

HEIZER AND CLEWLOW'S SOUTHERN SIERRA PAINTED STYLE REVISITED

MARY A. GORDEN AND ANNE Q. STOLL

When Heizer and Clewlow described the Southern Sierra Painted Style in 1973, they referred to the hills and mountains that border the east side of the San Joaquin Valley as being unusually rich in rock art sites. With some modifications, their classification continues to be a useful one. This article updates the number of rock art sites in the northern portion of the Southern Sierra Painted Style area and discusses the changes in research methods and cultural interpretation in the ensuing years.

In their ground-breaking two-volume work, *Prehistoric Rock Art of California*, published nearly half a century ago, Robert F. Heizer and C. William "Billy" Clewlow (1973:43) identified a distinctive rock art painting style found in a striking concentration of pictograph sites in the foothills of California's Sierra Nevada, which they labeled the Southern Sierra Painted Style. Since their survey, advances in archaeological knowledge and rock art recording techniques have shed new light on the dating and the cultural meanings of this style. In this study, the focus is on painted sites located in Madera and Fresno counties in the northern portion of the Southern Sierra Painted Style area. The revised site and element counts are tabulated and compared, and a summary of the research methods, element categories, and cultural interpretations is presented.

BACKGROUND AND METHODS

Archaeological sites exhibiting pictographic elements of the Southern Sierra Painted Style (SSPS) are found spread across five counties in central California. This study presents an update and comparison of SSPS elements found in the northernmost section of the style range (Figure 1). Pictograph sites begin in the Fresno River watershed in Madera County. They then extend south along the western slope of the Sierra Nevada into Fresno County to form the northernmost section of the SSPS.

We use as our research base an invaluable private archive of photographs taken beginning in 1970 by Richard Burns, Gordon Redtfeldt, David Stuart, and Mary Gorden. Both Adobe Photoshop and Jon Harmon's DStretch digital enhancement program are used to make a careful study of each image. Our results show significantly increased element counts over the numbers obtained by Heizer and Clewlow in their 1973 survey.

For this analysis, we focused on a total of 421 painted elements found at 27 sites in the northern portion of the style area (Table 1; red dots on Figure 2). The number of painted sites recorded was increased from two to 11 in Madera County and from seven to 20 in Fresno County. Five sites in Madera County and four sites in Fresno County lacked drawings or photographs. Nine sites in the survey have names but no site numbers; these were given abbreviated letter names. Our primary reason for counting motifs is to assess distribution trends.

The established SSPS distribution shown in Figure 2 has been superimposed on linguistically determined ethnographic territories known for the same area. Historically, two language groups dominated the northern portion of the style area: the Mono (North Fork and Western branches) and the Northern Yokuts. Although these groups had a number of traits in common, each resided in a distinct territory and pursued a slightly different way of life from their neighbors (Spier 1978:426).

The North Fork Mono lived on the upper portions of the San Joaquin River, while the Chukchansi, Dalinichi, and Dumna Yokuts lived downstream from them. Dumna, Kechayi, and Gashow Yokuts territory extended south of the San Joaquin River. Western Mono sites were located in the upper portions of the Kings and Kaweah river drainages. The area along and south of the Kings River was occupied by Choynimni and Chukaymina Yokuts, as well as by the Wobonuch and Entimbich, a Yokuts-

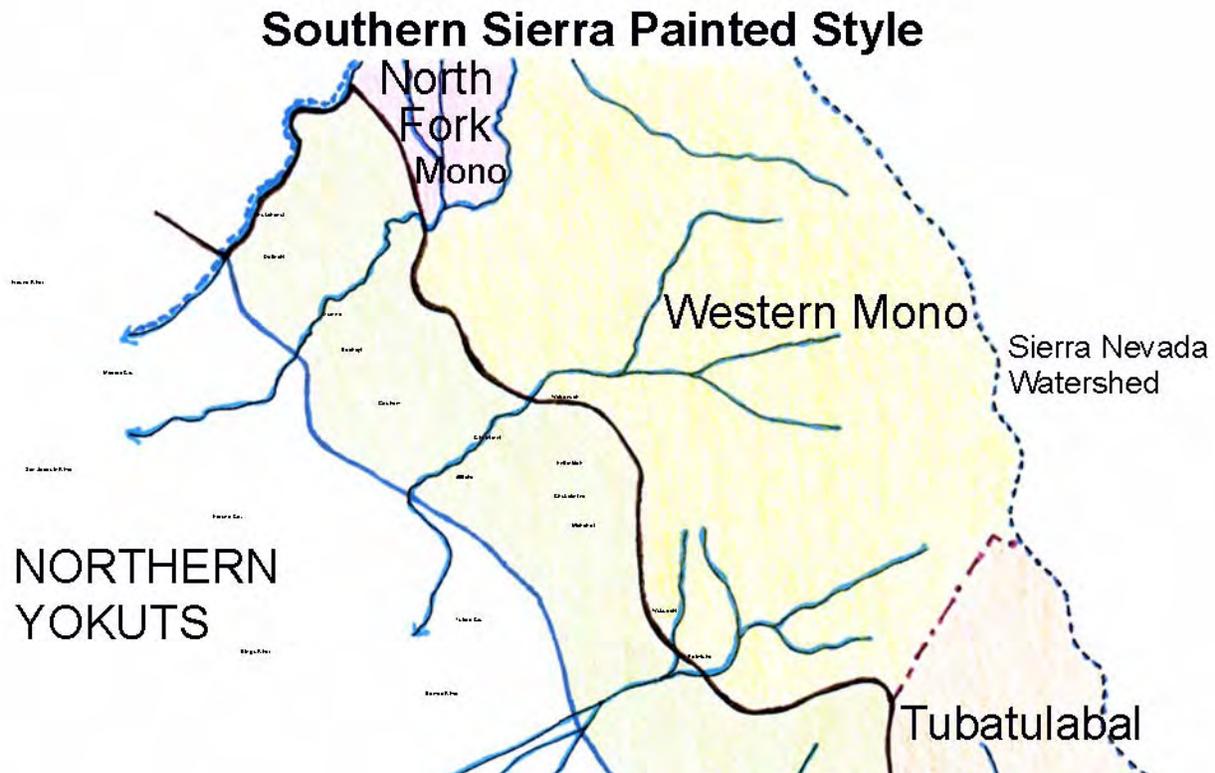


Figure 1. Distribution of Madera and Fresno County Southern Sierra Painted Style sites.

