Revisions to the Palomar Tradition
Model in Southern California Prehistory

Mark Q. Sutton

Abstract

In the original model of the Palomar Tradition of southern California (Sutton 2011), two phases of the San Luis Rey Pattern (I and II) were proposed. In retrospect, these two phases have proved inadequate to fully characterize the archaeological record of southern Orange County and northern San Diego County. Consequently, an earlier phase of the San Luis Rey Pattern, herein referred to as Initial San Luis Rey, is proposed to distinguish and represent the first entry of Takic groups into the area.

Introduction

The Palomar Tradition was defined by Sutton (2011) to reflect the movement of Californian traits and Takic languages first into coastal southern Orange County and environs and then into interior southern California. Two patterns were proposed: the San Luis Rey Pattern to represent the prehistoric antecedents of the ethnographic Juaneño, Luiseño, and Cupeño (see Figure 1) and the Peninsular Pattern to represent the prehistoric antecedents of the ethnographic Cahuilla. The San Luis Rey Pattern was seen as reflecting the movement of traits south along the coast between about 1,250 and 1,000 BP, while the Peninsular Pattern was viewed as reflecting the movement of traits into inland southern California after about 1,000 BP. For both patterns Sutton (2011) posited that the Californian traits and Takic languages had moved as the result of diffusion rather than a population migration, although at least some people surely did move.

However, the first arrival of Californian traits and Takic languages into southern Orange County seems to have been the result of an actual population movement and so would have a different archaeological signature than San Luis Rey I and II, both suggested to signify the later diffusion of traits into existing La Jolla III populations. Thus, it became apparent that a different archaeological classificatory entity was needed to characterize and describe the first arrival of this Takic population. Borrowing from both True and Waugh (e.g., True et al. 1974:Figures 2 and 3; also see True and Waugh 1982:35; Waugh 1986:310), this first appearance of Takic groups into southern Orange County and northern San Diego County is placed into a new San Luis Rey phase, herein called Initial San Luis Rey.

The San Luis Rey Pattern and its phases, including the newly proposed Initial San Luis Rey, is discussed below. That discussion is preceded by a general review of southern California coastal prehistory. As it is not germane to the arguments made herein, a discussion of the Peninsular Pattern is not included (see Sutton [2011] for details).

A Review of Southern California Coastal Prehistory

A number of chronological frameworks have been developed for the prehistory of coastal southern California (e.g., Rogers 1929, 1945; Meighan 1954; Wallace 1955; True 1958, 1966, 1980; Warren 1964; Reddy 2007; Sutton and Gardner 2010; Sutton 2010a, 2011; also see Moratto 1984). The first general synthesis of southern California prehistory (Wallace 1955:2; also see Wallace 1978) proposed
four “broad temporal divisions”: Horizons I (Early Man), II (Milling Stone), III (Intermediate), and IV (Late Prehistoric). This general chronology was not revised until recently (Sutton 2010a), although the “Millingstone Horizon” was redefined as the Encinitas Tradition by Warren (1968; also see Sutton and Gardner 2010). Along coastal San Diego County a general chronology using Early, Middle, and Late Archaic and Late Prehistoric is often used (e.g., York 2005; Reddy 2007). Others have focused on broad environmental periods, such as the Early, Middle, and Late Holocene (e.g., Gallegos 2002; Byrd and Raab 2007), or on even finer temporal subdivisions of those general periods (e.g., Byrd et al. 2004; Byrd and Berryman 2006).

The most recent syntheses of southern California prehistory (Sutton 2010a, 2011; Sutton and Gardner 2010; also see Warren et al. 2008) proposed the use of cultural units of definition and analysis and organized the extant archaeological information into a model of traditions, patterns, and phases. This system gave priority to cultural manifestations as opposed to the temporal periods of previous systems (see Table 1). Thus, archaeological components are assigned to phases based on their cultural traits, with chronometric data being used secondarily to determine the time spans of those phases.

