

# CULTURE ELEMENT DISTRIBUTIONS: III AREA AND CLIMAX

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THIS PAPER is related to those of Klimek and Gifford which precede it in this volume in that it deals with minimal definable elements of culture. It is dissimilar in that the distribution of these is not localized in minimal ethnic or tribal units. Although published later, it is a historical antecedent.

In 1928 I was examining the correspondence of natural areas—climatic, ecological, life-zonal, and so forth—with areas of native culture in California. The problems led me into the wider data of the continent. As a result I completed a monograph on the Cultural and Natural Areas of Native North America, which is still, and somewhat uncertainly, awaiting publication. (The more detailed investigation of California may or may not seem worth resuming in future.) As part of it I had compiled a list of eight hundred culture traits or elements occurring in native California, with their approximate geographical distribution in terms of culture areas. It was obvious that a distribution in terms of smaller units, “tribes” or ethnic groups, would be far more exact. But the data on this basis were far from complete at the time; the labor of assembling them from the literature was considerable; and their significance to the problem then being inquired into was not certain. Accordingly the more detailed task was deferred, and the distributions noted for elements were expressed more roughly in terms of culture areas and the climax and subclimax or marginal parts of areas.

When, some five years later, Klimek visited the University for the purpose of making a statistical study of the distribution of elements, this “rough” list of eight hundred elements served as a point of departure in the preparation of his more accurate list with precise tribal distributions. In this preparation, the list shrank from its original volume, mainly because for nearly half of the elements the recorded precise localizations were too few for satisfactory statistical treatment. Since then, Gifford and others have again expanded the list as a basis for new systematic field inquiry.

One purpose and result of Klimek’s work was the establishment of culture areas on an objective, inductive basis. Those determined by him agree fairly with those previously formulated by myself subjectively, on the basis of prolonged if unsystematic experience, and set forth in the Handbook of California Indians.

However, the culture areas in terms of which I classified elements in 1928 differed somewhat from those in the Handbook. First, the boundaries were somewhat altered in detail, and a new Northeast California area was carved out of the older Central California or still larger California-Great Basin area.

Second, the culture foci or climaxes were now territorially expressed in terms of groups or tribes instead of points on the map. It is therefore necessary to define the areas as here dealt with, and their climaxes.

*Northwest, Climax:* Yurok, Hupa, Karok.

*Subclimax and Margin:* Tolowa, Wiyot, Shasta, Chimariko, Athabascans except Hupa and Kato.

*Northeast:* Modoc, Achomawi, Atsugewi.

*Central, Climax I:* Pomo of Clear lake and Russian river.

*Climax II:* Patwin, Maidu, and Nisenan of Sacramento river.

*Remainder:* Kato, Yuki, Coast Yuki, Coast Pomo, (Central) Wintun and (Northern) Wintu, Mountain and Foothill (NE and upper NW) Maidu, Foothill Nisenan, all Miwok (Sierra, Plains, Lake, Coast), all Yokuts, Western Mono, Tübatulabal, Kawaiisu, Kitanemuk Serrano, Salinan, Esselen, Costano.

*Related, but not included:* Basin-and-Range peoples, namely, N. Paiute, Washo, E. Mono ("Owens Valley Paiute"), Koso-Panamint, Chemehuevi.

*South, Climax I:* Coast and Island Chumash, Island Gabrielino.

*Climax II:* Mainland Gabrielino, Juanefio, Luiseño.

*Subclimax:* Interior Chumash, all Serrano except Kitanemuk, all Cahuilla, Cupeño, Diegueño (and Kamia).

*Lower Colorado River:* Yuma, Mohave (and formerly Halchidhoma).<sup>1</sup>

The element list itself is not reproduced here. It would fill a signature of presswork. It is on file for reference; and it has been included in a card catalogue of the growing list of elements on which field data are being obtained.

From here on, the text is as written in 1928, except for some alterations and condensations, and the addition of sections on musical styles and general inferences.

Tables 1 and 2 summarize the results of the compilation of distributions. The outstanding result is the preponderance of traits distributed conformably to culture areas. Distributions covering areas, partial areas, or combinations of areas constitute three-fourths of the total: 605 out of 806. If this seems too liberal a construal of conformable distributions, the distributions expressible in terms of two or more areas and those limited to nonfocal parts can be excluded and there will still remain a substantial majority for the conformable ones. Trait distributions substantially coinciding with the recognized culture areas aggregate 230; those essentially limited to the recognized foci or climaxes of single areas number about the same, or 232; total, 462, as against 344 of all other kinds.

Of particular significance is the disproportion between the two kinds of distributions limited to parts of areas: climactic, 225 (232, less 7 duplications); subclimactic or marginal, 89. The culture centers thus seem to contain between two and three times as many peculiar traits as the noncentral parts of the same areas. In other words, traits are more often than not characteristic either of whole culture areas (or still larger territories) or of their focal parts alone.

Another comparison can be made between distributions limited to areas or parts of areas and those exceeding areas: 230, 225, 89, total 544, as against 54, 143, 58, total 225. The latter figure is somewhat too high at that, because it

<sup>1</sup> This classification is slightly altered in the unpublished monograph on North America.