Western Mono cultural mix (Gayton 1948:143-145, 255-258; Gifford 1932:1; Golla 2011:149; McCarthy 1995:12).

Native Americans in the style area believed that humans, animals, plants, and inanimate objects such as rocks had spirits and could represent mythical or supernatural beings or other forms. Not only could these spirits, animals, and humans shift and change shape, but they had the power to do good as well as evil (Gayton and Newman 1940:34). Rock art in the style area displays characteristic elements that communicate these specific cultural ideas and beliefs (Gorden 2013:284-286).

We observe that the majority of SSPS figures are static, as opposed to dynamic. Also, the forms are generally epitomic, meaning that they lack perceptible depth. Scenes are difficult to distinguish unless rock contours or a painted boundary outlines an image or a group of figures. Further, those traits that define a human, as distinguished from an animal or supernatural spirit, can be difficult to determine. Heizer and Clewlow (1973:9) recognized that some figures appeared to be insects or supernatural creatures, images outside of their current system. They expressed the hope that future researchers would make additional categories and place these images in their correct categories. Difficulties arise when an image depicts an insect with human characteristics, or a human with bird traits, or a supernatural basket giving birth to a baby, for example (Gayton and Newman 1940:68-71; Latta 1936:77).

Nevertheless, the majority of painted elements fall within the basic categories as first identified by Heizer and Clewlow (1973:9). SSPS rock art elements are grouped into five categories: human, animal, circle-and-dot, angular, and curvilinear. In Table 1, the numbers and percentages of these five element types in Madera and Fresno County sites are compared. Limiting the number of types and variations is important because even simple elements are variable, and consistency is the goal.

Table 1. Element counts for 2014 survey of Madera and Fresno Counties.

SITE NO.	TOTAL ELEMENTS	HUMAN		ANIMAL		CIRCLE-AND-DOT		ANGLE		CURVE	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
MAD-0071	4	2	50.00	1	25.00	--	--	1	25.00	--	--
MAD-0072	1	--	--	--	--	--	--	1	100.00	--	--
MAD-0103	1	--	--	--	--	--	--	1	100.00	--	--
MAD-0542	5	--	--	--	--	--	--	2	40.00	3	60.00
MAD-1412	12	2	16.67	1	8.33	--	--	4	33.33	5	41.67
MAD-FS	32	12	44.44	1	3.70	1	3.70	11	40.74	7	25.93
Subtotal	55	16	29.09	3	5.45	1	1.81	20	36.36	15	27.27
FRE-0032	15	4	26.67	--	--	--	--	7	46.66	4	26.67
FRE-0041	64	7	10.94	1	1.56	--	--	36	56.25	20	31.27
FRE-0061	18	2	11.11	--	--	1	5.56	6	33.33	9	50.00
FRE-0063	1	--	--	--	--	--	--	1	100.00	--	--
FRE-0077	5	1	20.00	1	20.00	--	--	--	--	3	60.00
FRE-0078	3	--	--	3	100.00	--	--	--	--	--	--
FRE-0233	26	11	42.31	4	15.38	--	--	5	19.23	6	23.08
FRE-0234	149	50	33.56	11	7.38	--	--	45	30.20	43	28.86
FRE-0271	1	1	100.00	--	--	--	--	--	--	--	--
FRE-0601	1	1	100.00	--	--	--	--	--	--	--	--
FRE-1496	15	7	46.67	1	6.67	--	--	5	33.33	2	13.33
FRE-2318	1	--	--	--	--	--	--	--	--	1	100.00
FRE-CV	5	1	20.00	1	20.00	--	--	3	60.00	--	--
FRE-Ful	3	1	33.33	--	--	--	--	1	33.33	1	33.33
FRE-HC	5	1	20.00	2	40.00	--	--	--	--	2	40.00
FRE-HwR	3	--	--	3	100.00	--	--	--	--	--	--
FRE-Hut	2	--	--	1	50.00	--	--	--	--	1	50.00
FRE-OM	2	--	--	--	--	--	--	2	100.00	--	--
FRE-ShA	36	4	11.11	4	11.11	--	--	14	38.89	14	38.89
FRE-SM	8	6	75.00	--	--	--	--	2	25.00	--	--
FRE-WaV	3	1	33.34	--	--	--	--	1	33.33	1	33.33
Subtotal	366	98	26.78	32	8.74	1	0.28	128	34.97	107	29.23
Grand Total	421	114	27.08	35	8.31	2	0.48	148	35.15	122	28.98

DISCUSSION OF TABLES 1 AND 2

1) *Human elements.* The percentage of human figures within the total rose from 17 percent based on the original survey to 26 percent in 2014. One reason for the increase is that better imaging techniques revealed that what appeared to be geometric designs were actually human elements. Categories 1 and 2 include stylized or parts of figures, such as handprints or paws, when they are evident.

2) *Animal elements.* This group contains all fauna except humans. While percentage of animal images decreased in 2014, the difference was minimal. Insects and arthropods in the form of millipedes were the primary images, with a few reptiles and birds.

3) *Circle-and-dot elements.* This category is defined as one dot or circle surrounded by one or more concentric lines. The sample size in both surveys was minimal.

