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ETHNOGRAPHIC INTERPRETATIONS: 12 – 13


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EDITOR'S PREFACE

The two papers presented in this number of the Contributions are among a dozen based on research and writing produced during the nine weeks of the Spring Quarter, 1974, in course Anthropology 195, an undergraduate research seminar offered as a continuation of the lecture course on Indians of California.

The main title is not original, but is copied from one coined by Alfred Kroeber and used by him as an umbrella title to cover a series of brief papers on California ethnography, eleven of which were published in University of California Publications in American Archaeology and Ethnology 47 (2, 3), 1957, 1959. This reuse, or continuation, of Kroeber's title and number series is deliberate, and I believe that he would have approved both of our doing so and of the papers themselves.

In the last major California ethnographic monograph brought to completion before his death in 1960 (More Mohave Myths. Anthropological Records 27, 1972) Alfred Kroeber provided us with a statement on the history of this particular piece of research and the process of "conveying to the intellectual world of an organized body of new information." Among other things he says in this quite personal declaration is the following:

"I have long pondered to whom we owe the saving of human religious and aesthetic achievements such as are recorded here. It is probably not to the group that produced them. Why should we preserve Mohave values when they themselves cannot preserve them, and their descendants will likely be indifferent? It is the future of our own world culture that preservation of these values can enrich, and our ultimate understandings grow wider as well as deeper thereby."

That statement, taken literally by someone who did not know Kroeber and who knew nothing about the Colorado River Mohave Indians, might be interpreted as an ethnocentric declaration in which the writer was congratulating himself for having the foresight to record some fragments of native perception of which their creators and latter day bearers were unappreciative. And a casual reader who knew neither the anthropologist nor the people he was studying, might even suppose that Kroeber himself took a poor view of the Mohave. But that was surely not the case. Kroeber loved and admired the Mohave as a particularly warm, generous, spontaneous and sensitive people, and for whose intellectual achievements in creating a particularly rich, complex and imagery-full mythology he was much impressed.

It is, of course, perfectly true that the Mohave have been unable to preserve their "values," but the reason for that failure has not been that they were indifferent
to or unappreciative of these, but rather that these values came to mean less and less as the whites fought and killed them off, took their lands, and forced the Mohaves to accept the white man's values at the same time excluding them from entering as participants in the new culture. That is amply illustrated in A. L. and C. B. Kroeber's *A Mohave War Reminiscence, 1854-1880* (University of California Publications in Anthropology 10, 1974) as well as in the annual reports of agents of the Colorado River reservations to the Commissioner of Indians Affairs.

If Kroeber rescued for "our own world culture" some examples of Mohave myths in the original tongue from survivors of the violence of white encroachment, he was thereby serving as the essential instrument for the conservation of this amount of an ancient past and of an alien civilization whose fatal weakness was that its bearers were neither sufficiently numerous nor adequately armed to fend off the American onslaught. And, in addition to rescuing this knowledge of a now-extinct civilization for our own world culture, I believe that it will turn out that Kroeber also did this for the Mohave who survive today and who will be born in the future, as well as for other Native Americans whose ancient tribalism has given way to a unity which transcends the time of their earlier independence.

The recorded facts about Native Californian cultures will continue to be used in various ways. One of these will be by anthropologists who go back to the documentary records and try to sharpen our understanding of the ways in which these people organized their lives. Such efforts, if they are soundly done, are important to use today in providing examples of alternatives. It is all too easy to become blind to, and thus prejudiced against, the ways and attitudes of others, and it is therefore essential that we have the opportunities to reach beyond ourselves and, as it were, look at the world through the eyes of other cultures. Anthropologists can provide one of these kinds of relativism; novelists another; historians still another.

Mr. Swezey's paper offers a new way of looking at the socio-religious system (s) of food procurement. The harmonizing of economic needs, with the subtly variable food supply obviously needed some form of pattern and direction, and here we have a suggestion of how this was effected; one which seems to me to be a sound one. The value of Mr. Swezey's analysis lies not in showing us, today, an alternative direction is which we might turn in a world whose order is disintegrating, but rather that order and pattern are necessary even on the relatively simple level of the cultures of Native California.

Ms. Graziani and Mr. James have collected and presented a very considerable body of data on that form of conflict which is termed warfare. Here again, the purpose is not to argue this as a desirable model for war between today's great powers armed with hydrogen bombs and MIG - 23 or F-4 Phantom supersonic interceptor planes. There is too much at stake here to destroy these weapons and go back to re-learning how to use the bow and arrow. What we can read in this survey of group
conflict among California Indians is the message that national entities composed of human beings with all of the fundamental emotions of fear, hate, envy, greed, pride, self-consciousness and the like had been able to manage or control these feelings sufficiently so that they did not kill each other off. If they could do it, there may be a chance that we can also learn this mode of survival -- at least their example proves that this is a workable alternative.

The Archaeological Research Facility had filed as Manuscript No. 469 an extensive collection of xerox copies of ethnographic data on California Indian warfare. This had been consulted by Ms. Graziani and Mr. James, but it is so extensive that it can still be mined with profit.

Although there are no firm plans to do so, we may publish from time to time more such papers under this same title.