TABLE I

SUMMARY OF CULTURE ELEMENT DISTRIBUTION

|  |                   |
|--|-------------------|
| <b>A. Elements distributed conformably to culture areas:</b>   |                   |
| 1. Characteristic of culture areas as units:                   |                   |
| Northwest .....  | 51                |
| Northeast (local, 23; ex N or E, 23) .....                     | 46                |
| Central .....  | 25                |
| Southern .....   | 29                |
| Lower Colorado River.....                                      | 79                |
| <b>Total .....</b>   | <b>230</b>        |
| 2. Limited to parts of culture areas:                          |                   |
| a. Climaxes  |                   |
| Northwest .....  | 102               |
| Pomo .....   | } 7 common..... { |
| Sacramento Valley.....   |                   |
| Southern (Chumash, 36; Luisefio, 31).....                      | 24                |
| <b>Total .....</b>   | <b>67</b>         |
| b. Subclimaxes or margins                                      |                   |
| Northwest .....  | 4                 |
| Yuki, etc.....   | 7                 |
| Maidu, etc.....  | 8                 |
| Various North-Central.....                                     | 11                |
| North- and South-Central.....                                  | 5                 |
| South-Central Coast.....                                       | 5                 |
| Miwok, etc.....  | 15                |
| Yokuts, etc.....   | 28                |
| South .....  | 6                 |
| <b>Total .....</b>   | <b>89</b>         |
| 3. Common to two (or three) areas:                             |                   |
| Northwest and Northeast.....                                   | 4                 |
| Northwest and North Central*.....                              | 14                |
| South-Central† and Southern.....                               | 18                |
| South-Central, Southern, and L. Colorado.....                  | 3                 |
| Southern and L. Colorado.....                                  | 10                |
| L. Colorado and Diegueño (Yumans in S.).....                   | 5                 |
| <b>Total .....</b>   | <b>54</b>         |
| <b>B. Elements distributed unconformably to culture areas:</b> |                   |
| 1. Universal, general, or widely spread.....                   |                   |
|  | 143               |
| 2. Sporadic and discontinuous.....                             |                   |
|  | 58                |
| <b>Total .....</b>   | <b>201</b>        |
| <b>Grand total.....</b>  | <b>806</b>        |

\* As far south as to include Nisenan (S. Maidu).

† As far north as to include the Sierra Miwok.

includes "sporadic" or irregular distributions directly limited by environment. Fuller knowledge, however, would presumably extend some distributions at present reckoned as limited, causing a shift from the narrow to the wide class. Even with allowance for this, however, areal and subareal distributions promise to remain about twice as numerous as superareal ones.

TABLE 2  
CLASSIFICATION BY AREAS

|   | NW  | NE | O   | S   | LC | Total |
|---|-----|----|-----|-----|----|-------|
| A1. Area as a whole (climax and margin) . . . . .                   | 51  | 46 | 25  | 29  | 79 | 230   |
| A2a. Climax only . . . . .  | 102 | —  | 56* | 67  | —  | 225*  |
| A2b. Subclimax or margin only . . . . .                             | 4   | —  | 79  | 6   | —  | 89    |
| A3. Common to two (or three) areas† . . . . .                       | 8   | 4  | 16  | 18  | 8  | 54†   |
|   | 165 | 50 | 176 | 120 | 87 | 598*  |
| (Alternative total: A3 without prorating of duplications) . . . . . | 175 | 57 | 195 | 138 | 97 | —     |

\* Seven elements common to the two Central climaxes have been counted only once, giving 225 instead of 232 and 598 instead of 605, as in table 1.

† Prorated; an element common to two areas being counted  $\frac{1}{2}$  for each; the total of 54 therefore agrees with table 1.

The several areas present some interesting differences among themselves. In total number of areally conformable traits the Central area leads with 176, the Northwestern is a close second with 165, the Southern not far behind with 120. As the Central area is much the largest, the slightness of its excess of distinctive cultural material means that it is far from being the richest relatively to its size. It is probably no more, at best, than on a level with the Southern area; and definitely poorer than the much smaller Northwestern one. The Lower Colorado River and Northeastern areas can best be compared with each other, since each comprises only a few ethnic groups and contains no separate climax in California. Their totals, 87 and 50, show the Colorado area as the richer. It may be estimated as more or less on a par with Southern and perhaps superior to Central California in cultural wealth.

One marked contrast exists between the territorially compact Northwestern and Southern areas on the one hand and the widespread Central on the other. In the two former, the marginal or subclimactic parts contain only an insignificant number of distinctive traits—4 and 6, respectively, as against 102 and 67 characteristic of the climaxes. In the Central area, however, in spite of two climaxes, the proportion is reversed: 56 to 79. This means obviously that the Central climaxes are relatively feeble, and are approached by a number of subclimaxes (Yokuts, Miwok, etc.) which are not directly in dependence on them. In other words, the Central area is relatively uniform as to level, and large enough to be fairly differentiated locally. Lacking both regional homogeneity and definite climax specialization, it is not a culture area in the same sense, or with the same validity, as the Northwestern or Southern ones.<sup>3</sup>

<sup>3</sup> Kroeber, *Handbook*, 915-918.

The reason is the fact that both these areas are themselves marginal tracts of greater, extra-Californian areas—that of the North Pacific Coast and that of the Southwest, with centers in British Columbia and New Mexico. The California Northwest and South indeed constitute clearly differentiated provinces of these major areas, as is evident from their possessing rigorously definable climaxes as well as boundaries of their own. Nevertheless, these provincial climaxes stand in a relation of dependence to the distant greater ones.