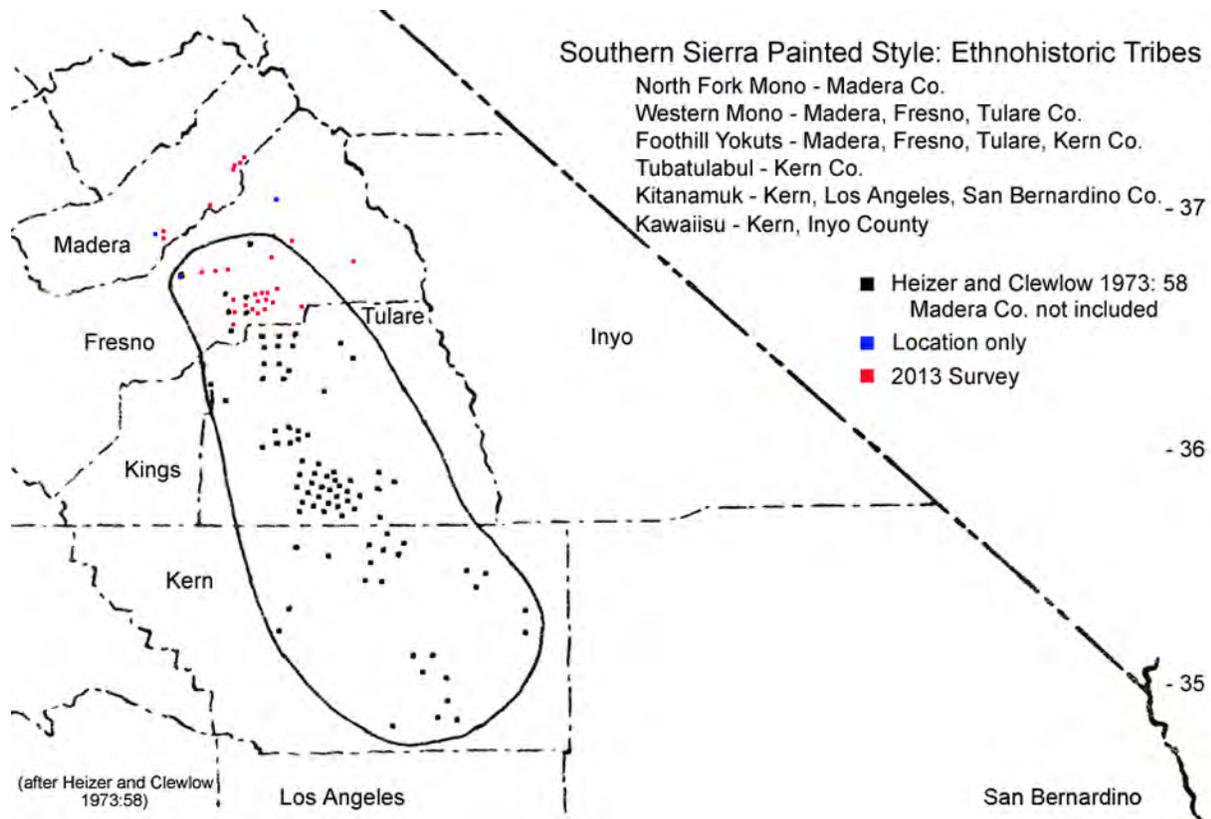


Figure 2. Ethnographic map of the Southern Sierra Painted Style Area.

Table 2. Element counts for 1973 survey (Heizer and Clewlow 1973:82, 73) and comparison with 2014 element counts.

SITE NO.	TOTAL ELEMENTS	HUMAN		ANIMAL		CIRCLE-AND-DOT		ANGLE		CURVE	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
MAD-071	5	2	40.00	--	--	--	--	2	40.00	1	10.00
MAD-072	4	--	--	--	--	--	--	4	100.00	--	--
Subtotal	9	2	22.20	--	--	--	--	6	66.67	1	11.10
FRE-32	7	2	28.60	--	--	--	--	5	71.40	--	--
FRE-41	47	8	27.60	--	--	--	--	13	17.00	26	55.30
FRE-61	17	1	5.90	--	--	--	--	8	47.00	8	47.00
FRE-185	8	3	37.50	1	12.50	--	--	1	12.50	3	37.50
FRE-232	15	--	--	--	--	--	--	--	--	15	100.00
FRE-233	17	5	29.40	5	29.40	--	--	2	11.80	5	29.40
FRE-234	66	11	16.70	10	15.10	1	1.50	9	13.60	35	53.00
Subtotal	177	30	16.90	16	9.00	1	0.60	38	21.50	92	52.00
Grand Total	186	32	17.20	16	8.60	1	0.01	44	23.66	93	50.00
HEIZER AND CLEWLOW SURVEY COUNTS COMPARED TO 2014 COUNTS											
1973	186	32	17.20	16	8.60	1	0.01	44	23.66	93	50.00
2014	421	114	27.08	35	8.31	2	0.48	148	35.15	122	28.98

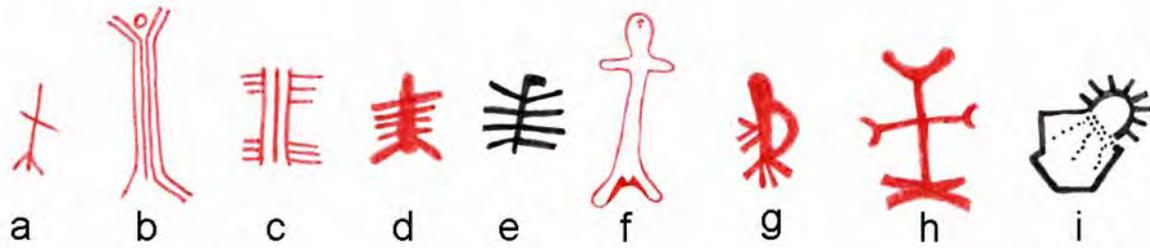


Figure 3. Anthropomorphs from Madera and Fresno Counties.

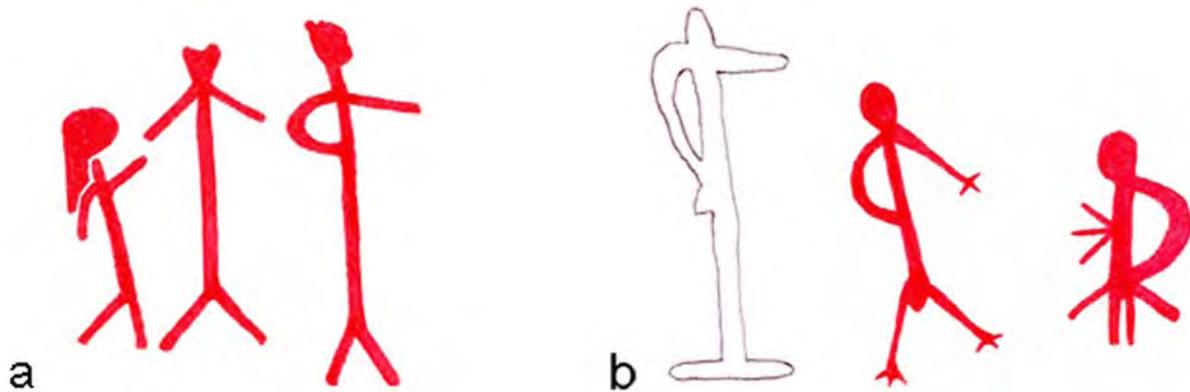


Figure 4. Dancers: (a) CA-FRE-234; (b) CA-FRE-233.