Robert F. Heizer
March 20, 1975
THE ENERGETICS OF

SUBSISTENCE-ASSURANCE RITUAL IN NATIVE CALIFORNIA

Sean Swezey
Tribes and Territories of California Indians
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INTRODUCTION

Within the ecologically diverse natural environments of aboriginal California, variable methods of resource exploitation characterized native cultural groups. Kroeber (1925: 523-526), Beals and Hester (1960: 73-83), Baumhoff (1963), and others have commented upon the diversity of hunting, gathering, fishing, and flood-plain agriculture subsistence techniques and strategies which integrated human populations into stable ecological systems. Within these systems, natural complexity of food resources established the general nature of California resource technology:

"The California Indian, then, secured his variety of foods by techniques that were closely interrelated, or where diverse, connected by innumerable transitions. Few of the processes involved high skill or long experience for their successful application, none entailed serious danger, material exposure, or even strenuous effort. A little modification, and each process was capable of successful employment on some other class of food objects. Thus the activities called upon were distinguished by patience, simplicity, and crude adaptability rather than by intense endeavor and accurate specialization; and their outcome tended to manifold distribution and approximate balance in place of high yields or concentration along particular but detached lines" (Kroeber, 1925: 525).

In proposing models of human populations in solar energy-based systems, Odum typifies cultural response of hunting and gathering peoples:

"...culture in such a system must include a great knowledge of species properties, of seasonal cycles, and of the network in which he is embedded. Medicinal herbs, poisons, building materials, and animal products are available in great biochemical diversity, but in small quantities, so that considerable gathering energies are required" (1971: 105).

Several interactive ecological and energetic factors were operative in determining subsistence patterns in native California. The transitional adaptability of subsistence technology, when applied to a biological diversity
of resources such as acorns, pinyon nuts, mesquite beans, herbaceous seed and root plants, fish, and game animals, precluded major input or direction of energy by native societies into the ecosystems of which they were an integral part. The low-level energetic potential of subsistence techniques thus prevented major disruption through over-exploitation of environmental resources. It has been proposed that the broad application of a basic inventory of methods simultaneously conferred a great degree of ecological efficiency upon native economies (Kroeber, 1925: 524-525; Jones, 1951: 89). Adaptation of hunting and gathering strategies to the complexities of resource diversity in California (in particular, emphasis on the acorn economy) appears to have been sufficiently advanced to have supported aboriginal populations of greater density than native North American agriculturalists, and perhaps discouraged the acceptance of cultivated crops which were suitable to California climates (Heizer, 1958: 20-21).

However, a correlative hypothesis concerning the interaction of cultural and environmental factors in promoting the extractive efficiency of native economies must also be considered. An essential aspect of the diversity of major aboriginal food resources was the highly seasonal nature of their abundance. Efficient maintenance of an abundant and storable resource base required accurate organization and direction of maximum human energy potentials into subsistence pursuits at appropriate, and often critical, seasonal intervals, when, for example, acorns and other tree crops ripened, herbaceous annuals matured, salmon runs began, and deer, antelope, or rabbit populations reached maximum density.

Whereas the broad adaptation of material technology to the efficient exploitation of food resources has been discussed and documented at length in the ethnographic literature, the importance of ideational systems such as world view and ritual in response to environmental systems of native California has received little attention, due to the generally non-analytic nature of much of the ethnographic data. The large volume of ethnographic information does provide evidence that various aspects of world view and ritual behavior functioned to organize and adapt human cultures to the ecological permutations of subsistence in California. The present study is aimed at an examination of a specialized aspect of the relationship between world view and environment: the functions of specific ritual specialists (such as shamans, secret society headmen, ceremonial leaders, and formulists) in aboriginal systems of resource utilization.

An energetic systems approach, based on the analysis and reconstruction of an energy flow complex in native societies involving ritual regulation of gathering, fishing, and hunting activities, indicates a central

1 Notable exceptions are more recent examinations of culture-environment interaction in Native California by White (1963) and Bean (1972).
role of the ritual specialist in organizing subsistence behavior. Ritual personalities occupied a distinct, modular position within native societies, reinforced by world view and operating in the context of stereotypic ceremony which attributed social power to those individuals who internalized or ritually mediated the supernatural forces of nature. This potential for organization and regulation of subsistence energetics (especially of high level input by communal groups in response to seasonal availability of resources) was a significant factor in economic activity.

The hypothesis that adaptation of relatively unspecialized hunting and gathering societies to the ecological conditions of the California environment included a system of ritual "control" functions over subsistence behavior, requires consideration of specific questions concerning important areas of ethnographic data:

(1) The Ideational Context:
What features of world view in native California supported and socially sanctioned an ecologically manipulative role of shamans and other ritual specialists? How did belief in supernatural or ceremonial modes of control over natural process reinforce the overt, socially structured regulatory powers of ritual leaders?

(2) The Operational Context:
What were the cultural and environmental contexts in which these ritual control functions were performed? What aspects of rituals concerned with the acquisition of plant foods, fish, and game animals defined them as regulatory or managerial mechanisms?