The Central Californian area, on the contrary, leans to no serious degree on anything. To the west was an unnavigated ocean, to the east the Great Basin with scattered tribes eking out a bare subsistence. To the north and south lay the two contrasting areas, from which some cultural material was no doubt derived, but in so trickling and perhaps so ancient a stream, that, simply patterned as the Central culture was, it was able to mould this material over into its own patterns as fast as it came in. This is shown by the fact that the Northwestern and Southern elements in the Central area are, after all, few in comparison with those specific to it: 14 and 21, respectively, as against 160. The Central culture thus is definitely not a mere transition or blend between those of the Northwest and the South. It is a culture of lower potency, of less rich characterization, and, hand in hand with this, of less sharply definable climax. But in another sense, it is more independent than its Californian neighbors which, after all, are essentially local workings-over of distant greater culture impulses.

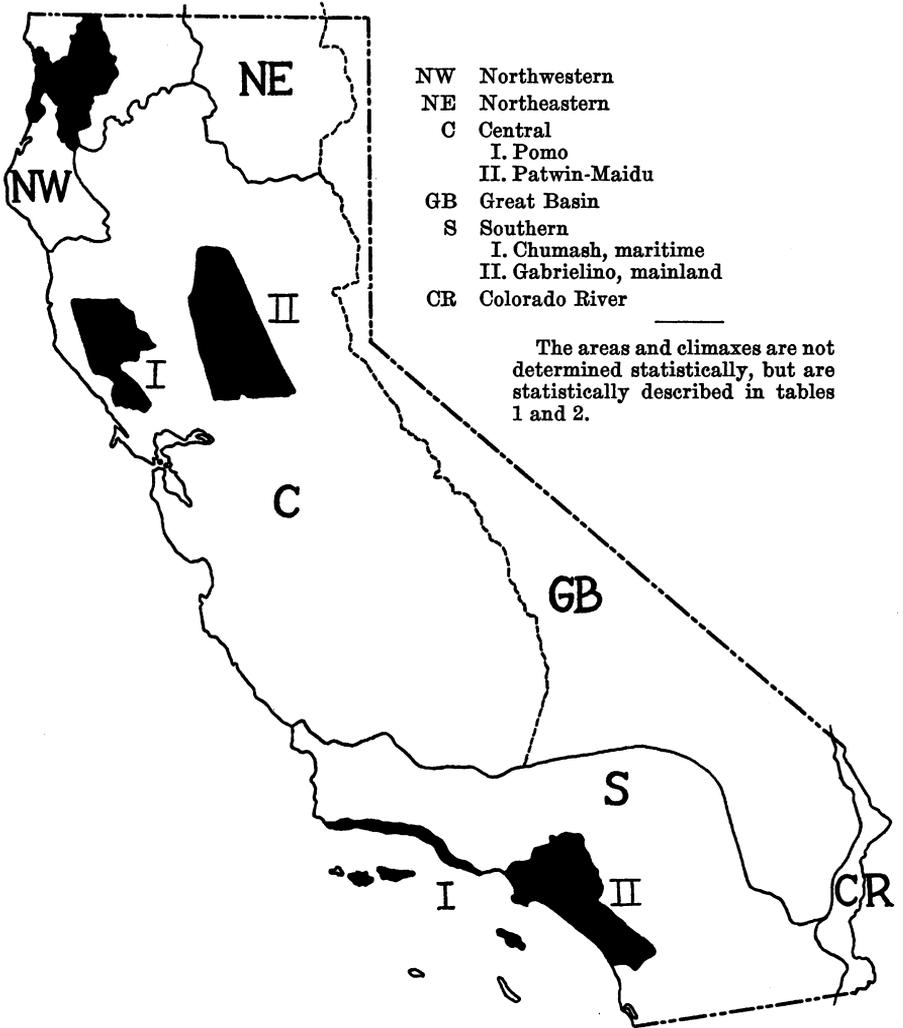
It might be questioned whether, indeed, any notable or worthwhile climax is determinable in the Central area. The two so specified, the Pomo and Sacramento Valley, have only 39 and 24 traits peculiar to them, and 7 of these are common; the Yokuts subarea has 28, the Miwok 15, and so on. However, the Yokuts area is as large as the two areas containing the assumed climaxes, and as these are contiguous, it seems fair to count them as a unit in comparison with the Yokuts area; in which case the proportion of specific traits is two to one.

As between the two Central climaxes, the Pomo of Clear lake and Russian river, and the Maidu and Patwin of the Sacramento river, the statistical compilation gives preëminence to the former, whereas my previous impression had been to the contrary and I had actually mapped the River Patwin territory as the focal point of Central California.<sup>3</sup> This was largely on the basis of the more complex cult system of the Patwin and Maidu. I am still somewhat dubious whether the impression was not more right than the trait count, because of the greater qualitative weighting which cult factors perhaps deserve. This point I wish to revert to shortly. In the immediate connection, it is significant, however, that the Pomo possess a highly finished and diversified basketry, the habit of counting to large numbers, matrilineal inclinations, and, seemingly in at least one group, private (family) land ownership. And yet the Valley Patwin and Maidu are so much less fully described that traits of more or less equivalent significance may not have been noted.