4) *Angular elements*. These figures have straight lines that may form angles. The percentage increased in the 2014 survey.

5) *Curvilinear elements*. Images in this group are composed primarily by wavy lines, and the percentage was significantly less in the 1973 survey.

Category 1: Human Elements

To help clarify the distinction between humans and other elements, the following figures illustrate the human or “anthropomorph” category (Figure 3). Human elements were analyzed for these component attributes: 10 percent of the human elements were body parts, which included vulva shapes, headless bodies, and hands.

Within the classification of human depictions, the form subcategories are line, outline, and infill. Fifty-seven percent are in the form of line drawings (Figure 3a, b, c), 19 percent are infilled (Figure 3d, e, g, h), and 24 percent are outlined (Figure 3f, i).

Gender subcategories include none, female, male, and other. The lack of gender in Figures 3, 4, and 5 is typical of paintings in the two northern counties. Only 10 percent of the anthropomorphic motifs in the northern SSPS display morphological sexual characteristics. Earlier research at Yokuts painted sites in the southern SSPS demonstrated a more frequent occurrence of diverse genders (Gorden 2009a:903-904).

The poses recorded for human elements are frontal, side, seated, dancing, and other. Dancing figures display distinctive arm and/or leg positions and sometimes show clothing or headgear (Figure 3g, h, i). Ethnographic sources report that religious adepts engaging in curing and competitive contests wore eagle-down skirts, as did the dancers, called *hat'amits'*, who accompanied the doctor in certain

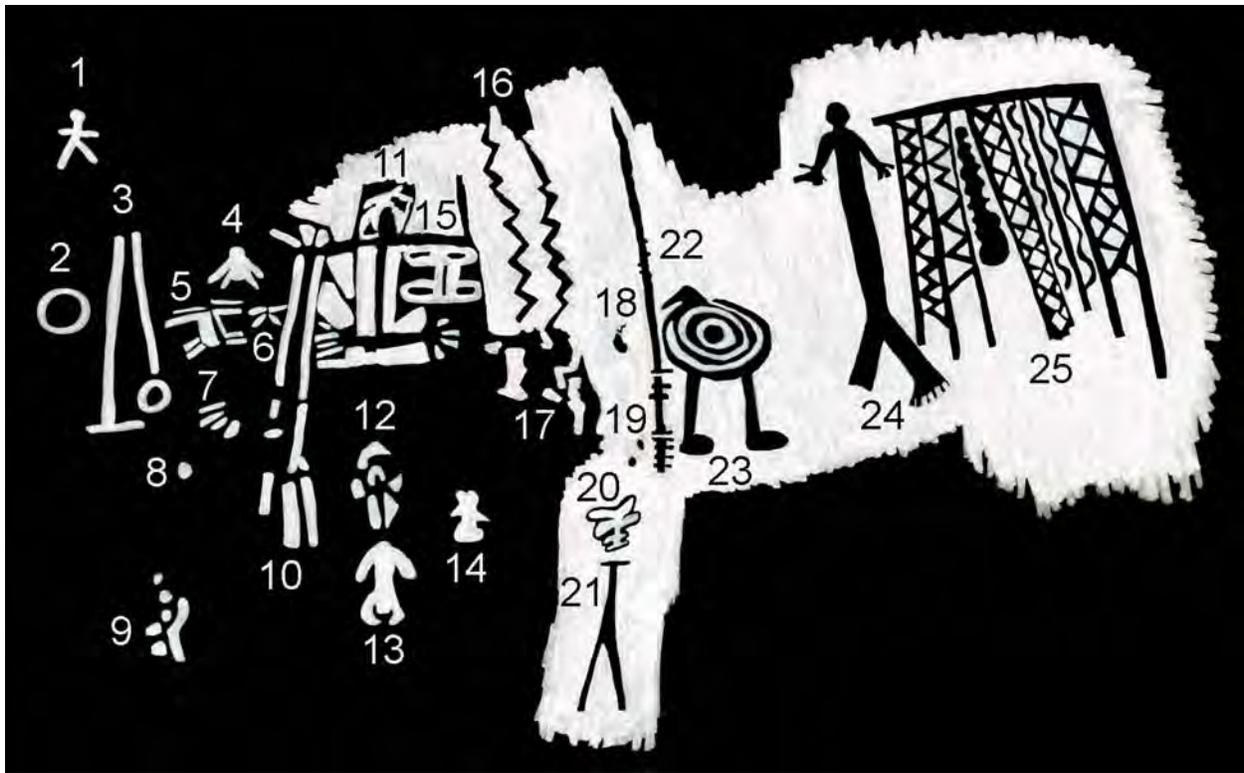


Figure 5. MAD-4TC panel.

ceremonies (Harrington 1915; Kroeber 1925:508, 1963:188, 216, 221; Figure 3g). At SSPS sites south of Fresno County, anthropomorphs of all types and genders commonly wear eagle-down skirts and magpie and crow headdresses. In the northern SSPS area, however, these figures are rare, with only 6 percent of anthropomorphs sporting headgear and only one figure appears to be wearing a skirt (Gorden 2013:297) (Figure 4b).

Dance postures depicting extended arm positions are found throughout the SSPS area (Gorden 2013:286, 293-297, 299-300). In the north portion of the SSPS area, poses such as standing face forward and a dance pose with a curved arm that ends with one hand at the waist are similar to those in the south. The human elements on the panel from Chukchaimina territory (Gayton 1948:Map 2; Figure 2) were unfortunately chalked for photography, and whoever did this added headgear, which the senior author removed in her drawing (Figure 4b). As shown in Figures 3 and 4, anthropomorphic images from Madera and Fresno counties assume distinctive postures that are recognizable throughout the SSPS (Gorden 2013:284, 286-300).

Ethnographic material helped identify some figures that have a combination of human, animal, and/or plant traits. One of the Thunder Twins (Figure 3f) depicted at FRE-32 and Walking Skeleton in Fresno (FRE-SM; Figure 3d) and Madera (MAD-241; Figure 3e) counties are examples of images that are connected to stories (Gayton and Newman 1940:48-50, 84, 90-93). FRE-61, a Kachayi village named Aileeno, has a story about the site that involves Falcon, Crow, and Measuring Worm during the time when animals were people (McCarthy 1995:13). Figure 6a is a combination of a measuring worm and a bird, which may be a reference to this story.

