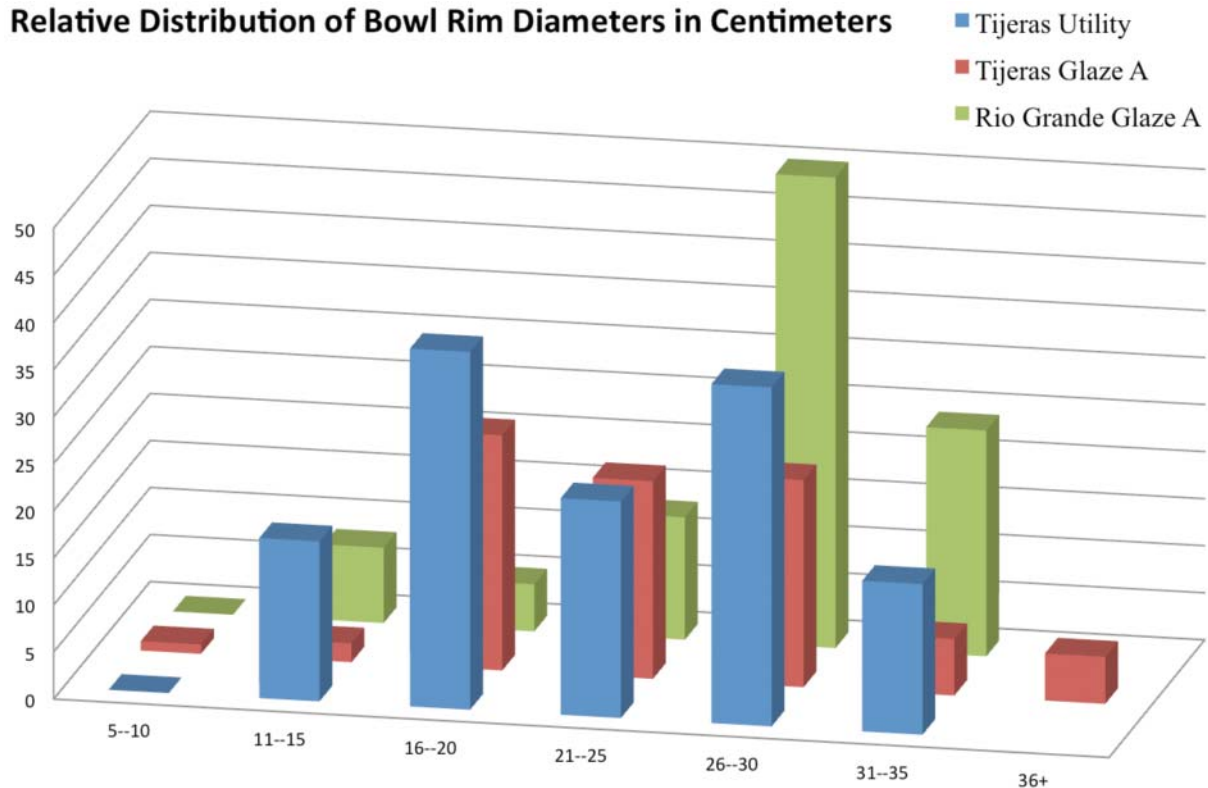


**Figure 8.** Relative frequency of Tijeras Utility Ware bowls to jars at Tijeras Pueblo based on analysis of vessel rim and neck fragments from sampled proveniences.

form data from Tijeras suggest that the foodways of people living in the Albuquerque District of the Central Rio Grande during the fourteenth century may have been more similar to those of Western Pueblo groups of the Mogollon Rim and Arizona Mountains than to other Eastern Pueblo groups living in the Northern Rio Grande.

In addition to the large number of utility ware bowls recovered from Tijeras Pueblo, the size distribution of these bowls was quite unexpected. Bowl diameters were estimated by matching rim sherds to a standard rim diameter circle chart. The measured rim diameters of Tijeras Utility Ware bowls range from 11 to 35 cm (approximately 4 to 14 inches), with a clear bimodal distribution of small (11 to 20 cm [4 to 8 in]) and large (26 to 35 cm [10 to 14 in]) bowls (Figure 9). In contrast, Mogollon Brown Ware bowl rim diameters from late thirteenth and early fourteenth century village sites in the Silver Creek district along the Mogollon Rim mostly cluster in the middle of this range, with median sizes less than 20 cm (8 in) (Mills 2007; Figure 8 and Figure 9).





**Figure 9.** Comparison of the relative distribution of rim diameter sizes (in centimeters) among Tijeras Utility Wares and Glaze A Red bowls from Tijeras Pueblo (LA 581) and Glaze A Red bowls from other fourteenth century sites throughout the Northern and Central Rio Grande as reported by Spielmann (1998).

However, this pattern of distinct classes of small (< 20 cm [8 in]) versus large (>25 cm [10 in]) bowls is typical of many of the red- and yellow-slipped and polychrome pottery types that began to spread over large areas of the Southwest during the thirteenth and fourteenth centuries (Mills 2007; Potter 2000; Spielmann 1998). In particular, a dramatic increase in the number of large-sized bowls, compared to earlier local black-on-white types, seems to be a diagnostic feature of these assemblages. The development and spread of these highly crafted, brightly colored, and iconographically charged pottery styles is widely assumed to have been associated with the introduction of new religious ideologies and ritual practices throughout the Ancestral Pueblo world. The presence of a whole new class of large serving bowls is generally interpreted as evidence for an increasing focus on communal feasting activities as central to these new practices. These communal

rituals, in turn, are thought to have been critical to processes of coalescence and social integration in the larger aggregated communities that were emerging throughout the Southwest at this time.