In the Southern area there may also have been a pair of interrelated, nearly

<sup>3</sup> Handbook, fig. 74.

contiguous, and yet differentiated climaxes, among the Coast Chumash and Coast Shoshoneans. The difficulty in coming to a decision is that our knowledge of the Chumash is almost wholly archaeological, their cults and society remaining a terra incognita;<sup>4</sup> whereas for the Shoshoneans there exist excellent cult and society data from the Juaneño and Luiseño, who, however, de-



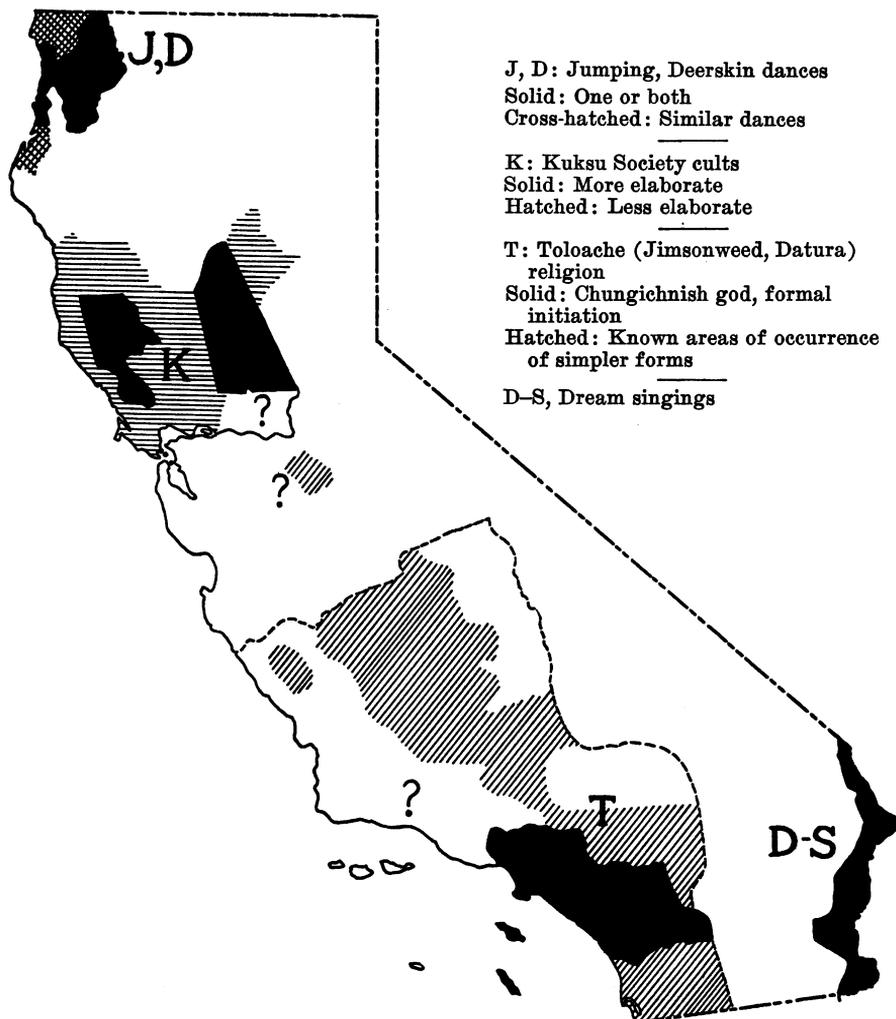
Map 1. Culture areas and climaxes.

clare that they derived their most elaborate cults from the Gabriellino of Catalina island and the fronting mainland. These Gabriellino have perished with about as little record of their intangibles as the Chumash. In the computations, therefore, two climax areas have been recognized: one maritime and prevailingly Chumash, the other chiefly mainland and Shoshonean.

The Lower Colorado River area is highly distinctive so far as California is

<sup>4</sup> J. P. Harrington, an unusually able worker, has rescued invaluable records from the last surviving Chumash, but so far has published little.

concerned. This is only in part because of its extreme marginal position in the modern state. If its position were the chief factor, we should not find 79 traits peculiar to the River and only 18 shared with the adjacent South, a proportion of four to one. However, since the River area as here dealt with consists only of the Yuman river tribes, which for the recent period virtually