The farthest northeast SSPS site recorded to date, MAD-4TC, is located in North Fork Mono territory, Madera County (Figure 5). This unusual panel is composed of white paintings over a smoked background, adjoining black paintings on the light wall surface. This site is important for being a good example of the varied element types that characterize the northern expression of this style. Six percent of

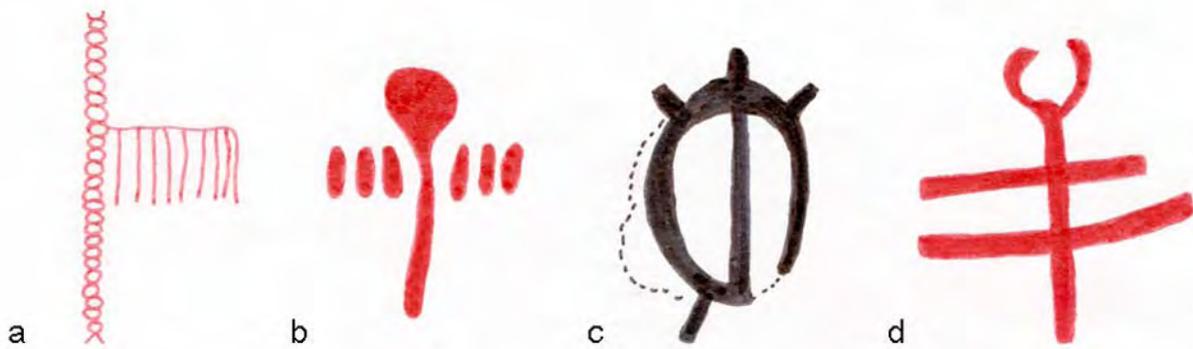


Figure 6. Animals: (a) caterpillar body with wing; (b) abstract bird; (c) turtle; (d) dragonfly.

the human images in the northern SSPS are headless, and at MAD-4TC, five out of 10 anthropomorphs are shown without a head (Figure 5, elements 5, 6, 13, 15, and 21). This design feature may represent a common belief or serve to represent a story. Also note the complex anthropomorph consisting of a black seated figure inside a white infill, topped by white hair or a mask head (Figure 5, element 11). The circle-and-dot body with human feet (Figure 5, element 23) is thought to represent a bird image.

Category 2: Animal

Animal images in the 2014 survey were slightly fewer than in 1973 (Table 1). Insects and arthropods in the form of millipedes are the primary images. A few reptiles and bird figures are known; two composite bird forms have been recorded. Depictions of mammals are absent, which is different from the southern SSPS, where mountain lions, coyotes, elk, and other creatures are commonly shown. An image in Choinimni Yokuts territory (Figure 6a) appears to show a caterpillar body with a large wing. As noted above, at a village named Aileeno, in Kechayi Yokuts territory (FRE-61; Figure 2), a story was recorded that involves Falcon, Crow, and Measuring Worm during the time when animals were people (McCarthy 1995:13).

An image from a previously undocumented site represents a combination of bird and human dancer elements (Figure 6b). Gifford (1932:39) states that the Western Mono, North Fork Mono, and Yokuts had bird cults that were important in their social structure and mythology. This cult is reflected in the number of bird paintings throughout the SSPS.

Categories 3 through 5, as defined by Heizer and Clewlow, all consist of geometric shapes, and thus these categories were not useful for several reasons. First, only two circle-and-dot images were recorded. (The circle-and-dot bird image, Figure 5 element 23, was not counted in this category.) Second, a number of the curvilinear images are recognizably plant-like (for example, Figure 7j). Harrington's (1917: Slip File 2) informants personified yucca, tobacco, and other plants as people who lived during the Creation period. Examples of abstract angular and curvilinear images are presented in Figure 7. Categories 3, 4, and 5 will be combined into Category 3, Geometrics, for comparison with the original categories.

It is important to note that labeling an image "angular" or "curvilinear" refers only to its shape and suggests that the image has no meaning to today's researchers or their audience. Angular or curvilinear images are likely to appear "abstract" to those who have no contact with the culture that made them. Ethnographic sources indicate that a variety of objects, such as tools or items that we cannot identify, can and do nevertheless convey symbolic meaning.

Within the new Category 3, Geometrics, the subgroups not included in Table 1 are flora, tools and manufactured items, and dress. Adding these elements to Category 3 was more meaningful because these geometric images may represent manufactured items, such as women's gambling trays or basket

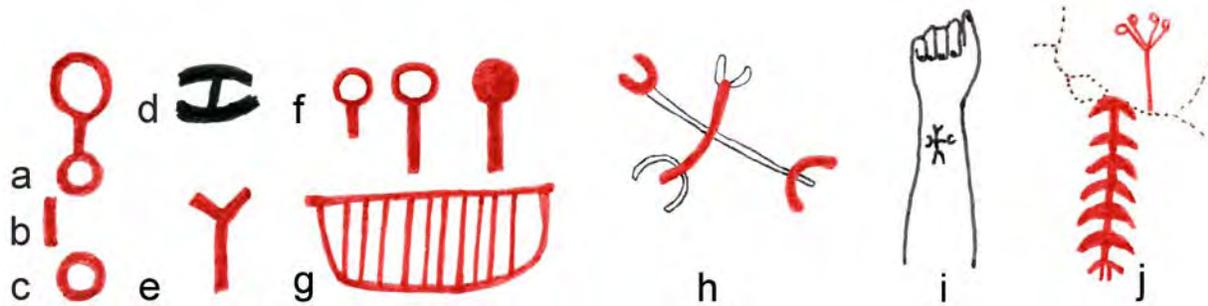


Figure 7. Geometric shapes.

trays that religious adepts used when engaged in curing and competitive contests (Kroeber 1925:507; Latta 1977:461, 635-636).

Ethnographer Frank Latta (1949:179-180) stated that the Wukchumne Yokuts knew the names of various paintings but attached no mystery to them. His notes contain a lengthy description of a visit to several Tulare County sites with his southern Yokuts informants, Dick Francisco, his wife, and her brother, Charles Dansing. At one site, Mrs. Francisco recognized a number of elements in a painted panel as representing a woman's dice tray, a millipede, and a mythological animal, among others. Latta (1934) remarked that Mrs. Francisco was extremely interested in the paintings, looking at them carefully. In addition, she related a number of stories and named natural features that she had heard about many years before. Her description is so detailed that this site can be identified as TUL-32.