The cultural classification developed by Sutton and colleagues was proposed in the hope that shifting the analytical emphasis from temporal spans to cultural units would assist in the anthropological understanding of past peoples of southern California. This shift in emphasis was also intended to foster the development of hypotheses and test implications regarding cultural adaptation and processes. This new system is briefly described below and summarized in Table 2, and the traits for the various patterns and phases are presented in Table 3.
Table 1. Concordance of Several Sequences for the Southern California Coast.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>500 to 200</td>
<td>Yuman</td>
<td>Late Prehistoric Intermediate</td>
<td>Shoshonean and Yuman</td>
<td>Period III</td>
<td>Late Holocene</td>
<td>San Luis Rey II</td>
</tr>
<tr>
<td>1,000 to 500</td>
<td></td>
<td>Millingstone</td>
<td>Encinitas Tradition</td>
<td>Period II</td>
<td>Middle Holocene</td>
<td>San Luis Rey I</td>
</tr>
<tr>
<td>1,250 to 1,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Initial San Luis Rey</td>
</tr>
<tr>
<td>3,000 to 1,250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>La Jolla III</td>
</tr>
<tr>
<td>4,000 to 3,000</td>
<td>La Jolla III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>La Jolla II</td>
</tr>
<tr>
<td>5,000 to 4,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>La Jolla I</td>
</tr>
<tr>
<td>6,000 to 5,000</td>
<td>La Jolla II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>La Jolla I</td>
</tr>
<tr>
<td>7,000 to 6,000</td>
<td>La Jolla I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>La Jolla I</td>
</tr>
<tr>
<td>8,500 to 7,000</td>
<td>San Dieguito</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>San Dieguito</td>
</tr>
<tr>
<td>10,000 to 8,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Early Holocene</td>
</tr>
<tr>
<td>12,000 to 10,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>San Dieguito</td>
</tr>
</tbody>
</table>

Table 2. The Cultural Sequence along Coastal Southern California.

<table>
<thead>
<tr>
<th>General Dates (BP)</th>
<th>Tradition</th>
<th>“Juaneño” Area</th>
<th>“Luiseño and Cupeño” Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 to 200</td>
<td>Palomar</td>
<td>San Luis Rey II</td>
<td>San Luis Rey II</td>
</tr>
<tr>
<td>1,000 to 500</td>
<td>Initial San Luis Rey</td>
<td>San Luis Rey I</td>
<td>San Luis Rey I</td>
</tr>
<tr>
<td>1,250 to 1,000</td>
<td></td>
<td>La Jolla III</td>
<td>San Luis Rey I</td>
</tr>
<tr>
<td>3,000 to 1,250</td>
<td>Encinitas</td>
<td>La Jolla II</td>
<td>San Luis Rey I</td>
</tr>
<tr>
<td>5,000 to 3,000</td>
<td></td>
<td>La Jolla I</td>
<td>San Luis Rey I</td>
</tr>
<tr>
<td>8,500 to 5,000</td>
<td></td>
<td></td>
<td>San Luis Rey I</td>
</tr>
<tr>
<td>10,000 to 8,500</td>
<td>unknown</td>
<td>San Dieguito</td>
<td>San Luis Rey I</td>
</tr>
<tr>
<td>12,000 to 10,000</td>
<td>unknown</td>
<td>Paleocoastal along the coast, Paleoindian in the interior</td>
<td>San Luis Rey I</td>
</tr>
</tbody>
</table>

Note: From this article and Sutton (2011).

Initial Peopling of Southern California

Previous scholars commonly believed that the first people into North America were Paleoindians who entered mainland North America on foot, utilizing terrestrial resources and spreading out across the continent. These Paleoindians would have had a terrestrial adaptation; considerable evidence of this has been found, although the record in California is meager.

A growing body of evidence suggests that at least some people entered the New World by moving south along the coast. A number of very early sites are known along the coasts and islands of central and southern California, apparently reflecting a...
Table 3. Traits of the Patterns and Phases of Prehistoric Cultural Traditions of the Southern California Coast.