(3) The Functional Context:
How may the functional role of the supernatural or ritual specialist be modeled to provide qualification of his position in aboriginal California societies with respect to subsistence energetics? Did the ritual direction of large-scale productive behavior serve to organize large groups at important seasonal intervals, and facilitate distribution of food resources? Was the energetic structure of subsistence ritual adaptive to the variable availability of food resources in California environments?
The analysis of the ideational and operational aspects of world view and ritual, which established a special complex of regulatory roles assumed by shamans and other ritual specialists in native California, provides basic perspectives concerning special adaptations of cultural systems to environmental pressures. An energetics model of ritually enforced control mechanisms directly relating to subsistence further emphasizes the general principles by which hunting and gathering societies maintained effective channels of energy transfer between food resources and human populations. Ritual regulation of environmental relationships in widespread cultural contexts, may have been a uniquely unifying response by native populations to the biological and energetic complexities of subsistence in California.

The Ideational Context: World View and the Ritual Specialist in Environmental Relations.

Of preliminary importance to understanding the regulation of ecological and energetic systems by shamans and other ritual specialists is a general discussion of those aspects of world view which ideologically supported ritual control mechanisms. In establishing the central position of the ceremonial personality within the complex of environment–culture interactions, several concepts relating to the cognitive organization of the native world require brief review: (1) the natural world was composed of supernatural, spirit-beings who controlled environmental process; (2) man was an integral part of the natural system, and was held accountable for the propriety of his actions toward the animate world; and (3) the abstract supernatural "power" and favor of spirit forces could be acquired and internalized by shamans, or otherwise mediated and obtained, for the benefit or the entire community, by the activities of ritualists in public ceremonies designed to insure the continued availability and abundance of natural resources. The integration of these concepts, common to world view systems of native California, provides the philosophical basis by which ritual systematized land-man relationships.

All native peoples of California manifested some fundamental belief in the animistic nature of the world. A basic theme of animism as a religious concept proposes that all biotic and abiotic phenomena are controlled by spirit forces possessing supernatural power and intelligence. The "spirit" world, as dichotomously distinct from the empirical reality of the "physical" world, was composed of an ordered assemblage of animate beings largely invisible in the normal activities of daily life:

"Everything in this world talks, just as we are now, the trees, the rocks, everything. But we can't understand them, just as the white people
do not understand Indians" (Nomlaki informant; in Goldschmidt, 1951: 348).

"Who's tending this sun, moon? Who moves them around? There must be somebody to look after this world..." (Nisenan informant; in Beals, 1933: 380).

Mythological traditions concerning the origins of human culture established the basis for the animate composition of the universe. In the beginning, superhuman beings (often animal culture-hero characters) inhabited the first world, ultimately creating men, women and the natural resources for their sustenance, while designating the cultural practices (technological and ritual) by which people could live and maintain proper balance with an animate natural environment. Plants, animals, mountains, springs, wind, rain, clouds, thunder, and numerous other entities comprised a mythically empowered system of supernatural agency, also capable of human rationality and emotion in reacting to the actions of men:

"An Indian trapper in Nevada found his traps empty except one which held a large coyote. When the trapper was about to shoot, the coyote told him to stop and said in Paiute: 'My friend, we as people have found it necessary to warn you against trapping us, taking from our bodies our skins, and selling them for your happiness..." (Owens Valley Paiute informant; in Steward, 1933: 310).

Within a supernaturally animate world, where natural process was governed by spirit -controllers of powerful dimensions, man and his culture were properly viewed as a small subsystem in an infinitely larger complex of interacting forces. As an integral part of nature, man played an important role in the supernatural causality of the world. The degree of ritual attention paid to the natural environment by its human inhabitants integrated and stabilized the relationships between the supernatural and "normal" dimensions of existence. The idealized ecosystem was a set of "feedback" interactions between man and supernatural forces, such that proper ritual conduct toward natural resources, for example, insured positive response from spirits who controlled the abundance or availability of animal and plant foods. This concept of reciprocity of natural process is exemplified in the widespread belief that the animate spirit of hunted animals (either an omniscient species-representative or a super-human "master of animals") must be ritually assuaged to provide abundant game. Drucker has noted the commonality of this concept in Northwestern California.
"The spirit of the animal, salmon, deer, or whatever it might be, was induced to allow himself to be captured by performance of the proper ritual. Only if the flesh were properly handled 'with respect'...as informants say, would the spirit resume animal form and allow himself to be taken again" (Drucker, 1937a: 260).

A further example is found among the Southern Maidu in rabbit-hunting ritual:

"The head hunter and the other hunters planned the hunt. It was necessary for them to speak in a whisper lest the rabbits hear them. When the first rabbit was killed, the head hunter picked it up, and pressing it tenderly against his chest, petted it and spoke soft words to it. All hunters sighed while he was going through this performance" (Faye, 1923: 40).

Thus, native world view implied that man was held strictly accountable for his behavior toward the natural world by supernatural sanction. If he did not give sufficient ritual support or respect to the animate forces of nature, he was upsetting the idealized system of interactions upon which the stability of the world depended. The resultant "negative feedback" from the spirit world in response to human negligence, which might be manifest in floods, earthquakes, disease, failure of food resources, and other potentially harmful phenomena, served to remind man of the ultimate homeostatic principles involved in the operation of the universe.