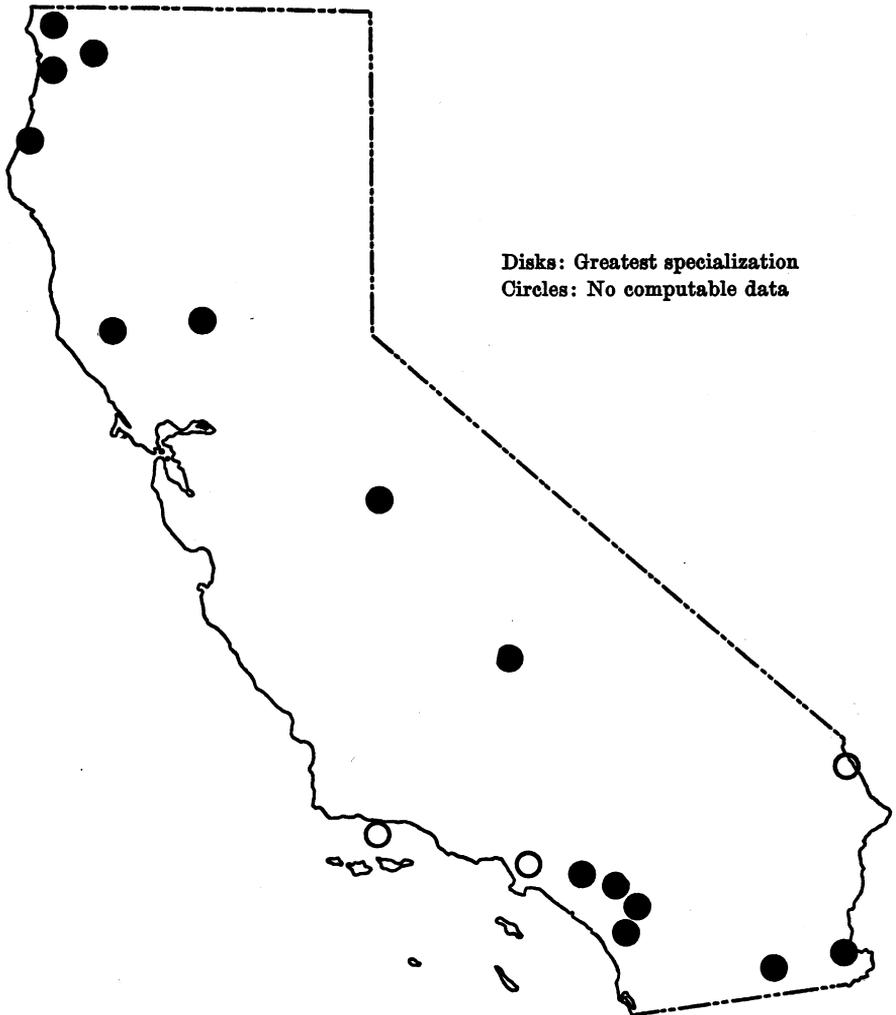
Map 2. Systematically patterned cults.

means the Yuma and Mohave, a differentiation into climax and margin would be meaningless. On wide-range consideration these river tribes may prove to be in large measure dependent historically on those of the Gila or of Sonora, with whom they evidently appear to stand in fairly close cultural relations.<sup>5</sup> Yet even if so, it is clear that they constitute a relatively independent subarea. With relation to California they can therefore fairly be considered as forming either a culture area or a culture climax. In the latter event, they rank

<sup>5</sup> This point I have since discussed in *The Seri*, SW Mus. Pap. 6, 1931.

high for specialization with 79 specific traits—a greater number than any other climax except the Northwestern.

The Northeast area contains no indication of a climax or even subclimax in California, nor is there a known climax for the larger Great Basin area of which it appears fundamentally to form part, with late intrusions from



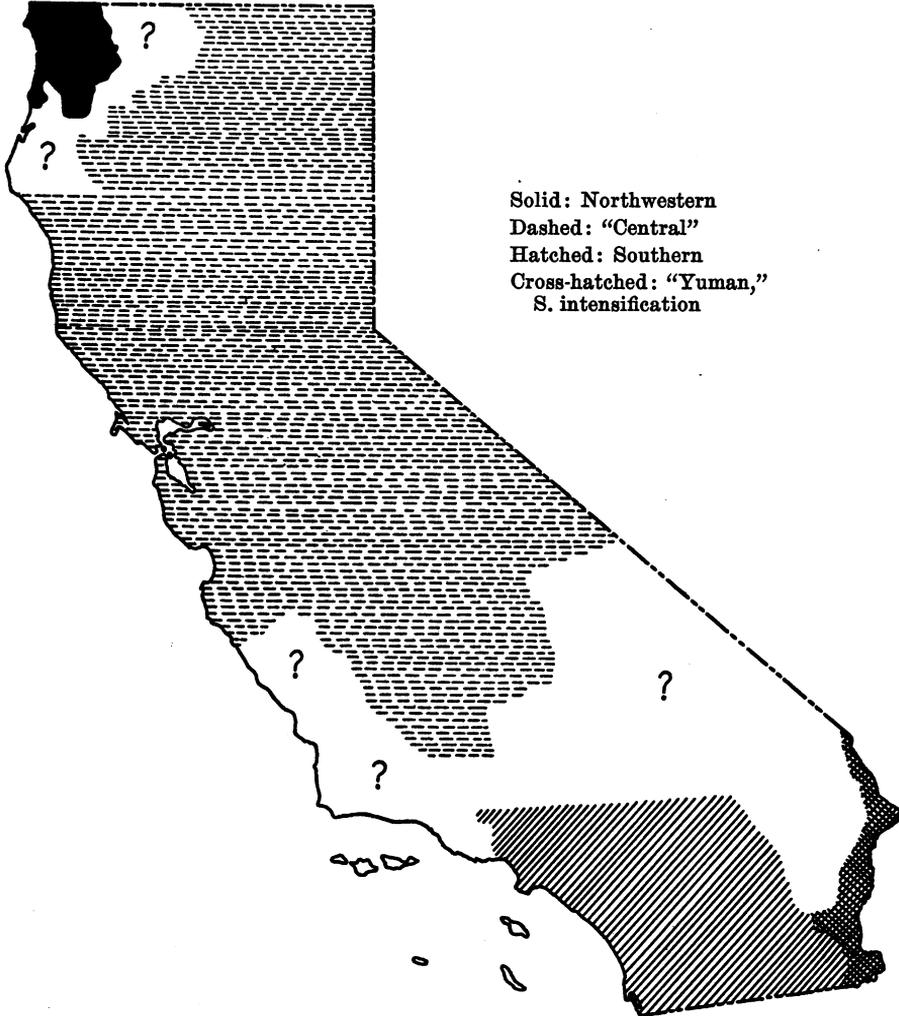
Map 3. Kinship systems.

the Columbia River region. The fact of being marginal, plus that of being adjacent only to marginal portions of the Central and Northwestern areas, partly accounts for the strikingly low total of Northeastern traits; though, in part, insufficient data may also be the cause. The figures for this area are therefore perhaps the least significant of any here dealt with.