<table>
<thead>
<tr>
<th>Tradition</th>
<th>Phase</th>
<th>Dates (BP)</th>
<th>Material Culture Traits</th>
<th>Linguistic Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paleoindian</td>
<td>-</td>
<td>ca. 12,000–10,000</td>
<td>Clovis and other fluted points, stemmed projectile points, many scrapers, and use of volcanics for flaked stone tools</td>
<td>Unknown, possibly Hokan</td>
</tr>
<tr>
<td>Paleo-coastal</td>
<td>-</td>
<td>unknown</td>
<td>Hunting important resources, general use of terrestrial resources, limited addition of marine resources, emphasis on hard seeds and marine resources</td>
<td>Unknown, a maritime adaptation, shellfish near shore line, possibly whole populations adapted to the coast</td>
</tr>
<tr>
<td>Enemians</td>
<td>La Jolla I</td>
<td>ca. 8,500–5,000</td>
<td>Cores, scrapers, planes, cobble tools, bone tools, and obsidian</td>
<td>The inland pattern, not discussed here (see Sutton 2011)</td>
</tr>
<tr>
<td></td>
<td>La Jolla II</td>
<td>ca. 5,000–4,000</td>
<td>Increased use of manos and metates, late discoidals, scraper planes, abundant manos and metates (initial appearance), scrapers, stone tools, and use of volcanics for flaked stone tools</td>
<td>Unknown, possibly Hokan</td>
</tr>
<tr>
<td></td>
<td>La Jolla III</td>
<td>ca. 4,000–3,000</td>
<td>Obsidian Butte glass, obvious middens, Universe effigies</td>
<td>Arrival of proto-Cupan to local La Jolla (Yuman) groups followed by its break-up into proto-Juaneño, proto-Luiseño, and proto-Cupeño groups</td>
</tr>
<tr>
<td></td>
<td>San Luis Rey I</td>
<td>ca. 1,250–500</td>
<td>Shellfish and plants more important than game and fish (marine mammals exploited), no cremations, mostly loosely flexed inhumations</td>
<td>Initial migration of people into southwestern Orange County, foraging for shellfish, establishment of settlements in new locations; focus on terrestrial resources, some cremations, mostly loosely flexed inhumations</td>
</tr>
<tr>
<td></td>
<td>San Luis Rey II</td>
<td>ca. 1,000–500</td>
<td>Rapid transition from La Jolla technology, increased use of mortars and pestles; adoption of Universe effigies; Rancho Bernardo rock art</td>
<td>Type-B mission sites, some cremations, some loosely flexed inhumations</td>
</tr>
<tr>
<td></td>
<td>San Luis Rey III</td>
<td>ca. 500–200</td>
<td>Fewer villages, closer to Euroamerican settlements; occasional move to missions</td>
<td>Arrival of proto-Cupan to local La Jolla (Yuman) groups; use of existing settlement but change in location, and function of special purpose sites; adoption of Chingichngish religion, some cremations</td>
</tr>
<tr>
<td></td>
<td>San Luis Rey</td>
<td>-</td>
<td>San Luis Rey rock art</td>
<td>Type-A mission sites, some cremations, some loosely flexed inhumations</td>
</tr>
<tr>
<td></td>
<td>Initial San Luis Rey</td>
<td>-</td>
<td>Appearance of “California” material culture, adoption of Universe effigies; Rancho Bernardo rock art</td>
<td>Type-A mission sites, some cremations, some loosely flexed inhumations</td>
</tr>
<tr>
<td></td>
<td>La Jolla</td>
<td>-</td>
<td>San Luis Rep I sites, some cremations, some loosely flexed inhumations</td>
<td>Arrival of proto-Cupan to local La Jolla (Yuman) groups followed by its break-up into proto-Juaneño, proto-Luiseño, and proto-Cupeño groups</td>
</tr>
<tr>
<td></td>
<td>Pauma</td>
<td>-</td>
<td>Presence of “California” material culture, adoption of Universe effigies</td>
<td>Arrival of proto-Cupan to local La Jolla (Yuman) groups followed by its break-up into proto-Juaneño, proto-Luiseño, and proto-Cupeño groups</td>
</tr>
<tr>
<td></td>
<td>Palos Verdes</td>
<td>-</td>
<td>Presence of “California” material culture, adoption of Universe effigies</td>
<td>Arrival of proto-Cupan to local La Jolla (Yuman) groups followed by its break-up into proto-Juaneño, proto-Luiseño, and proto-Cupeño groups</td>
</tr>
<tr>
<td></td>
<td>San Dieguito</td>
<td>-</td>
<td>Stemmed points (e.g., Lake Mojave), crescents, many scrapers, and use of volcanics for flaked stone tools</td>
<td>Unknown, possibly Hokan</td>
</tr>
<tr>
<td></td>
<td>Pauma</td>
<td>-</td>
<td>Presence of “California” material culture, adoption of Universe effigies</td>
<td>Arrival of proto-Cupan to local La Jolla (Yuman) groups followed by its break-up into proto-Juaneño, proto-Luiseño, and proto-Cupeño groups</td>
</tr>
<tr>
<td></td>
<td>unknown</td>
<td>-</td>
<td>Presence of “California” material culture, adoption of Universe effigies</td>
<td>Arrival of proto-Cupan to local La Jolla (Yuman) groups followed by its break-up into proto-Juaneño, proto-Luiseño, and proto-Cupeño groups</td>
</tr>
<tr>
<td></td>
<td>San Diego</td>
<td>-</td>
<td>Presence of “California” material culture, adoption of Universe effigies</td>
<td>Arrival of proto-Cupan to local La Jolla (Yuman) groups followed by its break-up into proto-Juaneño, proto-Luiseño, and proto-Cupeño groups</td>
</tr>
</tbody>
</table>