Within in a world of wilful supernatural forces, native world view incorporated the corollary premise of shamanistic power:

"...namely, the belief that certain men, through communication with the animate supernatural world, had the power to accomplish what was contrary to, or rather above, the events of daily, ordinary experience, which the latter, in so far as they were distinguished from the happenings caused by supernatural agencies, were of natural, meaningless, and as it were, accidental origin" (Kroeber, 1907: 319).

Shamanism may be succinctly defined as the special, individual control of supernatural process through a personally acquired power of direct communication
with the spirit world. In California, the shaman was universally regarded as an individual who possessed an inordinate amount of supernatural power, which allowed him to have communication with and control over forces in the natural world, usually for benevolent social ends. While most persons might hope to acquire "luck" in daily pursuits through customary personal observances of material offering, prayer, and ritual restriction, the social and religious prominence of the shaman stemmed from his continuous relationship with personal "guardian" spirits, who communicated to him the methods by which he could effect cures of disease, manipulate climatic conditions, or control the availability of plant foods and game animals.

The variable nature of this "guardian spirit, " and the means by which it was acquired by the shaman have been previously summarized by Kroeber (1907: 327-334), Spier (1930: 245-265), and Park (1938: 75-88). In most cases, the shaman's spirit allies were animals; mammals, birds, reptiles, or fish, but often abiotic entities such as mountains, springs, clouds, or thunder served this purpose as well. Power might also be secured from anthropomorphic dwarfs, culture-hero characters of mythology, spirits of the dead or, as peculiar to Northwestern groups, special intrusive "pains" controlled within the body of the shaman. Acquisition of these spirit powers was everywhere a personal activity of the shaman, potentially accomplished within several broad categories of cultural practice: dreams, in which the supernatural form appears and establishes a dialogue with the shaman-to-be; involuntary visions, in which the shaman receives power in a conscious or semi-conscious state through a sudden encounter with a supernatural apparition; the vision quest, whereby the prospective shaman deliberately seeks communication with supernatural forces in isolated locations; or inheritance of power, techniques, or paraphernalia from another shaman, usually an immediate relation.

Within the complex of beliefs surrounding spirit sources and methods of acquiring supernatural powers, several philosophical concepts basic to shamanism in native California emerge. As previously discussed, the shaman possessed supernormal abilities, based on special communicative or control relationships with spirit forces encountered in dreams or visions, and in all societies differentiated from the community at large as a religious or ritual specialist by virtue of his supernatural power. Relationships with these special supernatural forces were strictly the prerogative of the shaman, who alone might acquire and use them (Benedict, 1923: 68). Finally, in obtaining his supernatural ability, the shaman internalized the powers attributed to his guardian spirits, and was ipso facto regarded as a supernatural controller of process in the natural world.
As a culturally patterned embodiment of supernatural ability, the shaman occupied a unique position in native world view; his presence acted as a "control device" between the reciprocally functioning realms of normal and supernatural existence. The ritual obligations and activity of the shaman were undertaken to avert supernatural catastrophe and insure the stability and positive operation of interactions in the animate world. Although Kroeber (1922: 299) has remarked that shamanistic practice in California was more narrowly concerned with the causation, prevention and prediction of disease and death than elsewhere in native North America, influence upon ecological factors and the availability of natural resources was also largely attributed to shamanistic powers of integration and control, as among the Southern Maidu:

"O'cpe or ho'cpe are a kind of doctors...
They neither cure nor direct dances, but 'sing for luck.' In spring in the dark dance house, they sing night after night to make acorns, seeds, fish, ducks grow in abundance" (Nisenan informant; in Kroeber, 1929: 275).

and the Cahuilla:

"He (the shaman) was able to 'create' food. When there was a scarcity of food, or when there was a prediction of scarcity, the puul (shaman) drew a miniature food-producing tree such as an oak from his hand during a public performance, thereby magically ensuring that the season's acorn crop would be plentiful" (Bean, 1972: 111).

The idealized principles of shamanistic power appear to have been further conceptually enlarged into a basic mechanism for the effective control over the complexity and uncertainty of the external world (i.e. the ecosystem) as reflected in DuBois' remarks concerning Wintu shamans:

"The shamans as a sociological factor must not be minimized too much. In their hands lay the transmission and molding of speculative thought...Their reputation for knowing all that transpired exerted a deterring influence...They were called upon to predict the outcome of hunts, to restrain inclement weather, and in different ways allowed to direct and shape social undertakings" (1935: 118).
The interrelated elements of animism and shamanism in native world view have been briefly reviewed to preface the idea that the socially-sanctioned prerogatives and powers of shamans were a potential means of structuring social and economic activity. With particular reference to the idealized supernatural role of the shaman in determining the availability of natural resources, and the directive influence he exerted over the community by virtue of his supernatural ability, the shaman, as will be seen, often organized and ritually regulated important aspects of subsistence activity. However, in addition to the shaman, a large and culturally varied group of non-shamanistic personalities with specific regulatory powers over subsistence behavior must also be considered. By virtue of their institutionalized powers to initiate and enforce ritual behavior and place restrictions upon collection and/or consumption of food resources during periods of maximum seasonal availability, headmen, chiefs, formulists, and other personalities entered into ritual management systems, deriving cognitive support similar to that of the shaman. As "ritual specialists" responsible for mediation of nonempirical forces in public ceremonies (i.e. periodic rituals of the "first harvest" type) or in the actual direction of subsistence activities in ritual contexts, these individuals were also largely regarded as integrative forces who had socially defined regulatory powers.