It is probable that fuller knowledge will necessitate the setting off of a sixth area: an Eastern (as viewed from California), or unmodified Great Basin

area, comprising the Northern Paiute, Washo, "Eastern" Mono, Koso-Panamint, and perhaps Chemehuevi.

*Indicators of climax: cults.*—The matter of weighting of culture material, especially its systematized organization, deserves attention with relation to climaxes. For instance, cult developments may weigh lightly in a statistical



Map 4. Musical styles.

consideration. One group may possess much of the ceremonial apparatus and many of the specific beliefs of another, plus certain of its own, and yet have left these elements unsystematized to a much greater degree. Such a difference might show little in a purely quantitative computation of elements; yet the system which the one group possesses and the other lacks certainly has a significance also. In decorative art and music a definitely developed style is more or less the counterpart of formal organization in religion; and the same holds of organization in the intellectual, social, and political fields. In all

these, however, development is relatively low in California, and for some, such as music, both quantitative and qualitative definition is an elusive matter; so that cults remain, for the present, one of the most satisfactory avenues of approach.

A cult map of aboriginal California has been published.<sup>6</sup> New data allow the correction of this mainly in the direction of simplification as between distinct cults and somewhat surer differentiations within them. The earlier formulation is therefore revisable as follows.<sup>7</sup>

In Central California the cults of Kuksu society type prove to occupy a considerably smaller range than was formerly thought. The true Kuksu, or initiating organization, prevailed over a compact area not more than about 150 miles in length and breadth, and was restricted to the Northern Hill Maidu, Valley Maidu, and Valley Nisenan; Patwin; Pomo; Southern Yuki proper, Huchnom, Coast Yuki; Wappo; Athabascan Kato; Coast and Lake Miwok, and perhaps Plains Miwok. The following are not known to have had Kuksu societies or initiations: Northern Yuki proper, Wintun, Mountain Maidu, Northern Yokuts, Costano, Salinan, Esselen.<sup>8</sup>

Within this area, there occur several oscillations of elaboration of the cult. These fluctuations are concretely manifest in the number of initiations, spirit impersonations, and major dances recorded for the several groups, as assembled in Loeb's final tabulation. From east to west, the several Kuksu forms may be rated thus: Hill Maidu, simple; Valley Maidu and River Patwin, elaborate; Hill Patwin, simple; Clear Lake and Russian River Pomo, elaborate; Coast Pomo, simple. This distribution coincides with our two Central area climaxes. An environmental association is also evident: river or lake valley, elaborate; hills and ocean shore, simple.

For the Northwest, no correction is necessary, but the situation can be defined more positively as a result of Drucker's Tolowa work. A Jumping or Deerskin dance, or both, were performed at about a dozen spots among the Yurok, Karok, Hupa (those in the valley only), and at the northernmost Wiyot settlement. The other Wiyot and the Tolowa held fairly spectacular dances obviously similar to the Jumping dance, but less rigorously standardized. Still other northwestern tribes did not make even these.

The Toloache or Datura cult distribution has also become clearer. The Yokuts and Western Mono, according to Gayton,<sup>9</sup> drank toloache though they possessed no religious society. Men or boys partook of the drug, ceremonially and in groups, once or repeatedly (or not at all) at their option, and for their spiritual or material welfare, but they were not initiated, because there was no organization to be initiated into. This marks the San Joaquin valley region as possessing the cult in a less organized form than did the Southern California region, where there were toloache society, initiation, and sand painting.

<sup>6</sup> Handbook, pl. 74; also 855-859.

<sup>7</sup> The following paragraphs have been rewritten in the light of new data accumulated since 1928.

<sup>8</sup> Kroeber, The Patwin, UC-PAAE 29:391, 1932; Loeb, Eastern Kuksu Cult, *ibid.*, 33: 139-232, 1933.

<sup>9</sup> MS, in preparation.

Within the Southern California region this "normal" form and the "Chungichnish" cult are distinguishable, the latter adding to the normal form the supreme or punishing god Chungichnish and certain rituals.<sup>10</sup> According to the Indians themselves, the Chungichnish cult spread from the Gabrielino of Catalina island as far as the Luiseño and, within the historic period, to at least some of the Diegueño. The deity concept suggests Christian influence; but since the source locality is indicated as a native culture focus on other grounds, including archaeological evidence, it is not unlikely that some germ of this cult form was in existence before the coming of the Spaniards. This gives, then, three stages of toloache cult: toloache-taking, toloache initiation, and Chungichnish-toloache initiation.