Note: Partly adapted from Sutton and Gardner (2010) and Sutton (2011).
Paleocoastal population whose adaptation and technology were separate from those of terrestrial Paleoindians and possibly indicating a separate migration.

Paleoindian Period

In interior California the Paleoindian Complex so far identified is generally known as Clovis, and it is thought to date between 12,000 and 10,000 BP (e.g., Erlandson et al. 2007). The Clovis Complex is marked by the characteristic fluted projectile point of the same name. Fluted points have an uneven distribution in California, and none have been discovered along coastal southern California. These Paleoindian groups were probably small with highly mobile populations, and they lived in small temporary camps located near permanent water sources. The nature of Clovis subsistence systems is unknown.

Other Paleoindian peoples, called Paleocoastal (ca. 12,000 to 10,000 BP; see Moratto 1984:104–109), had a maritime focus (e.g., exploitation of shellfish, fish, and marine mammals). They presumably used boats, although the earliest evidence of boat building technology in the area is dated at only about 8,000 BP (Cassidy et al. 2004:109; also see Erlandson and Moss 1996:295). Sites dating to Paleocoastal times (see Erlandson et al. 2007) along coastal central and southern California include Daisy Cave (Erlandson et al. 1996), Arlington Springs (Johnson et al. 2002), Cross Creek (Jones et al. 2002), and Eel Point (Cassidy et al. 2004).

The San Dieguito Complex

The San Dieguito Complex was first defined at the Harris site (CA-SDI-149), a multicomponent site located on the San Dieguito River. The site was tested by Malcolm Rogers in 1938 and 1939 and again by UCLA researchers in 1959 (Warren and True 1961; Warren 1966, 1967). The San Dieguito component identified by Rogers was marked by the presence of stemmed (e.g., Lake Mojave, Silver Lake) projectile points, crescents, many scrapers, a small number of milling tools, and the general use of volcanics for flaked stone tools. Rogers’ San Dieguito component dated to between 9080 ± 350 and 8540 ± 400 RYBP. Most researchers believe that the San Dieguito Complex originated ca. 10,000 BP in the deserts to the east (e.g., Lake Mojave in the Mojave Desert) and moved to the coast as conditions deteriorated (Warren et al. 1961:28; Warren and Pavesic 1963:420; Kowta 1969:68; also see Osborne 1958:48).

San Dieguito components are known along the southern California coast, including the Irvine site, or CA-ORA-64, in Orange County (Drover et al. 1983; Macko 1998) and the Agua Hedionda site, or CA-SDI-210, in northern San Diego County (Moriarty 1967). San Dieguito components have also been identified at several inland sites, including CA-RIV-2798 at Lake Elsinore (Grenda 1997) and at the Lake Perris sites CA-RIV-6069 (Horne and McDougall 2008) and CA-RIV-5086/H (McDougall 2001).

The connection between the San Dieguito Complex and the later La Jolla Pattern of the Encinitas Tradition is unclear (see Warren et al. 2008:85–86). It is possible that San Dieguito arrived from the deserts early on and transitioned into La Jolla sometime around 7,500 BP, with a change in economic focus from hunting to seed gathering (as evidenced by millstones) and shellfish exploitation (Moriarty 1967; Warren 1967; Kaldenberg 1982; Chartkoff and Chartkoff 1984; Koerper et al. 1991; Warren et al. 2008). Another possibility is that San Dieguito came from the deserts first and was replaced by La Jolla (Encinitas) groups moving south from the Los Angeles area (Smith 1987:68–69). In the first model the La Jolla Pattern could have developed in situ from a San Dieguito foundation (Gallegos 1987:30; Koerper et al. 1991; but see Warren et al. 2008:85) with San Dieguito groups adding millstone technology to their inventory as changing conditions made small seeds more economical.
The Encinitas Tradition

