ASSIGNING GEOGRAPHIC ORIGINS TO CERAMICS AT CA-RIV-1950

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ABSTRACT

Geographic origins of pottery types recovered at the Triple House site, RIV-1950, may be indicated by variation of temper. The site is located in Joshua Tree National Park, an area dominated by granitic mountains and sediments. Non-local pottery imported from the Colorado River can be regionally subdivided by temper type or lack of temper, e.g., Tumco, Parker, and Topoc Buff Wares. Pottery made locally should include temper that consists primarily of granitics or other local lithic types. The analysis of temper of Triple House site ceramics and comparison with Buff Ware collections of the Colorado River Valley may provide information suggesting areas of origin of RIV-1950 pottery.

Introduction

Southwestern ceramics have long been the subject of intensive scrutiny by archaeologists. This focus has resulted in the construction of elaborate typologies. Ceramics of the Lower Colorado River and the adjacent Mojave Desert, on the other hand, have not received the same attention. In the 1930s after completing exhaustive comparisons of native historic groups, Malcolm Rogers defined the late prehistoric complex in the Lower Colorado region as the Yuman Culture. Comparisons with historic native groups living along the river made this possible (Rogers 1936; 1939; 1966). Two other researchers, Colton and Schroeder, defined the late prehistoric complex as the Laquish branch of the Patayan Culture (Colton 1938; Schroeder 1952). Later, Schroeder, disliking Colton's term Patayan, split the culture into two groups identified as the Upland and Lowland branches. The Lowland branch included the river people (Schroeder 1975). Schroeder felt that the entire complex should still be called Yuman; that the term Patayan should be confined to what Colton called the Upland Patayan of western Arizona which include the Cerbat, Prescott, and Cohonina branches. Schroeder believed the term Laquish should be used for the lowland areas. He suggested that the Lowland branch be referred to as the Palo Verde branch of the Laquish when referring to the area from Blythe south. The northern area or the Amacava Branch, as Schroeder said, "has already been defined by Pyramid Gray" (Schroeder 1952:54). Schroeder believed, like Rogers, that individual types of the Buff Ware ceramics could be linked with specific ethnic groups.

Through his work, Rogers believed that he could assign ceramic types to a specific chronologic period by comparing the spatial relationship of sherds and trail segments along with excavation data. Based on the results, he divided the Yuman Culture into three periods, Yuman I dating from A.D. 800 to 1150, Yuman II from A.D. 1150 to contact with the Spanish, and Yuman III from around 1600 to the present (Rogers 1945). In addition to his work along the river, he examined sites with ceramic assemblages around Lake Cahuilla. As the lake held water only intermittently, sherds could be associated with specific lacusterine episodes. These episodes allowed archaeologists to date other buff ware types found in association with Salton Buff, the predominant type in that region.

Rogers believed that ceramics were introduced in the Yuma area during the Yuman I

period. It was not until the Yuman II period that ceramics were being made by local populations in the Mojave Desert. His work showed that ceramic technology early on in the Mojave Desert shared characteristics with the Anasazi to the north. During the Yuman II and III periods, there was a marked increase in the occurrence of paddle and anvil buff wares. During these two periods the Mojave River provided a natural trade route between the Colorado River and the west coast, allowing for the paddle and anvil technology to spread west (Rogers 1945).

Schroeder held an alternate view based on his excavations at Willow Beach (Schroeder 1950). He felt that ceramics were first manufactured in southern Nevada around A.D. 900. His alternative convictions are based on intrusive sherds recovered from Willow Beach which were found in association with the buff wares he named Pyramid Gray. These were found in levels assigned to the end of the Willow Beach phase dating to A.D. 900-1150. He also believed that Rogers' Yuman II period should be pushed back to approximately the same time as the Willow Beach Phase. This effectively erased Roger's Yuman I period. Schroeder was convinced that these Pyramid Gray sherds represented the first ceramics on the river. Despite recent evidence refuting much of what Schroeder believed, many still attempt to make use of his ceramic typology.