Thus, of basic interest to the following discussion are the ceremonial duties assigned to both shamans and other ritualists which overtly structured the human ecology and energetics of subsistence in native California. The data to be presented indicate the extreme variability of the cultural and environmental situations in which this ritual organization took place. It will be noted that ritual regulation of subsistence activity in native California functioned at three main levels of organization:

1. the activities of the shaman alone as the exclusive regulating force,

2. the activities of the non-shamanistic specialist, such as the Cahuilla nef, the Yuma kwoxot, the salmon formulist of Northwestern California, or the Washo rabbit boss, who may similarly direct subsistence activity in ritual contexts; or,

3. the co-operative efforts of shamans and other ritualists in the organization of economic behavior.

It has been previously postulated that native cultures regarded ritual as a means of maintaining "balance" in an animate universe. The ritual organization of subsistence, involving the regulation of large-scale
economic activities by specific ritual functionaries, was perhaps the basic process by which energetic equilibrium between human populations and resources was achieved.

The Operational Context: First Fruits Rites for Acorns and other Plant Foods; Formulism and other First-Fish Rites; Hunting Ritual.

In quantifying population–environment relations in native California, Baumhoff (1963: 161) has remarked that within the great diversity of food resources utilized by aboriginal peoples, acorns, salmon, and large game animals may be characterized as those resources which were procured and stored in sufficient quantities to be considered "ecological determinants."

With this appraisal in mind, examples (for which sufficiently detailed ethnographic data are available) of first-fruits rites for acorns and several other plant foods of regional importance, salmon ritual, and hunting ceremony will be briefly described. Particular attention will be paid to the organizational role assumed by the central ritualist(s) in each case.

First Fruits Rites for Acorns and other Plant Foods: Some Selected Examples

The acorn is generally regarded as having been the basic staple of native populations in California; oak species of the genus Quercus are widely distributed across the state in all but high altitude and desert regions, and Lithocarpus densiflora is found throughout the Coast Ranges north of Santa Barbara, most abundantly in Mendocino and Humboldt counties. Within areas of dense distribution, the oak provided a prodigious potential resource for exploitation. But the annual acorn crop presented a major energetic problem to aboriginal groups, in that it matured over a brief, two to three week interval in October or November, when the necessity for harvest was critical. Within this limited period of abundant potential yield, maximum community energies were necessarily directed toward gathering pursuits, which might include large population movements over considerable distances to harvest and transport the acorns. Optimal quantities of acorns were collected before they fell from the trees, and the entire harvest lasted a variable number of days or weeks, depending upon the size of the groups and the resource at hand. Synchrony of rapid, efficient gathering activity with the onset of the mature crop was essential; as natural competition from numerous birds, mammals, and insects, and the potentially destructive effects of rainfall or frost were ever-present factors which might reduce the harvest (Wolf, 1945: 19).

The organization of the community for the collection and distribution of acorns was often the ritual prerogative of the shaman, and
the importance of his role is exemplified in Maidu society of North Central California. Among the foothill Maidu, the huku, or secret society headman, who according to Dixon (1905: 267, 272) was an extremely influential shaman and political leader, located the most favorable sites for acorn gathering, announced them to the public, and negotiated payment for the crop if the trees belonged to another village (Kroeber, 1925: 74). A similar function was assigned to the Valley Maidu Kuksu headman (yeponi), and the details of ritual involved are recorded by Voegelin (1942: 175). The yeponi located and tested acorns for ripeness, then returned and informed the community of their availability. His wife then went out to the productive site and secured one pack-basketful of acorns. Within six days, she dried and prepared two baskets of acorn mush, and took them to secret society members in the assembly house where the mush was prayed over and ritually consumed. After this ceremony, the entire community was allowed to gather the acorn crop. Premature harvest or eating of acorns before the rite was strictly forbidden by ritual (and therefore supernatural) sanction. Among Mountain Maidu groups, the ritual eating of acorns appears to have been a public rite after the initial period of gathering. A large amount of acorn soup was prepared from the first crop collected, over which a shaman prayed, then distributed portions to all present. After this ritual consumption, each family was allowed to cook and use its own acorn mush separately, an activity which had previously been forbidden. In these Maidu examples, the shaman appears to have assumed major control over the schedule of harvest activities, including the times and places at which the acorns were to be collected, distributed, and consumed.