The exact distribution of these three stages cannot yet be given; in fact, for some tribes the necessary information can probably never be obtained. On the map, therefore, the substantially full Chungichnish cult has been denoted by solid shading, but hatching indicates known occurrences of abbreviated forms of this, as well as of non-Chungichnish toloache-drinking by groups of youths. Tribes in the white areas within the enclosing line actually or presumably used toloache with religious significance, but data are insufficient for classification. The sporadic taking of toloache by individuals for their personal benefit, as, for example, by the more interior Cahuilla, several Yuman tribes, and some of the Pueblos, has not been counted in for entry on the map.<sup>11</sup>

The dream-myth singings in their fully specialized form prove to be restricted to the Yuman tribes on the Colorado river. Neighbors to the east and west, like Walapai, Yavapai, Chemehuevi, Serrano, Desert Cahuilla, and more westerly Cahuilla have sometimes borrowed certain of these song series, usually without the peculiar mythological-shamanistic context. The Yuman river tribes simply reckon song cycles of their neighbors as equivalent to their own, although their context, function, and setting appear to be pretty thoroughly different. It is true that there is evidence of historical connection between the river Yuman and alien song cycles; but our concern here is with specialization definable enough for distinct classification.

These corrections of the earlier data clarify the picture, for the following reasons: the four most organized or specialized cult systems of California are found to have no territorial overlap; they are probably in the main not even in territorial abutment; and usually they grade into stages of intensification which show climax and sometimes subclimax and marginal distribution. The cult climaxes coincide closely with those determined on the broader basis of wealth of elements in the total culture. The inference is that cult specialization by itself is an excellent indicator of total degree of culture specialization or climax in native California—and perhaps elsewhere.

The obverse of this situation is presented by the distribution of forms of the girls' puberty rite. This is universal in California and for long distances east and north. The usual form includes a dance or other public perform-

<sup>10</sup> The Yunish matakish, for instance, perhaps also the Notush and Wanawut. Handbook, 668-677.

<sup>11</sup> The fullest of the recent data are by Strong, *Aboriginal Society in Southern California*, UC-PAAE 26:31, 116, 173, 258, 309, 1929.

ance, such as pit roasting in the South. A less common form makes the rite a private or unobtrusive family matter. The known occurrence of this minimized form of rite in California is among the following groups: Yurok, Inland Pomo, Patwin, Valley Maidu, Yokuts, Mohave, Yuma.<sup>12</sup> Except for the Yokuts, six of these seven groups are situated in culture climaxes; and they coincide with four of the five or six climaxes.<sup>13</sup> It is evident that intensity of girls'-rite development stands in inverse relation to intensity of organized cult development, and that the latter has probably caused a recession or simplification of the former. On this score again, then, ritual proves a sensitive though obverse index of climax specialization.

*Kinship indicators.*—Another measure of specialization is afforded by a computation of kinship-system relations worked out by Gifford.<sup>14</sup> Fifty tribes on which there were data for 37 specific forms of kinship designation, such as calling the father's sister "older sister," were compared, and the total number of trait resemblances of each to the other 49 was ascertained. A high number means many, and therefore widespread, resemblances; a low one, specialization and local differentiation. The range of Gifford's aggregate scores is from 1025 for the tribe with the most generalized, to 708 for the one with the most specialized system. I reverse these figures by subtracting from 1025, so that a high number denotes high specialization. The 14 most specialized tribes of the 50 are the following:

*Colorado River:*

Yuma, 317 (climax)  
 (Mohave, climax, no data)  
 Kamia, 165 (adjacent to Yuma)

*Northwest:*

Wiyot, 258 (subclimax)  
 Karok, 209 (climax)  
 Tolowa, 156 (subclimax)  
 Yurok, 154 (climax)

*South:*

(Chumash, climax, no data)

*South (concluded):*

(Gabrielino, climax, no data)  
 Serrano, 244 (adjacent to Gabrielino)  
 Cahuilla,<sup>15</sup> 221 (adjacent to Gabrielino)  
 Cupeño, 221 (between last and next)  
 Luiseño, 188 (adjacent to Gabrielino)

*Central:*

Southern Miwok, 168 (marginal)  
 Patwin, 163 (climax)  
 Tübatulabal, 159 (marginal)  
 Central Pomo, 156 (climax)

As Gifford points out, factors not apparent on the surface enter into some of these computations—for the Wiyot, for instance. Kinship systems are fairly complex, and, as Gifford substantiates abundantly in his memoir, are influenced by a variety of known factors, and very probably by other unknown ones.<sup>16</sup> Nevertheless, the tendency of specialized systems to occur in or adjacent to climax areas is marked in this list. That this is not entirely because several of the climaxes lie near the margins of the total area examined, is shown by instances such as: Wiyot 258 versus Whilkut 39; and Yuma 317

<sup>12</sup> Handbook, 861; also, Forde, Yuma, UC-PAAE 28:152, 1931.

<sup>13</sup> Northwest, Pomo-Central, Sacramento-Central, Colorado River—all except Southern.

<sup>14</sup> UC-PAAE, 18:1-285, 1922. See 193-217.

<sup>15</sup> The figure is from the Desert Cahuilla, who are marginal, but there are no data on the Pass Cahuilla who adjoin the Gabrielino.

<sup>16</sup> For instance, the Pomo internal discrepancies (C 156, S 141, SE 128, SW 61, N 7) are unexplained.

versus Diegueño 97 and 64; where the low-figure generalized tribes are as marginal, so far as reference is made to the political state boundary, as the high-figure specialized ones.