On Building Typologies

Since the early research of Malcolm Rogers, Harold Colton, and Albert Schroeder, there has been little agreement on which typology fits the data best. Central to this quagmire is the role played by specific variables such as vessel form and temper or clay variation (Seymour 1995).

From the beginning there have been two opposing approaches for building a workable typology for the Lower Colorado River Buff Wares. These can be divided into the Rogers/Waters and the Colton/Schroeder ceramic classification and identification systems; each has its own criteria. Rogers believed that surface treatment, vessel and rim form, and clay color were the most important traits for chronometric assignment. He believed temper distinctions were not of primary importance because this variable was, for the most part, dictated by environmental constraints. He did, however, believe that temper variation could be assigned to distinct ethnic groups in these deserts (Rogers 1936).

Albert Schroeder came to different conclusions after completing a survey of the Lower Colorado River (Schroeder 1952; 1958). He studied Rogers' notes and ceramic collections at the San Diego Museum of Man. Schroeder took exception to Rogers' chronology, believing Rogers had not utilized intrusive ceramics to build chronologies. In his opinion, Rogers' typology was based almost entirely on "refinements in paste, tempering, color, design, and vessel form" (Schroeder 1952:7). As a result of his work, Schroeder concluded that temper variation should be the primary variable in determining ceramic types (Schroeder 1952;1958). Therefore, he believed that two elements could be used to assign pottery to similar types; they were temper and time. Temper was the "prime factor" in identifying sources of manufacture. If there was a discrepancy in one of these two elements then they could not be the same ceramic type. Schroeder believed that "form and construction" did not provide a good basis for typing. He considered clay color important, but secondary to the significance of temper.

In 1982 Michael Waters published a refined typology (Waters 1982) that was based on the earlier work of Rogers. Using the Rogers type collection and the scant notes which remained, he lumped 46 types into nine types and their variants. Upon examing Waters' published work and type collection at the Museum of Man, it is apparent that he takes a middle ground between the opinions of Rogers and Schroeder. He places more weight on the importance of temper than Rogers but less than Schroeder (Seymour 1995).

The Lower Colorado River Buff Wares

Although little research has focused on Pyramid Gray or Topoc Buff, recent research along the ancient shores of Lake Cahuilla has been productive. This work has shown that Patayan II and III period sites in the Sonoran Desert of southern California contain buff wares that are predominantly from two sources (Schaefer 1994). They include the southern end of the Colorado River and the Salton Sea region (i.e., Lake Cahuilla). The three predominant buff ware types recovered at most locations consist of Tumco, Salton, and Colorado Buffs. Tumco Buff typically contains no temper. Poorly ground clay pieces are often included in the fabric. This is the principal type found on West Mesa sites. Waters attributes Tumco to the Patayan II period but Schaefer has found it to be common during the early part of the Patayan III period (Schaefer 1995).

The tempered sherd type Salton Buff has been described as including well-worn beach sands with rare shell inclusions. This Patayan I ceramic type is most prevalent at sites located along the eastern shore of the Salton Sea, i.e., Lake Cahuilla (Schaefer 1994). Sites located along the opposite western shore contain mostly brown wares. Colorado Buff is described as a well-made temperless ceramic containing well-ground clay with small rock inclusions. It is the widest ranging of the buff ware types and dates to the end of the Patayan II and throughout the Patayan III periods (Waters 1982:291). Although Waters shows no regional variation within this type, Rogers believed that there was, in fact, variation. He described three sub-types of Colorado Buff, each defined by region: northern, southern and eastern. Rogers believed the origin of the southern sub-type was along the Colorado River. More recent work shows that the origin of this southern sub-type of Colorado Buff may be west of the Salton Sea at San Sebastian Wash (Schaefer and Elling 1987). Other less common types found in this region include Hedges and Parker Buff Wares. Hedges Buff, which contains sherd temper that is a different color from the paste, is defined by Schaefer as a very late prehistoric type that becomes increasingly common into the late Patayan III period. In some examples the temper used in the original sherd can be seen. Finally, Parker Buff contains crushed feldspar and quartz. It was manufactured along the river from Parker Arizona north to Nevada during the Patayan II and III periods (Waters 1982).