Figures at other sites in the SSPS are very similar to the ones Mrs. Francisco identified. Keeping in mind Grant's (1971:233) reminder that the same motif may have different meanings, the search for meaning remains one of the biggest concerns in rock art research.

Geometric figures are 69 percent of the elements in the 2013 survey. These images clearly contain compelling pictorial and symbolic importance for the northern tribes in the SSPS, and thus we have focused specifically on them. Attempting to use the original classification system, 35 percent of the images are predominately linear, compared to 24 percent for Heizer and Clewlow. A more significant difference was found in the comparison of curvilinear elements. Twenty-nine percent were classified as curvilinear in the 2013 survey, compared to 50 percent in 1973 (Table 2). This large discrepancy between the two surveys is likely explained by the challenges and limitations of this kind of categorization. In 23 percent of the drawings, it was difficult to distinguish between a predominantly linear and a curvilinear image when both components occur in a single element in equal numbers. An unavoidable bias in favor of angular shapes may be present in the totals. For example, how is a circle connected to a line categorized? In the 2014 survey, 13 circles connected to a line (Figure 7f) are included in the Table 1, Category 5 total.

Geometric shapes are found at most sites. For example, a dumbbell-like form and a line attached to a circle (Figure 7a, f) are fairly common elements in the SSPS. These items have not yet been associated with any known objects. Latta (1977:418, 456, 486) illustrates several types of round objects. Using his example, Figure 7c could represent a charmstone, a mano or grinding stone, a supernatural arrow straightener that was used to kill a bear in a Wobonoch story, or a hammer stone like the one that killed Coyote in a Chukchansi tale (Gayton and Newman 1940:94; Rogers and Gayton 1944:200). A Y-shape (Figure 7e) could represent a cradle or fletching frame, while other shapes (Figure 7g, h, i) may be identified with basket and tattoo patterns (Gorden 2009b:10; Harrington 1915; Hudson and Blackburn 1984:325; Kroeber 1925:520, 533, 535). Two examples of ethnographically documented tattoo patterns are found in the northern SSPS (Gayton 1948:69; Gifford 1932:92; Figure 7i). Examples of Figure 5h are recorded at 15 sites throughout the SSPS. The pattern appears in painted and petroglyph forms (Gorden 2009b:10). The women's tattoo pattern composed of two vertical zigzag lines (Gifford 1932:92) is similar to the image at MAD-4CT (Figure 5, element 16).



Figure 8. Basket trays used in gambling games and rituals, FRE-234.

From Gashow territory, two images are recorded that may represent basket trays. The medallion images (Figure 8) are similar to those from another panel also located in Gashow territory depicting a large circle containing two figures, one of which wears feather headgear. During a contest for power at the mourning ceremony, a *tripne* doctor swung the basket tray over one shoulder and then the other before she or he slapped the tray to the ground (Harrington 1915; Latta 1977:635). These trays are similar in appearance to the ones Mrs. Francisco described (Latta 1934).

Abstract representations of a bow, arrow, or ritual chest markings, which are known from the drawings in Tulare and Kern counties, are apparently absent in the northern SSPS (Gorden 1996:232-233; Hudson and Blackburn 1986:321; Merriam 1955:80).

In the drawing from the original survey labeled Panel 15a, a small figure appears to be using a bow and arrow (Figure 9a). However, these images are not discernable in the photographs of the panel, and the site is FRE-61, not FRE-232.

Deeply grooved painted cups and grooves are unusual in the SSPS area (Gorden 1990:228-229). Twelve sites are recorded in Tulare County, and one in Fresno County, FRE-234 (formerly FRE-185).

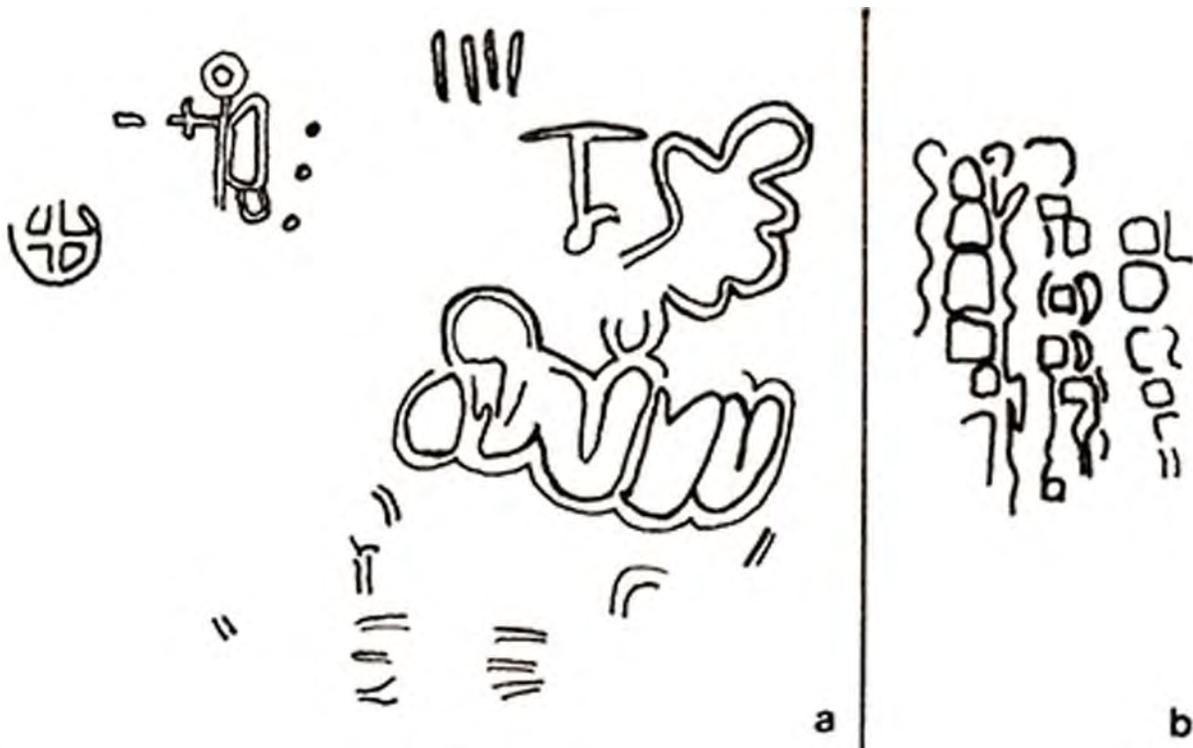


Figure 9. FRE-61, Panels 15a and 15 b in Heizer and Clewlow (1973).