The Millingstone Horizon initially proposed by Wallace (1955) was subsequently renamed the Encinitas Tradition (Warren 1968; Sutton and Gardner 2010), combining the various regional expressions of the Millingstone Horizon into a single tradition. Warren (1968:6) defined the ecological adaptation of the Encinitas Tradition as reflecting a well-developed plant collecting economy with projectile points and faunal remains being rare. In the San Diego area the Encinitas Tradition is represented by the La Jolla Pattern along the coast and the Pauma Pattern in the interior.

The La Jolla Pattern

By about 8,500 BP the Encinitas Tradition along the San Diego coast is represented by the La Jolla Pattern for which three phases (La Jolla I, II, and III) have been defined (see Sutton and Gardner 2010). Many researchers in San Diego County, however, prefer to collapse the time between San Dieguito and the introduction of small projectile points and pottery (roughly between 8,500 and 1,300 BP) into “a massive, chronologically undifferentiated cultural unit” (Warren et al. 2008:30), while some (e.g., Gallegos 2002) use the terms Early, Middle, and Late Holocene and/or Early Period and Late Period to encompass this span of time. Warren (2008:36, Table 4) defined four chronological periods (I through IV) for western San Diego County and offered several “cultural assemblages” for each, including San Dieguito and La Jolla.

Generally speaking, the La Jolla Pattern in coastal San Diego County is characterized by a major reliance on shellfish, fishing in rocky nearshore areas and kelp beds, heavy exploitation of lagoons, seed gathering, and some terrestrial hunting (Sutton and Gardner 2010). Animal bones tend to be rare at La Jolla sites, reinforcing the original idea that hunting was not very important during the Encinitas Tradition. However, it is possible that hunting may have been more significant than is currently thought. Gallegos and Kyle (1991:iii) suggested that this paucity of bone might be due to poor preservation. Perhaps it was due to the “schlepp effect” (e.g., Daly 1969:149), and Sutton (1993) suggested the possibility that the bone may have been processed (e.g., on metates) and so not recovered in the 1/4-inch screen so often used. La Jolla sites are typically located on terraces around lagoons or bays (e.g., Moratto 1984; Gallegos 1992; Masters and Gallegos 1997; Byrd and Raab 2007; Warren et al. 2008:78). Warren (1964; also see Warren 1967:234–236) suggested that La Jolla groups employed a Central-Based Wandering pattern (e.g., Beardsley et al. 1956:138).

The Pauma Pattern

In inland San Diego County the Encinitas Tradition is represented by the Pauma Pattern, named for the Pauma Valley where it was first identified (True 1958:255; also see Warren et al. 1961; True 1980; True and Beemer 1982; Sutton and Gardner 2010). Pauma assemblages are quite different from San Dieguito assemblages (True 1980:37) but are similar to those of the La Jolla Pattern, with the exception of shellfish remains, which occur only rarely at inland sites (True 1980:37; also see Warren et al. 2008:71). Pauma components are known from various areas in San Diego County (e.g., San Luis Rey River, Valley Center, Escondido, San Marcos, Green Valley, and Santa Margarita River) and exhibit “generally similar aggregates of artifacts … in generally similar environmental contexts” (True and Beemer 1982:233). Indeed, an examination of the geographic distribution of the Pauma Pattern shows a tendency for Pauma sites to occur in montane settings.

Pauma components in northern interior San Diego County are characterized by a high frequency of shaped manos, a predominance of basin metates over slab metates, and cobble tools, as well as occasional scrapers, discoidals, and stone balls (see Sutton and
Gardner 2010: Table 2; also see McCown 1955; True 1958, 1980; Warren et al. 1961; True and Beemer 1982; True and Pankey 1985). Flaked stone artifacts (e.g., knives, points) are relatively uncommon, and bedrock mortars, pottery, and small triangular projectile points are “conspicuous by their absence” (True and Beemer 1982:233; also see True 1958, 1980; Warren et al. 1961; True and Pankey 1985). As noted above, archaeological assemblages of the Pauma and La Jolla patterns are similar, indicating “some as yet undefined but close relationship … between the two” (True 1980:370), possibly even that Pauma is an inland variant of La Jolla (Warren et al. 1961, 2008:71).