The Brown Wares

Brown wares are manufactured from residual clay and are considered by many to be self-tempering. That is, the clay contains a great deal of mica, quartz, feldspar, and other lithic materials. Rogers constructed a working typology for the California Tizon Brown wares. His results were published by Ron May who also added some of his own data (1978). Because of the variability of the lithic inclusions present, it has been found to be extremely difficult to identify types regionally or chronologically. The wide distribution of granitics across the Mojave, producing the clays, makes identification of temper source problematic (Lyneis 1988).

Schaefer has also made distinctions within the brown wares, calling two of them Tizon Brown and Salton Brown. Schaefer, after Rogers, characterized Tizon Brown as containing abundant angular to sub-angular lithic material including mica (Schaefer 1994). If the distinction can be made, Rogers' Cronese Brown is a variation of Tizon Brown. As far as can be determined, the manufacture of Tizon Brown spans the entire ceramic period. Salton Brown contains subangular to rounded lithic grains with much less mica. Some examples with small rounded lithic grains compare with Rogers' Cahuilla Brown. This type is defined culturally as Patayan II and III. Both Tizon and Salton Brown are common at selected sites in the Lake Cahuilla region.

The Triple House Site: Synthesis

The study of ceramics from RIV-1950 or the Triple House site was completed with two goals in mind. The first was simply to characterize the assemblage and the second, to determine the origins of the Lower Colorado River Buff Wares and the brown wares at this site. That is, were they manufactured locally or were they imported

from another region?

As the name suggests, "Triple House site" contains the remains of three house pits with a possible ramada in the proximity of two of the house pits (See Warren and Schneider in this volume). Each pit is 5 sq m in size and is associated with a mound of midden. Each house pit and midden covers an area of 25 sq m. These features collectively encompass an area totaling 500 sq m or 32 percent of the 1600 sq m site. The remainder of the site is characterized by a light scatter of artifactual materials.

This collection contained few rim sherds and the majority of the remaining sherds were too small to determine vessel form. Given these circumstances, determination of ceramic type was based on temper and clay. We hypothesize that the general origin of the sherds can be determined through temper analysis based on the belief that certain temper sources are geographically specific. These general temper source patterns can provide clues to the origin of the ceramic assemblage. For example, Salton Buff contains beach sands from the lake shore. Therefore, tempered buff wares from this area should contain these sands. Further, pottery made in the Mojave Desert should include temper that consists of granite or other lithic types.

Six hundred and seventy-four sherds recovered from the surface of the Triple House site were analyzed. As expected, all sherds were paddle-and-anvil construction. The Waters typology was selected for the analysis of the buff wares. Comparisons were made with the Rogers and Waters type collections at the San Diego Museum of Man. The brown wares were divided into two types, Tizon and Salton. The Salton Brown also was presumed to have originated along the shores of the lake to the south. No determination of origin was attempted for the Tizon Brown.

Seventy-four percent (n= 499) of the total assemblage is Lower Colorado River Buff Wares. The remaining 26 percent (n=175) of the sherds are identified as brown ware. Of the Buff Wares, the assemblage contains 115 Tumco Buff, 116 Salton Buff, and 104 Colorado Buff Ware sherds. Other types present include 71 Topoc Buff, 26 Hedges Buff, and 2 Parker Buff (Table 1).