Among the Ancestral Eastern Pueblo villages of the Central and Southern Rio Grande, Spielmann (1998, 2002) has documented the presence of a distinct class of large glaze-painted “feast” bowls, beginning with the widespread introduction of Glaze A Red (Agua Fria Glaze-on-Red) during the early fourteenth century (Figure 9). She argues that although smaller Rio Grande Glaze Ware bowls were probably used as everyday household serving bowls, it was the technical craftsmanship and specific physical characteristics of this ware—its bright color, highly burnished surfaces, glossy paint, and iconographic designs—that made it suitable for use in ritual contexts, such as communal feasting (Spielmann 2002:202). James Potter (2000:486) suggests that the transition

from earlier unimodal pot size distributions to a distinctly bimodal pattern of small and large vessel classes may reflect an increasing formalization of the separation of domestic foodways and public feasting contexts during the Pueblo IV period.

Interestingly, at Tijeras Pueblo, while large (>25 cm [10 in] diameter) glaze-painted bowls are common, the range of Glaze A bowl sizes is less distinctly bimodal than that of Tijeras Utility Ware bowls (see Figure 9). Thus, it seems that utility ware bowls at Tijeras were being produced specifically for use as food service vessels in two very distinct social contexts, one a more intimate domestic household context and the other a more public communal feasting context. Initially, these utility ware feast bowls were probably being used alongside both imported Western Pueblo glaze-painted bowls, most likely from the Zuni or Acoma areas, as well as locally produced copies of these Western-style polychromes. As discussed above, multiple lines of evidence suggest that Western Pueblo immigrants may have introduced both glaze-paint technology, as well as the ideology and practices associated with the public and ritual use of glaze ware pottery, to Ancestral Eastern Pueblo groups in the Central Rio Grande around the turn of the fourteenth century. In early coalescent communities, such as Tijeras Pueblo, local potters, who may not have possessed the specialized skill or technical knowledge to make glaze-painted pottery, may have helped meet the increasing demand for large “feasting” vessels by constructing a new class of large utility ware serving bowls. The skill and craftsmanship required to produce these “super-sized” utility ware bowls may have transformed them from the mundane to the extraordinary (Spielmann 2002:200), making them appropriate for use in ritualized feasting contexts.

Within a generation, certainly by the 1320s, a uniquely local Rio Grande version of glaze-painted pottery was being widely produced throughout the Central Rio Grande region of New Mexico.

As this new style of pottery, and the technology required to make it, spread throughout the central core of the Eastern Pueblo World, it may have replaced imported and local Western-style glaze polychromes as the preferred pottery for use in community-based public rituals and feasting contexts. As Rio Grande Glaze Ware bowls became more pervasive throughout the region, the need for large utility ware bowls, such as those recovered from Tijeras Pueblo, also may have diminished. Testing this proposed model will require much more fine-grained temporal control of the pottery assemblage from Tijeras Pueblo and other fourteenth century sites in the Central Rio Grande.

### Summary and Conclusion

The analysis of utility ware pottery from Tijeras Pueblo is ongoing. However, we believe that the initial results of our study clearly demonstrate the value of paying greater attention to this too often poorly studied, yet ubiquitous, class of pottery from Ancestral Pueblo sites. A detailed analysis of the technical and stylistic attributes of Tijeras Utility Ware suggests a long and complex history of relationships and inter-regional interactions between the indigenous ancestral people of the Albuquerque Basin and their neighbors both to the north along the Rio Grande and to the south and west in the old Mogollon heartland. In addition, the surprising presence of a significant number of undecorated bowls, and in particular, large bowls, at Tijeras Pueblo suggests that fourteenth century utility wares functioned in much more than mundane domestic contexts. Rather, the production, circulation, and use of these utility ware “feast bowls,” alongside their flashier and better known glaze-painted counterparts, were central to the emergence and spread of new social and religious practices that transformed the Ancestral Eastern Pueblo world of the central Rio Grande during the fourteenth century.

### Acknowledgments

The authors would like to thank David Phillips for facilitating access to the Tijeras Pueblo pottery collections at the Maxwell Museum of Anthropology, University of New Mexico. We are also extremely grateful for the many volunteer hours that Bruce Walborn, Kym Campbell, Kath Linn, and Lu Kantz of the Friends of Tijeras Pueblo contributed to recording data on the utility ware collections from the site. The heroic efforts of Samantha Linford in hand-entering all of the utility ware data from over 12,000 paper forms into the computer database is also much appreciated.

In addition, we would like to thank Reese Robertson with his help weaving some Excel magic. The Tijeras Pueblo Ceramics Project was supported by a grant from the National Science Foundation (NSF 0912154), with support from the American Recovery and Reinvestment Act (ARRA) of 2009, and by funding from the UCSC Academic Senate Committee on Research and the Division of Social Sciences. This paper is dedicated to the memory of Dr. Linda S. Cordell who inspired our work on the pottery from Tijeras Pueblo.

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