In the context of the Kuksu dance cycle, Central Miwok groups also ritualized the acorn harvest, but the ritualist of note was not the shaman, but rather the secret society "chief" (hayapo), who was the head of the dancers and dance organization, and owned the costumes necessary for the impersonation performances. As such, the hayapo was the most powerful political and ceremonial figure in the community, possessing assistants and messengers through whom instructions for subsistence activities during celebrations were made known to the public. Among smaller groups, the hayapo himself might deliver these instructional orations from the dance house, detailing the various tasks and behavior to be followed by the community (Gifford, 1955: 263-265). "Little time" ceremonies, known as "uwetu" (from uwe--"to eat") were celebrated over four days of gathering activity in the fall. Before the first acorns could be eaten, the "yahuha" (a Kuksu ceremony described by Gifford, 1955: 293-294) dance was always organized and danced around a basket of mush in the ceremonial house. After this dance, the acorns might be processed and used by the community at large.
Also coinciding with autumnal conditions of acorn resources was the Bear Dance ritual of Yokuts and Western Mono tribes. This ceremony marked the end of the acorn harvest and the ritual first-use of acorns by specific moieties (Gayton, 1946: 257; 1948a: 39–40, 120–121). Central Foothills Yokuts, for example, performed the ceremony under the supervision of both shamans and moiety chiefs, the shamans performing the dance ritual, and the moiety chief calling together the community members involved. Gayton (1930: 410) has previously commented that "orderly social activity" was maintained by a combination of: (1) the traditional legal authority of the chief; and, (2) the belief in the supernatural abilities of the shaman to enforce adherence to ritual behavior. The regulation of subsistence activity by the bear dance ceremony appears to be no exception. The acorn crop would be gathered and stored by the people of one moiety (in this case the Bear lineages were ritually associated with the acorn), and after a shamanistic performance, the chief supervised a feast where acorns were prepared and served to other members of the community. The Bear lineages, having accomplished the successful harvest, were also allowed to partake of the acorns, which had been otherwise previously forbidden. A similar ceremonial practice is mentioned for the Western Mono by Gayton (1948b: 283) and Aginsky (1943: 388–399, 403). In establishing and enforcing traditional economic duties of specific lineages, to be accomplished before the entire moiety could utilize gathered resources, Yokuts and Western Mono shamans and chiefs performed a functional role, which ostensibly encouraged efficient harvesting, preparation, and distribution of acorn resources.

In Southern California, ritual regulation of the acorn harvest was developed around a central, social and ceremonial pragmatist (corresponding to a "chief") with well-defined economic powers; and the shamans, who provided supernatural support to the harvest procedure. The Cabuilla termed this chief the "net," and as a ceremonial leader, he was responsible for the maintenance of ritual conduct, and for the care of the sacred bundle (maiswat) and the ceremonial house (kisʔamnaʔa), the latter in which he lived in aboriginal times (Strong, 1929: 106; Bean, 1972: 104–105). Bean (1972: 113) has also noted that the net was usually also a shaman, belonging to an interactive association of other supernaturally oriented individuals who acted as community leaders. The net presided at all ceremonies, scheduled their occurrence, and maintained the oral tradition of songs and legends. Most significant, however, were the ritualized economic powers of the office. Based on his precise knowledge of community resource areas, he directed food gathering quests, determining when and where various crops were to be procured, and storing goods collected from community members for future distribution and use. The basis of his organizational power was the administration of the
first-fruits ritual for vegetable products, of which the acorn rite was most important. When the acorns were considered ready for collection and preparation, the net sent a representative to gather a small amount, which was brought back to the ceremonial house and consumed in ritual portions by members of various lineages (Bean, 1972: 143-144). In the "old days," it was customary for the net himself to eat the first product (Strong, 1929: 106). The accompanying ceremony, for which participants brought additional food to be shared by all, lasted three days and nights, and included singing by men and women, and dancing by shamans (puvalam) to ensure continuing positive response from supernatural forces in control of food (Drucker, 1937b: 41). The supernatural abilities of the puvalam were utilized to "create" an abundant crop of acorns and restrain unfavorable climatic conditions. Collection of acorns prior to completion of the entire first-fruits ritual would cause sickness or death by supernatural agency, and observance of this restriction was socially enforced. The ceremony completed, the net declared the gathering season "open" and advised community members as to the practical details of the harvest.

Of further note concerns data presented by White (1963: 123) on the Luiseno "tchumu' tushnakut," a ritual chief who supervised the gathering and distribution of vegetal resources from collectively-owned areas with the assistance of specifically empowered shaman (pul). White quotes Fr. Boscana on this aspect of subsistence organization:

"The captain (chief) was authorized to decide upon...the hunting of game and the collection of grain...they had a pul...who knew...the time to celebrate the feasts. In the same manner was made known the time to collect grain and to hunt; but he who advised the captain, was one originally endowed with the power of providing their game, herbs, etc...on such occasions, all turned out in quest of food--men, women, boys, and girls...the greater part of their acquisitions was deposited with the captain; who took care of the same for the feast..."

The collection of acorns was undertaken according to this procedure. Men and women, as well as the shamans, danced for several nights in the ceremonial house for the first-fruits (Drucker, 1937b: 41). Distribution of the acorns to the community by the tchumu' tushnakut took place over a protracted time period after completion of the harvest rite. As sickness would result if any acorns were eaten before the ceremony, the pul was held socially responsible for the performance of
his supernatural duties, and his abilities were deemed a "property belonging to the rancheria as a whole."