**The Palomar Tradition**

Sometime between about 1,250 and 1,000 years ago, Encinitas Tradition groups north of central San Diego County (La Jolla along the coast and Greven Knoll [see Sutton and Gardner 2010] in the interior) were replaced by a new archaeological entity, generally subsumed under the Late Period. The changes seen in the archaeological record include new technologies, new settlement systems, new economic foci, and transformations in artifact types. The Late Period in this area had traditionally been presumed to represent the entry of the Takic groups that occupied the region in ethnographic times. Sutton (2011) named this broad cultural assemblage the Palomar Tradition.

Within the Palomar Tradition, Sutton (2011) also proposed two regional expressions, the San Luis Rey and Peninsular patterns, each with several phases. The Palomar Tradition incorporated the idea (Sutton 2009) that, in general, people of Yuman biological background adopted “Californian” traits, including Takic languages, late in time. Sutton (2011:1) hoped that the “concept of the Palomar Tradition, patterns, and phases [would] illuminate a much more dynamic prehistory than was possible by the use of the simple temporal designation of Late Period.” People of the San Luis Rey Pattern occupied the region of southern Orange County and northern San Diego County, with people of the Peninsular Pattern well to the east; thus, it is the former pattern that is discussed here.

**A Proposed Revision to the San Luis Rey Pattern**

Sometime about 1,250 BP, Californian material culture and the proto-Cupan language diffused south from the Los Angeles Basin into southern Orange County and far northern San Diego County, areas occupied by the ethnographic Juaneño and Luiseño. This new cultural entity was identified as the San Luis Rey Pattern (a detailed discussion of this pattern was provided by Sutton [2011] and much of the following derives from that source).

The impetus for the adoption of this new cultural tradition by existing groups is not at all clear (see Sutton 2011). At least two possibilities present themselves, new technology and environmental change, perhaps acting in tandem. Considering technology first, the entry of the bow and arrow into the region should have had a significant impact on a number of cultural systems, including subsistence and settlement. It seems possible that some level of increased interpersonal violence had accompanied the introduction of the bow and arrow, but direct evidence is lacking. If new languages diffused into the region at about the same time (e.g., Sutton 2009), it seems possible that a small number of people carrying a new set of technologies could have had a significant impact on existing groups, particularly those thought to be as conservative as Encinitas Tradition groups (e.g., Sutton and Gardner 2010).

Second, it is possible that environmental change prompted the movement of traits from the coast inland and from the north to the south. For example, biotic change associated with the Medieval Climatic Anomaly (see Stine 1994; Jones et al. 1999) could have resulted in the replacement of Encinitas economies by more specialized ones that emphasized
acorns impacting milling technologies and settlement patterns. Additional environmental permutation, such as the Little Ice Age (Koerper et al. 1985), could have resulted in further adaptive changes. Lastly, the arrival of Euroamericans dramatically altered the cultural environment, requiring drastic adaptations.

Sutton (2011) distinguished two San Luis Rey phases (I and II). While a preceding San Luis Rey phase had been proposed (variously called “Early San Luis Rey” [True at al. 1974:Figure 1], “proto-San Luis Rey I” [True and Waugh 1982:Figure 2], or “Initial San Luis Rey” [Waugh 1986:300, 310]), Sutton (2011:9) argued that the assemblage described for this “initial” San Luis Rey phase was actually late Encinitas in character.

However, it is now recognized that an additional and earlier phase of San Luis Rey is needed to adequately describe the archaeological record of the region. This “new” phase differentiates the initial (ca. 1,250 BP) entry of Takic groups into southern Orange County and far northern San Diego County. Thus, the “Initial San Luis Rey” phase is adopted herein to account for this new biological population and cultural assemblage. The Initial San Luis Rey phase replaces and incorporates the early portion of San Luis Rey I as was defined by Sutton (2011). The approximate geographic extent of the three San Luis Rey phases is illustrated in Figures 2–4.

**Initial San Luis Rey**

The Initial San Luis Rey phase represents the actual southward migration of Takic people (Sutton 2009) that had diverged from Angeles IV groups (see Sutton 2010a) in the Los Angeles Basin to the north, groups that moved south to occupy southern Orange County and northern San Diego County sometime around 1,250 BP (Figure 2). Initial San Luis Rey groups spoke proto-Cupan that had diverged from proto-Gabrielino, eventually to become the Juaneño. They also

Figure 2. Proposed geographic extent of the Initial San Luis Rey phase.
Revisions to the Palomar Tradition Model in Southern California Prehistory

Figure 3. Proposed geographic extent of the Initial San Luis Rey and San Luis Rey I phases.