Of the greatest interest, however, are the remaining 65 sherds. For the purposes of this study, they were grouped into a distinct type that we call Desert Topoc Buff. The distinction between Desert Topoc Buff and Topoc Buff could be made through comparison of several important characteristics suggesting that they are of local or central Mojave Desert origin. According to Waters, Topoc Buff originates along the northern end of the Colorado River near Davis Dam (Waters 1982). Topoc Buff contains a wide array of shapes and sizes of white to clear quartz temper, everything from small to large and angular to round. Clays in the examples of Desert Topoc in the assemblage recovered from the Triple House site were generally more granular than the other buff wares. Unusual lithic materials were mixed in with an assortment of white or clear quartzes. Found in varying amounts, these include sub-round granite, colored quartzes, schist, and gneiss. These two variables combined make this type look like non-riverine Palomas Buff Wares from central Arizona. Of course, they were not Palomas Buff, but the two hold similar characteristics. This correspondence is attributed to the use of clay and temper from the central desert environments.

The brown ware assemblage was divided into two types: Tizon and Salton. This distinction was based on the shape and size of the lithic inclusions and the amount of mica present.

The analysis of the assemblages within each house provided some interesting results. House Pits 1 and 2 show distinct differences while House Pits 3 and 4 reveal some similarities. The 494 sherds associated with these structures totaled 73 percent of the assemblage. The remainder of the site contained only 180 ceramics. One hundred and thirty sherds were collected in and around House Pit 1, 91 at House Pit 2, and 148 at House Pit 3. House Pit

4 and its associated midden area had 125 sherds. Buff wares predominated in the assemblage in this portion of the site, totaling 356. There were only 138 brown ware sherds from these structures. Salton, Tumco, and Topoc Buffs were the dominant types at House Pit 1 (Figure 1). Tizon was the dominant brown ware, although Salton Brown was also found in significant numbers. This might suggest that the seasonal rounds of this house pit's occupants encompassed areas both to the north and south. Colorado Buff, Desert Topoc and Salton Buff were in the majority at House Pit 2. Equivalent numbers of each type of brown ware were recovered here (Figure 1). An obliterated corrugated Tizon sherd, as well as one example of a Tizon with filleting, were recovered at this structure. The presence of both Salton and Desert Topoc suggests that there was contact with the Salton Sea and desert regions to the north. Tumco Buff and Colorado Buff were the primary types at House Pits 3 and 4 (Figure 2). Desert Topoc Buff appeared in significant numbers at House Pit 4 but not at 3. The highest frequency of Hedges Buff was at House Pit 3. Numbers of this type were insignificant at the other three pits. A large number of brown wares were recovered from House Pit 3 and few from 4. The Hedges and Tumco Buffs show an affinity with groups to the south.

Conclusions

Although this study had mixed results, some general conclusions can be drawn. The presence of a variety of buff ware and brown ware types at this site can suggest several things. First, its inhabitants were far-ranging in their seasonal rounds. During these forays, trade with other groups provided the local inhabitants with an array of buff ware types. Ethnograpic records show that the Cahuilla Indians, inhabiting the Salton trough, manufactured brown wares identified by Schaefer as Salton Brown. The Cahuilla also conducted extensive trade with the Mohave to the north (Schaefer 1995:IX-8). Non-local types such as Tumco and Hedges Buff, present at the Triple House site, show contact with peoples to the southeast. In addition, Topoc Buff suggests that trade also occurred to the north. As suggested by temper and clay attributes, some of these inhabitants at the Triple House site may have also manufactured buff wares in this non-riverine desert environment. Variation in the assemblages from each pit might be interpreted as the houses being occupied at temporally distinct times or as several families coming together at the site.