This brief summary of several regulatory rites is by no means a complete survey of acorn ritual in California, but serves rather to emphasize the more detailed ethnographic examples concerning the central position of ritual specialists in the direction of work on the fall harvest. But as additional examples of tree-crop ritual, the similarities of restricted seasonal abundance, staple importance, and pronounced ritual regulation, necessarily include the fall pinyon pine-nut harvest of the Washo and Serrano as cultural and ecological analogs of the elsewhere more prevalent acorn rite. The pinyon pine (Pinus monophylla) is distributed widely over the east slope of the Sierra Nevada, and the nuts were a more common food for the Washo than the acorn (Kroeber, 1925: 572). The production and harvest of the pinyon pine-nut in autumn was of critical importance to Washo winter survival. Downs (1961: 382) emphasizes the crucial nature of the seasonal crop in relating an old Washo informant's account of the four-day, first pinyon-nut ritual, regulated by a ritualist of definite shamanistic caste:

"This prayer-fella (Captain Jim) lived at Double Springs all year round. He would have a dream telling him to have a meeting. He was what you would call a religious man. He would get someone he could trust and send out a long, tanned string of hide with knots in it. For everyday until the meeting there was a knot so the people would know how many days they had until the meeting.

"All the men came and hunted for four days, and all the women would start gathering pine-nut. They would hang up the game to let it dry.

"The prayer wouldn't eat meat during those four days, but he could drink cold water and some lady would cook him pine nut. Every night they would have a dance. On the fourth day everybody would bring the food they had and put it in front of the prayer, and then he would pick some man who was just (fair) and the food was divided a little before sunrise. If you have a small

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2 Identified by Steward (1939: 415-416) as the "circle dance," commonly performed to ensure abundance of seed plants, pinyon nuts, rabbits, deer, and spring rains.
family you get less, if you have a big family you get more.

"Then the prayer makes a prayer something like this: 'Our father I dream that we must take a bath and then paint. Even the childrens... (We must) wash away the bad habits so we won't get sick from the food we have in front of us!"

"Then everybody go to the river... no matter if there was a little ice on the water, and take a bath. If they was not near the river, they bathed the kids from baskets at Double Springs. The prayer, he prayed for pine nut, rabbit, and deer."

The pinyon-nut harvest was accomplished in Southern California typically under the ritual supervision of an hereditary chief and his ritual assistant. Serrano groups (the eastern-most of which depended upon the pinyon nut as a substitute for the acorn) possessed a ceremonal leader (kika) who like the Cahulla net, lived in the ceremonial house and kept the "sacred bundle" from which his ritual authority stemmed. He was also a nominal owner of the wild-food tracts of the community, over which his authority extended (Drucker, 1937b: 28). His ritual assistant (paha) had direct personal powers to conduct tribal ceremonies, and act as a messenger from the kika to the community (Kroeber, 1925: 618). The kika accompanied the community on the seasonal collecting trip, and all individuals were required to contribute provisions for this communal venture; the goods to be re-distributed by the paha. The first pinyon nuts gathered were given to the kika, and used for the annual feast which took place in the ceremonial house upon return from a successful harvest (Benedict, 1924: 391-392).

Apart from tree crops such as Quercus sp. and Pinus monophylla which were principle resources in their respective areas of distribution, other plant products of regional importance were collected and distributed in ritual contexts. Several examples of first-fruits ceremony, connected with herbaceous root and seed plants, and mesquite bean harvests of Yuman groups on the Colorado River, provide further perspective concerning control mechanisms in which a ritual specialist played an important role.

In Northeastern California, important spring plant resources included the bulbs of Calochortus sp. (such as the star tulip and the Mariposa lily), and the roots of "Ipos," Perideridia sp. (Munz, 1968: 1012). Among the Atsugewi, spring first-fruits rites were held for these species when they matured (Voegelin, 1942: 176). In May, the first roots gathered by groups of women were sung over by the shaman, who then examined them in order to predict the future health of the female population. If the shaman predicted impending illness or disease, he instructed all the women to return to the collecting grounds and dig roots for an entire day. The harvest
accomplished, shamans sang for half a night over the roots to ensure the general well-being of all women in the community. Upon completion of the ceremony, each woman was allowed to take the roots she had collected, leaving a supply for the shaman who cooked and ate them. A variation of this ritual also occurred in which the shaman himself dug the requisite first roots, then supervised a general community feast to which women contributed "ipos" and men brought a late-spring fish catch.

Spring first-fruits rites, known as "witi lonu' iwis" ("little party") were engaged in by Yokuts divisions around Tulare Lake (Chunut, Tachi, and Wowol), and pertained primarily to berries and seeds which were "moiety-owned," as mentioned previously for the acorn crop (Gayton, 1948a: 40). The moiety associated with the food product would gather a supply when it first became available, and ritually present them to the other moiety. Consumption of the collected food by the associated lineages before the rite would cause their children to break out "with berries all over their bodies." Reciprocal services between moieties, ritually supervised by moiety chiefs, were observed for most seasonal foods requiring major collecting efforts in the spring. Chiefs might have informally directed the movements of village inhabitants during the collecting season (Gayton, 1949: 258), but as a pervasive feature of Yokuts social organization, shamans appear to have entered into schemes of social regulation through the use of their supernatural abilities. The seed growing dance, (known in Chunut as the "magic dance") was held each year by one or two shamans "who had the ability" to perform this prophetic ritual (Gayton, 1948a: 40). In late winter or early spring, the shamans who were to perform this dance did not consume any quantities of new seasonal food, such as tule roots or herbaceous annuals. About the middle of February, the shamans gave individual dance performances lasting all night and accompanied by a singer who sang songs "about birds and animals." During the night, a sleight-of-hand display was performed, in which the shaman caused the seeds of food plants to appear on the floor of the dance house by the fire, or by stamping on the ground, caused growing plants to materialize. The plants and seeds thus "produced" might just as suddenly disappear from view. The most significant aspect of this ritual, however, is the interplay between the shaman and the assembled participants:

"During this display the people would query the shaman about the crops of wild seeds for the coming season. 'Where were the seeds going to grow?' He would point in certain directions, or even reply that they would be prolific near a specific person's seed-gathering place" (Gayton, 1948: 40).