The two panels that Heizer and Clewlow (1973:Figures 8d and 9e) included in their survey are a continuous panel. Photoshop manipulation of a digital image of the panel provided greater detail than shown in the earlier illustrations. All the images appear to be geometric shapes and were counted as such in both surveys.

PIGMENTS AND SOURCES

The SSPS is famous for its polychrome paintings in shades of red, black, white, and yellow (Heizer and Clewlow 1973:44). In the two northern counties, 85 percent of the paintings are in red, 8 percent in black, and 7 percent in white. Panels were usually monochromatic. This differs from images in Tulare County, which may display a variety of pigment colors (Gorden 1996:39-43). In Madera County, at MAD-4TC (Figure 5) the artists took advantage of the smoked background to paint the white images, while they painted black images on the lighter area. Figure 7h, the sacred sign, is one of two paintings in this survey where red and white paint are integral to the design. The second image is a red-and-white lozenge (Heizer and Clewlow 1973:Figure 9f). Superposition is rare, with only one recorded example. At FRE-234, two red geometrics are painted over a black derrick-like image.

Research on the sources for red and white pigments used in the northern counties indicates that the Western Mono traded hematite, a red pigment found in quantity in the Minarets in Madera County, to the Yokuts (Murdock and Webb 1966:358). Gayton (1948:147) states that white pigment in the form of clay came from deposits near Centerville. The pigment may be kaolin, which the Koyeti mined in Tulare County (Cloudman et al. 1917; Latta 1977:202). Talc, from the Friant area of Fresno County, is a very soft mineral with a soapy feel that was also used for pigment (Murdock and Webb 1966:358). A Chukchasi site on Little Fine Gold Creek, which they called Ebehiwe, meaning “White Clay,” may also have been a pigment source (Gifford 1932:61). The North Fork Mono quarried steatite, a source of white paint, at Table Mountain in Madera County and on Fish Creek Mountain in Fresno County. The names for those sites are Monitsenauka and Tüpogiwee, respectively (Gifford 1932:61). McGuire (1995:48)

dated several steatite sites south of the Kings River to 900-1600 C.E. but did not list pigment as one of the possible uses.

DATING AND CUPULES

It is estimated that the majority of the SSPS paintings were made between 500 and 1200 C.E., with a terminal date around 1600 C.E. because of the horse image present at one site (Heizer and Clewlow 1973:46). McGuire (1995:33) states that cupules at FRE-61 may at some point determine the ethnic affiliation, because they are generally believed to be an ancient feature and a product of Hokan people whom Yokusan groups replaced about 3000-2000 B.C.E. While this cupule panel at FRE-61 is on a vertical surface, it is not painted or grooved as is the panel at FRE-234 (Figure 10), located 4 mi. to the southwest. Cupules in Tulare County occur between 400 and 2,100 ft. elevation and are in various styles and patterns on vertical and horizontal site features (Gorden 1990:234). They are more varied than is usually recognized, and their use by the Yokuts is documented into historic times (Gorden 2009a:902; Hector 2009:68-76).

CONCLUSION

Overall, the images that fill the panels in the northern SSPS are similar in size, type, form, and subject matter to the ones in the south. The significant majority of the figures are single line drawings. In the 2013 survey, geometric images constitute over half of the total images, human figures comprise over a fourth of the total, and animals account for less than 10 percent, while the circle-and-dot category was negligible.

There are several differences between the SSPS art of the northern and southern counties. First, the northern sites have only red, white, and black paintings, while various hues of red, black, white, and yellow pigment were used in the south. Second, in the north the majority of the anthropomorphic motifs do not display any morphological sexual characteristics. Only one dancing anthropomorph (Figure 4b) wears a skirt, and seven have headgear (e.g., Figure 3h). This may suggest that paintings of religious adepts are unusual in the northern SSPS. Our study confirms the impressions of earlier researchers that the designs in the SSPS are preponderantly geometric or semiabstract. The statement that many sites were thought to contain mammals drawn in profile (Grant, in Heizer and Clewlow 1973:44) is not supported. In fact, the absence of the bow and arrow and of mammal imagery in the north is a notable difference between north and south.

Dance poses, tattoo designs, and mythic figures appear to be common themes throughout the SSPS. By contrast, headless and abstract anthropomorphs occurred more frequently in the north than had been predicted. At this time, the painted cup-and-groove sites appear to be concentrated in southern Fresno County and northern Tulare County. The painted cup-and-groove petroglyphs (Figure 10) mentioned in this study consisted entirely of geometric designs.

Analyzing symbol distribution demonstrates the importance of some images over others by their sheer numbers. Abstract geometric paintings were identified nearly three times as frequently as anthropomorphs in the 2013 survey. Our conclusion is that researchers should look more closely at geometric motifs, since they are clearly more important than previously assumed. These motifs may also be easier to interpret than most people believe.

Because of the manner in which the original survey divided the northern and southern SSPS areas, and because one of the parameters of this study was to use the original research area for comparison, the 28 Western Mono pictograph sites in Tulare County were not included in this analysis. Further study will include sites in this county and other counties, and will continue to pursue the goal of better understanding the SSPS rock art style.

We wish to gratefully acknowledge the help of many individuals who have given their time for the benefit of rock art research.