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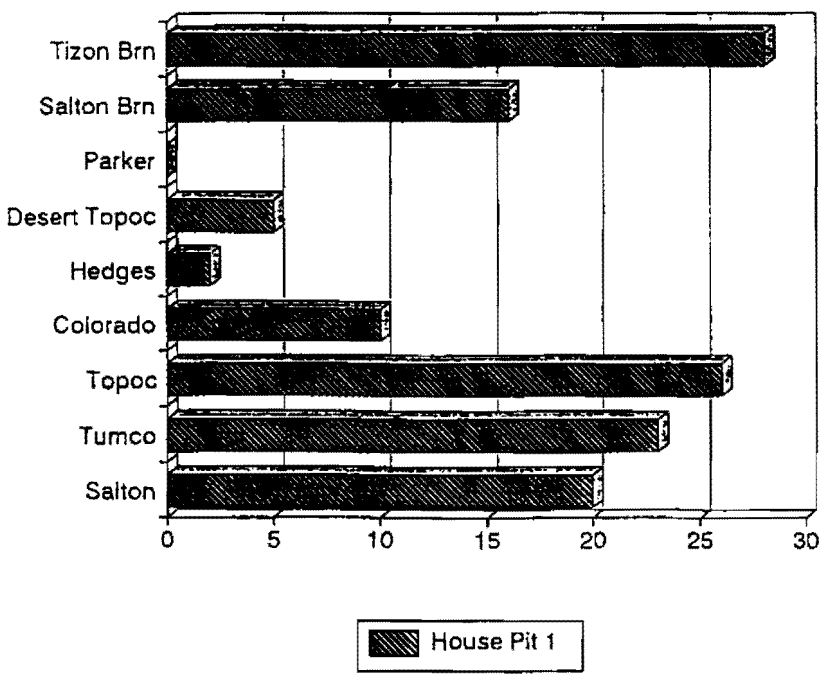
	House Pit 1	House Pit 2	House Pit 3	House Pit 4	House Pit Total	Site Total
Salton	20	12	17	17	66	115
Tumco	23	9	34	32	98	116
Topoc	26	9	11	11	57	71
Colorado	10	15	29	26	80	104
Hedges	2	2	7	2	13	26
Desert Topoc	5	14	2	20	41	65
Parker	0	1	0	0	1	2
Salton Brn	16	14	26	8	64	71
Tizon	28	15	22	9	74	104
Total	130	91	148	125	494	674

Table 1. Results of a ceramic analysis at the Triple House site, CA-RIV 1950.