Figure 4. Proposed geographic extent of the San Luis Rey II phase.
were of a different physical type (Western Mono rather than Californian) (see Gifford 1926a, 1926b; Sutton 2009) and would have had a different DNA signature. Initial San Luis Rey would have been geographically constricted to southern Orange County and far northern San Diego County (effectively ethnographic Juaneño territory), and the phase would have lasted until the introduction of pottery at about 500 BP.

Initial San Luis Rey groups replaced existing Encinitas (e.g., La Jolla III) populations and brought with them “Californian” traits, including bow and arrow technology, Cottonwood Triangular projectile points, bone awls, shaft straighteners, larger quantities of steatite artifacts, and greater numbers of shell beads, although pottery and ceramic figurines were absent (cf. Sutton 2011). It is not clear whether ceramic pipes were present. In addition, there appears to have been a shift in economic emphasis to terrestrial resources with seasonal use of the coastal zone primarily to harvest bean clam (Donax sp.) (e.g., Rosenthal et al. 2001). Also of note is the appearance of the dark and greasy middens so typical of “Californian” sites. After the establishment of the Initial San Luis Rey phase, the Chingichngish religion would have been adopted (probably from the Gabrielino to the north [Kroeber 1925:640]), and the Universe effigies would have appeared (see Koerper and Chace 2009).

Initial San Luis Rey groups also brought a new settlement pattern. They established villages in new locations; in other words, Initial San Luis Rey components would not overlie La Jolla components. These settlements may have included CA-ORA-855, the location of the ethnohistoric Juaneño village of Putuidem in the San Juan Capistrano area (see Koerper and Mason 2000), and CA-ORA-22 along lower San Mateo Creek (e.g., York 2009:20–21, 24–28), the location of the ethnohistoric Juaneño village of Panhe. Initial San Luis Rey groups did not move farther south. Other aspects of their settlement and subsistence patterns remain unclear.

The components of Initial San Luis Rey should date a bit earlier than San Luis Rey I components farther south (see below). Further, the Initial San Luis Rey mortuary pattern should be inhumation, and the interred individuals should exhibit a dolichocephalic (ca. < 78) cranial index (see Sutton 2009:40–46) and have Takic (e.g., Gabrielino) DNA.

**San Luis Rey I**

San Luis Rey I reflects the diffusion and adoption of Initial San Luis Rey traits, including “Californian” material culture and proto-Cupan languages, by existing Encinitas (La Jolla) populations to the south and east of southern Orange County beginning at approximately 1,000 BP (Figure 3). San Luis Rey I would have been geographically distributed in northern San Diego County and southwestern Riverside County (effectively ethnographic Luiseño territory) and would have lasted until the introduction of pottery at about 500 BP. In this model, San Luis Rey I reflects a diffusion of language and material culture rather than a population movement, although it seems likely that at least a small number of people moved along with the language. Thus, San Luis Rey I groups would have been largely biological Yumans (Encinitas groups) that adopted the material culture and language of their neighbors to the north, the Initial San Luis Rey people.

The adoption of “Californian” material culture (diffused in from Initial San Luis Rey groups) by San Luis Rey I groups after about 1,000 BP resulted in a rapid transition from their previous La Jolla technology that had focused on milling and shellfish collecting. These new traits include the bow and arrow, Cottonwood Triangular points, bone awls, shaft straighteners, and increased use of shell beads (Sutton 2011). Pottery and ceramic figurines were not present, and it is uncertain whether ceramic pipes were present. Dark and greasy middens appeared, and the Rancho Bernardo style of rock art was adopted. An increase in the use of mortars and pestles is also noteworthy.
Settlements would have been “dispersed,” and a “forager-like” pattern would have been used.

Given that San Luis Rey I material and linguistic traits were adopted by existing Encinitas (La Jolla) populations, one would expect that the earliest San Luis Rey I components would lie on top of existing La Jolla components. The San Luis Rey components at the major site in the Santa Margarita Canyon (CASDI-10,156/12,599/H) that would later be identified as the ethnohistoric Luiseño village of Topomai are underlain by a La Jolla component (Strudwick et al. 1996; York et al. 2002), and may include a La Jolla I component. Further, San Luis Rey I (and San Luis Rey II) burial populations should exhibit a mesocephalic to brachycephalic cranial index (> 80) and have Yuman DNA (see Sutton 2009:40–46).