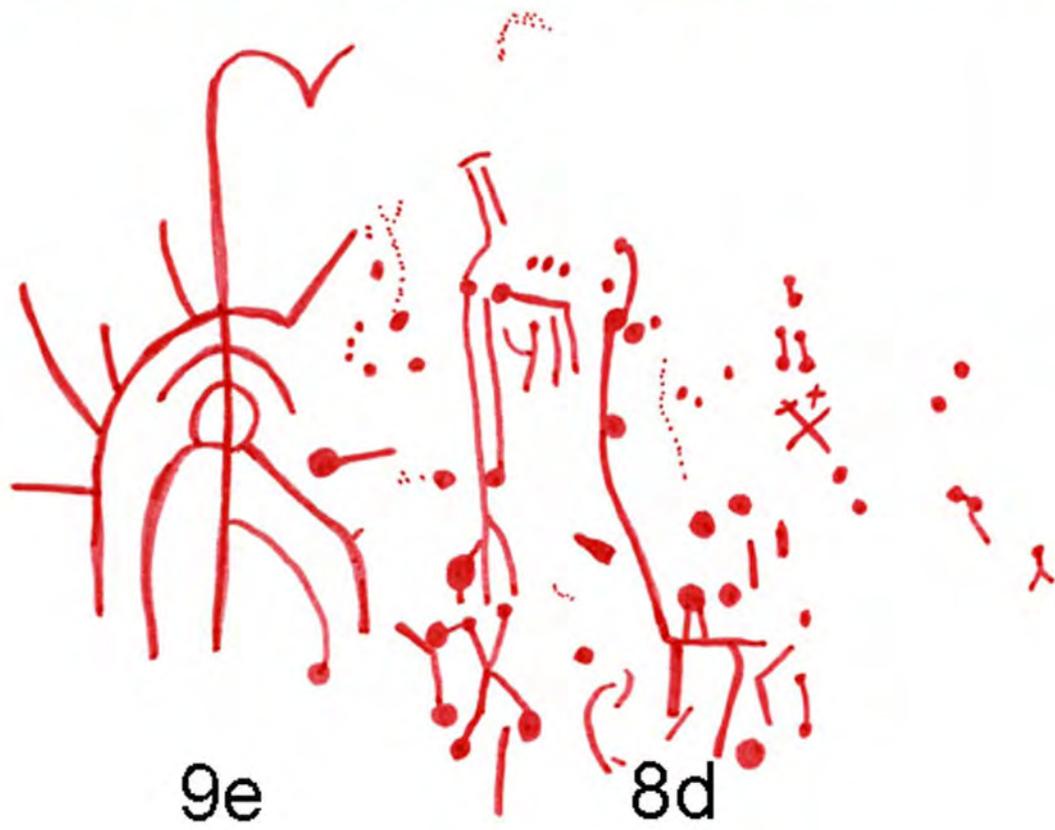


Figure 10. DStretch 1 lab photo (above) and drawing (below) of painted cup-and-groove panel, FRE-234.

REFERENCES CITED

- Cloudman, H. C., Emile Huguenin, F. J. H. Merrille, and W. Burling Tucker
1917 *Mines and Mineral Resources of San Bernardino County and Tulare County*. California State Mining Bureau, San Francisco.
- Gayton, Anna H.
1948 Yokuts and Western Mono Ethnography. *Anthropological Records* 10:1-310. University of California, Berkeley.
- Gayton, Anna H., and Stanley S. Newman
1940 Yokuts and Western Mono Myths. *Anthropological Records* 5:1-104. University of California, Berkeley.
- Gifford, Edward W.
1932 The Northfork Mono. *University of California Publications in American Archaeology and Ethnology* 31:1-65. Berkeley.
- Golla, Victor
2011 *California Indian Languages*. University of California Press, Berkeley.
- Gorden, Mary
1990 Cupule Petroglyphs in Tulare County, California. *American Indian Rock Art* 16:227-236.
1996 An Ethnographic Compilation of the Sources, Composition, and Uses of Paints by the Yokuts in the Southern San Joaquin Valley and Sierra Nevada, California. *Kern County Archaeological Society Journal* 7:36-58.
2009a Female, Male, Other: Gender and Sexual Identity in Yokuts Rock Art. 2009 *FUMDHA Mentos: Publicação of Função Museu do Homem Americano* 1:899-916.
2009b Women's Business: Symbols on the Rocks. *Utah Rock Art* 27-28:23-34.
2013 From Cradle to Grave and Beyond: Gender in Central California Rock Art. Paper presented at the annual conference of the American Rock Art Research Association, Albuquerque, New Mexico.
- Grant, Campbell
1971 Rock Art in California. In *The California Indians: A Source Book*, edited by R. F. Heizer and M. A. Whipple, pp. 233-234. 2nd ed. University of California Press, Berkeley.
- Harrington, John Peabody
1915 Ethnographic and linguistic notes on file at the Smithsonian Institution, Washington, D.C.
1917 Ethnographic and linguistic notes on file at the Smithsonian Institution, Washington, D.C.
- Hector, Susan M.
2009 Cupule Petroglyphs as Elements of the Cultural Landscape. *Journal of California and Great Basin Anthropology* 29:68-76.
- Heizer, R. F., and C. William Clewlow, Jr.
1973 *Prehistoric Rock Art of California*. 2 vols. Ballena Press, Ramona, California.
- Hudson, Travis, and Thomas C. Blackburn
1984 *The Material Culture of the Chumash Interactions Sphere, Vol. III*. Ballena Press, Menlo Park, California.
1986 *The Material Culture of the Chumash Interactions Sphere, Vol. IV*. Ballena Press, Los Altos, California.
- Kroeber, Alfred L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin No. 76. Washington, D.C.
1963 Yokuts Dialect Survey. *Anthropological Records* 11:177-251. University of California, Berkeley.

- Latta, Frank F.
1934 Latta papers. Yosemite National Park Research Library, Yosemite, California.
1936 *California Indian Folklore*. Shafter Press, Shafter, California.
1949 *Handbook of Yokuts Indians*. Kern County Museum, Bakersfield, California
1977 *Handbook of Yokuts Indians*. 2nd ed. Bear State Books, Santa Cruz, California.
- McCarthy, Helen
1995 Choinimne Ethnography and Ethnohistory. In *Test Excavations at CA-FRE-61, Fresno County, California*, by K.R. McGuire. Occasional Papers in Anthropology No. 5. Museum of Anthropology, California State University, Bakersfield.
- McGuire, Kelly R.
1995 *Test Excavations at CA-FRE-61, Fresno County, California*. Occasional Papers in Anthropology No. 5. Museum of Anthropology, California State University, Bakersfield.
- Merriam, C. Hart
1955 *Studies of California Indians*. University of California Press, Berkeley.
- Murdock, Joseph, and Robert Wallace Webb
1966 *Minerals of California: Centennial Volume (1866-1966)*. California Division of Mines and Geology Bulletin No. 189. Sacramento, California.
- Rogers, Barbara Thrall, and A. H. Gayton
1944 Twenty-Seven Chukchansi Yokuts Myths. *Journal of American Folklore* 57:190-207.
- Spier, Robert F. G.
1978 Foothill Yokuts. In *California*, edited by Robert F. Heizer, pp. 471-484. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.