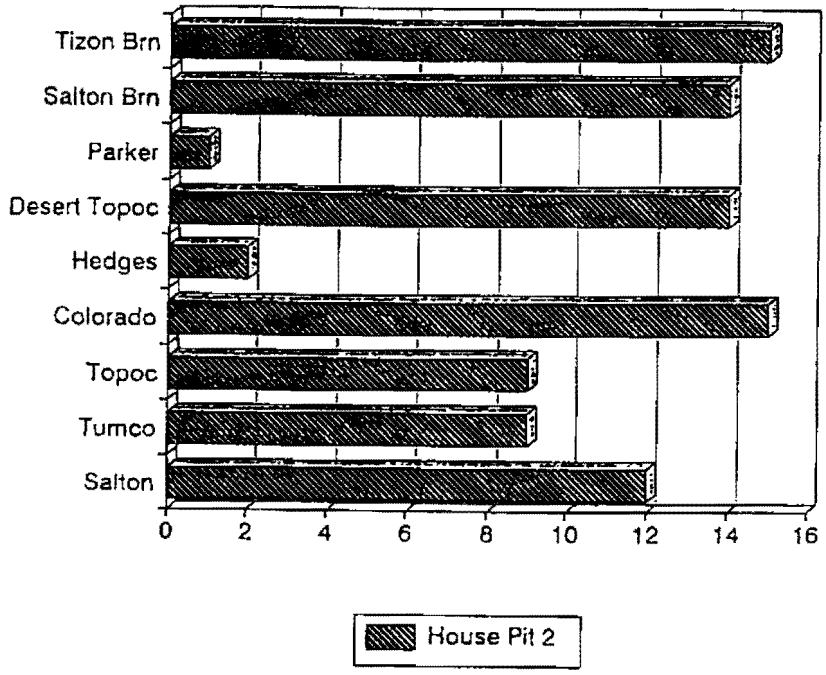
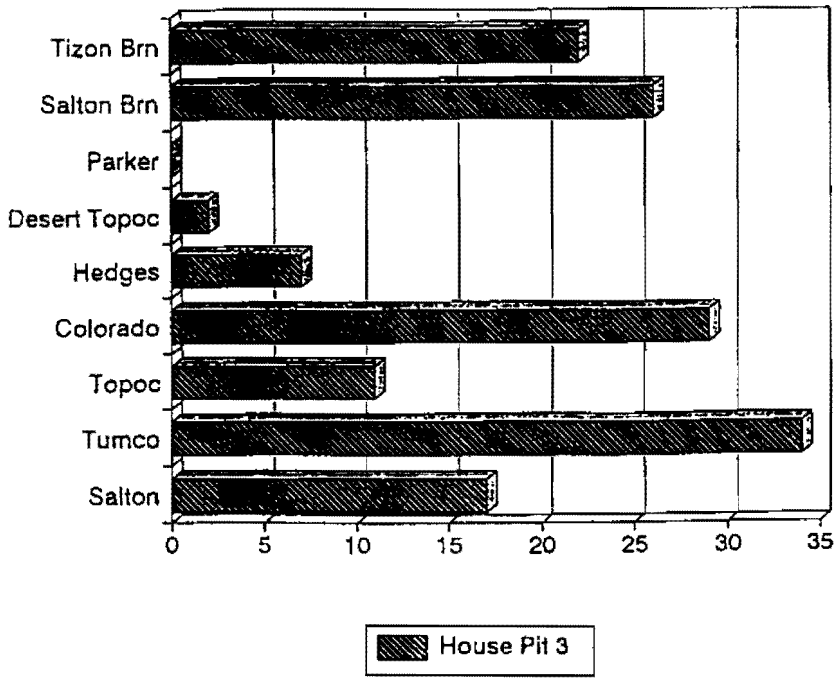


Figure 1. Ceramic type by house feature.



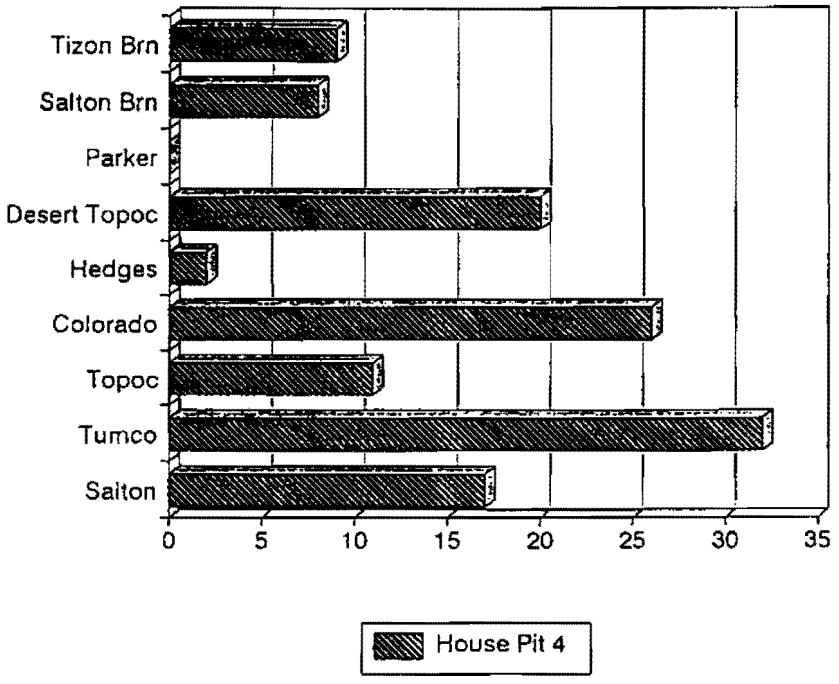


Figure 2. Ceramic type by house feature.