The mechanism of this diffusion is also unclear but might possibly involve internmarriage over an extended period of time or some sort of elite dominance, whereby an incoming group gains political control and imposes its language (e.g., Johnson and Lorenz 2006:35); perhaps this was related to the spread of the Chingichngish religion. Thus, the San Luis Rey Pattern could be viewed as the intersection of Californian material culture, proto-Cupan languages (e.g., Luiseño and Cupeño), and Yuman biology (e.g., Sutton 2009, 2011).

**San Luis Rey II**

After about 500 BP, a number of changes occurred, and both the Initial San Luis Rey and San Luis Rey I groups became San Luis Rey II (Figure 4). Technological changes included the adoption of Tizon Brown pottery, ceramic figurines and pipes, and a significant increase in bedrock mortars. Cremation appears to have become a significant mortuary treatment that may also be associated with the adoption of the Chingichngish religion. Acorns and large game became more important, while the reliance on coastal resources declined.

From the San Luis Rey I settlement-subsistence system with its “dispersed” settlements and its “forager-like” subsistence system, there emerged in San Luis Rey II a system characterized by larger and more sedentary winter and summer villages near permanent water sources and by a “collector-like” subsistence system. Thus, the San Luis Rey II settlement–subsistence adaptation is similar to that of the ethnographically and ethnohistorically documented Luiseño settlements.

**The Takic Expansion**

Byrd (2011:37, emphasis in original) noted that one of the “primary, if not the most important, unresolved issues facing scholars in the northern San Diego area” is an understanding of the expansion of Takic (a branch of Northern Uto-Aztecan [NUA]) languages into southern California, specifically the origin and timing of the arrival of Juaneño, Luiseño, and Cupeño. The long-standing model is that Takic groups came from the deserts to the north and east and entered southern California at some point in time. Such a model “has long been an accepted part of archaeological reconstructions and indeed recognized as a fundamental development that shaped the past” (Byrd 2011:37).

A number of ideas have been put forth regarding the timing of the Takic expansion. Kroeber (1925:578–579) suggested that it occurred between about 1,000 and 1,500 years ago, a date that has been correlated with the beginning of the Late Prehistoric Period (e.g., Meighan 1954; True 1966). Other ideas include a date of about 2,000 BP (Golla 2007), 3,000 BP (Kowta 1969:50; Moratto 1984:552–56), and even as early as 5,500 to 4,500 BP (Kennett et al. 2007; but see Sutton and Koerper 2009). A fundamental assumption of all these models is that the Takic expansion was a migration of people.

Most recently, it has been argued (Sutton 2009; also see Sutton 2010b) that a proto-Takic group diverged...
from NUA by about 4,000 BP and that by about 3,500 BP some of these people (the proto-Gab/Cupan sub-branch of NUA) migrated south to occupy the Los Angeles/Orange county region of coastal southern California, replacing the previous inhabitants and becoming the Gabrieleno. Sutton (2009) argued that sometime between about 1,500 and 1,000 BP some proto-Gabrielino people moved south into southern Orange County to become the Juaneño and that Takic languages (proto-Cupan) then diffused to the south and east and were adopted by existing Yuman peoples, who then developed into the Luiseño and Cupéño (and the Serrano and Cahuilla). In this model, Luiseño and Cupéño peoples would be biologically Yuman but linguistically Takic. In other words, the Luiseño and Cupéño peoples were not recent immigrants but had been resident in their territories for many thousands of years.

**Conclusions**

The San Luis Rey Pattern within the Palomar Tradition was offered by Sutton (2011) to characterize the diffusion of Californian traits and Takic languages into existing Yuman populations in portions of southern California. However, the two proposed phases of San Luis Rey (I and II) did not adequately characterize the original arrival of the new population into southern Orange County from the north, people who carried Californian traits and Takic languages that later diffused south and east. Thus, a new phase of the San Luis Rey Pattern, Initial San Luis Rey, is proposed to account for that original migration. Initial San Luis Rey groups would have been a new biological type, bringing new material culture, a new language, new settlement patterns, and a new subsistence pattern.

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