This computation has the virtue of statistical objectivity almost to the point of being mechanical. It disregards what may be the fundamental patterns of a system, and regards only discrete, definable details. In spite of therefore almost certainly counting in a fair number of "accidentals," it ends, however, by defining climaxes of specialization almost exactly as they are defined by intuitive "subjective" consideration of basic pattern. Thus, one of the most highly characterized kinds of kinship in America is what Spier has called the "Yuman type"; and within the range of this, at any rate within California, the Yuma and Mohave show the type most clearly. The Southern California systems obviously adhere more or less to this "Yuman" type or pattern, but less markedly. In the Northwest, I have recently shown that the Wiyot and Yurok systems are fundamentally of the highly specialized coastal "Salish type," although somewhat altered, and that they have imparted a smattering of traits expressive of this type to the neighboring systems which are mainly "non-Salish." In all Central California, the Patwin system stands out as possessing the smallest number of terms, and therefore as automatically making the greatest number of classificatory reductions or consolidations.

In short, whether we make a discrete-element or point count, as Gifford did, or evaluate kinship systems according to the degree to which they show a coherent, characterizable pattern or "style," we come to approximately the same result. And this result tallies closely with the climaxes inferred from aggregate wealth of elements in the total culture of comparable tribes. Moreover, where the climax is strong—Yurok-Karok, Yuma-Mohave, Chumash-Gabrielino—the kinship specialization is marked. Where the climax is but feebly elevated over its surroundings—Pomo, Patwin—the measure of kinship specialization is only moderate, though still evident.

*Music.*—Such evidence as we have on song styles, sketchy as it is, points generally to special developments in some of the same climax areas. A "Yuman musical style" has been defined by Herzog.<sup>17</sup> Closely allied variants of this style occur on the one hand among the Pima, on the other in Southern California: the area of highest characterization seems to have been on the lower Colorado. North of Tehachapi, the structure of native songs is obviously simpler, and a relatively uniform style seems to prevail over most of California and probably Nevada. We have as yet no definition based on technical analyses. But in all the songs heard by ethnologists, and phonographically preserved, no one has yet noted any outstanding qualities distinctive of a tribe or area. We may therefore assume that, while regional stylistic differences undoubtedly exist, they are minor; and that if there is a peak of specialization, whether among Pomo or Patwin or elsewhere, it is at best a moderate one. In the northwest, however, a different style is patent: the voice is often held whiningly plaintive, the volume swings back and forth between forte and piano instead of being kept relatively constant, and there are long descending pitch glides.

<sup>17</sup> JAFLL 41:183-231, 1928.

The effect certainly is that of a deliberate endeavor to express a mood or feeling tone; and there can be little doubt that analysis will show a structure different from that of the music of most of California.

The indicated situation thus is: a simply characterized musical style without notable regional variation in the Central, Northeastern, and Great Basin areas; a more developed one in the Southern and Lower Colorado regions, with heaviest accentuation probably in the latter; and another but differently developed one in the Northwest among the nearer neighbors of the Yurok. At least two of our four foci of specialization are therefore again represented.

*Inferences.*—The principles involved in the concept of sensitive indicators of degree of culture intensification can perhaps be clarified by an illustration from our own civilization. The per capita wealth of Massachusetts is presumably greater than that of Mississippi. In the number of persons per million owning a hundred thousand dollars, the disparity between the two states is greater; for those worth a million, still greater; for twenty-five or a hundred millions, it may be complete, since Mississippi probably possesses no such fortunes. In education, literacy is again higher in Massachusetts, but the difference is not very notable, the United States generally being essentially literate. The difference would be accentuated progressively as one considered respectively the proportionate number of high-school students, of bachelor's degrees, of doctors of philosophy, of names included in *American Men of Science*, and of scholars of international reputation. A similarly ascending scale of disparity would be evident if one compared, say, Paris and Auvergne for the proportions of population who had had drawing instruction, who professed to be artists, who had exhibited, and who had won prizes. As for the fact of participation in the content or substance of a given civilization, the lower grades evidently give the most truthful result. When the problem is the degree of participation in the more intensive manifestations of a civilization, the higher grades are the more useful criterion.

It is evident that what we are here dealing with in native California, on however lowly a scale, has a parallel in one or the other of two types of situation familiar in culture history. One of these is the fairly persistent center of civilization as against its hinterland: India in relation to Tibet, Greece to Thrace, Western Europe to Russia. The other is the nearly contemporaneous flowering of several or many civilizational activities among one people, or in one area, within a brief period: Greece from 500 to 200 B.C., for instance, or the Italian Renaissance. We have no time data for the California Indians, so cannot be certain whether the Yurok, Pomo, Chumash, Yuma culture developments were of the type of a fairly permanent precedence or of a transient florescence. What archaeology has contributed suggests the former. In any event, we are dealing with a climax—whether the distribution of this be expressible chiefly in space or in terms of both space and time.

Such a climax is likely to be defined by two characteristics: a larger content of culture; and a more developed or specialized organization of the content of the culture—in other words, more numerous elements, and more sharply expressed and interrelated patterns. These two properties are likely to go

hand in hand. A greater content calls for more definite organization; more organization makes possible the absorption of more content. Hence, to a certain degree, and within a given field, the recognition of above-average development in one respect should establish a presumption of above-average development in the other also. The purpose of the present essay is to show that a culture climax determined on a basis merely of generalized experience, relatively unsystematically acquired and necessarily more or less subjectively tinged, can be corroborated, with regard to relative wealth of content, by an element count; and that the localizations thus arrived at tend to coincide with localized concentrations of pattern development, whether the patterns be expressed in system organizations or in styles.

#### BIBLIOGRAPHICAL ABBREVIATIONS USED

UC-PAAE University of California Publications in American Archaeology and Ethnology  
JAFL Journal of American Folk-Lore