In establishing a supernatural basis for the productivity of resource areas to be harvested in the immediate future, the shaman ritually reinforced the eventual direction of communal groups into these areas by moiety chiefs when spring resources became available. This interactive system of "control" functions by shamans and ritually empowered moiety chiefs, as had been previously noted, appears to have been basic to efficient ecological behavior in Yokuts society.
The organization of the first-fruits rite was a function assumed by the tribal and spiritual leader of the Colorado River Yuma, known as the "kwoxot." Forde (1931: 118, 133-138) has provided a basic description of his supernatural and social powers:

"Kwoxot can be understood by all living creatures, by animals and plants. He can control them, so he can drive out sickness and prevent it from attacking people. He has the biggest powers of any man, is strong and happy, and tells the people what they must do to remain healthy. Kwoxot might sometimes cure diseases, but as a rule he did not, he used his powers to keep everybody well" (p. 136).

Kwoxot was a voluntary position of assumed responsibilities; the source of his power coming in dreams or visions of an ancestor or animal guardian. As a rule, supernatural spirits conferred the full powers of a kwoxot upon one man at a time, thus usually only one individual held this position. As an embodiment of supernatural power in the community, the kwoxot indeed approaches shamanistic dimensions. Significantly, he was expected to organize singings and feasts in harvest seasons and redistribute goods provided by the community to those in need. Of the plant collecting activities under his supervision, the harvest of the mesquite bean (Prosopis sp) and the associated ritual were particularly important. Trippel (1889: 6) notes that the mesquite bean was the chief article of food for the Yuma and stored in quantity for winter use. When the bean pods ripened in early summer, large quantities were collected at favorable locations by men, women and children, soaked in water for several days, and the entire "sticky mass" removed and stacked in piles. The bundles of mesquite bean were placed in a ceremonial enclosure, arranged in sets corresponding to each district attending the feast. Games, dancing, singing, and discussion of community affairs occupied the evenings. On the last day, participants gathered outside the ceremonial enclosure and on a given signal, all the people rushed in to procure their share of the harvest. The celebration completed, the bundles were shouldered and all departed for home.

In the general examples detailed in this first section, a variety of situations have been described in which ritual specialists, such as shamans, secret society headmen, and ceremonial leaders such as the Cahuilla net, the Serrano kika, and the Yuma kwoxot regulated the gathering and distribution of essential plant food resources in the context of special, community-based and socially sanctioned ritual. In continuing an analysis of the regulatory functions of these ritual personalities and the systems of ritual restriction which acted to encourage the ecological efficiency of communal subsistence activities, formulistic ritual surrounding the first-salmon rites of Northwestern California, and first-fish ceremony elsewhere in Native California form the next topic of discussion.
First-Fish Rites: Formulistic Ritual of Northwestern California and other First-Fish Ceremony.

Fish were undoubtedly an important food resource to native Californians. The seasonal upstream movements of anadromous fish, of which the distinct spring salmon run was most prolific, were events of great importance to many aboriginal subsistence economies. Stimulated by winter rains in the North Coast Ranges, and early snow melt in the Sierra Nevada, which provided appropriate water levels and headwater temperatures for spawning, annual or semi-annual fish resources were available in numerous freshwater river systems of Northwestern and North Central California (Rostlund, 1952: 20, 30). Fish of major importance were the Pacific species Oncorynchus tschawytscha (king salmon), Oncorhynchus kisutch (silver salmon), and the steelhead trout (Salmo gairdneri), which spawn in freshwater and soon after birth swim out to sea to grow to maturity. After four to six years they return to the freshwater rivers to spawn upstream (Baumhoff, 1963: 170).

The ecological significance of the seasonal spawning runs to aboriginal resource economies lay in the fact that the runs carried fish in significant numbers over a limited period of time, so that a concentrated, well-organized fishing effort at the appropriate seasonal interval gave a comparatively great return. In the brief analysis of the ritual practices surrounding freshwater fishing among particular culture groups of Northern and Central California, the various tribes utilizing anadromous fish resources will be divided into the two following classes:

(1) Those groups, in North Coast Range drainages, for whom the salmon constituted the main bulk and dietary staple in the annual food economy, and who performed a formulistic ritual coinciding with the onset of the spring runs. The Yurok, Karok, Hupa, and Tolowa will be considered as examples of this class, designated as inhabiting the "Lower Klamath province," where salmon runs are of the greatest annual reliability (Baumhoff, 1963: 171);

and

(2) those interior groups of the Sacramento and San Joaquin drainages, for whom the salmon was a secondary food resource of equal or supplementary importance to other foods, and who engaged in shamanistic or other first fish rites distinct from the formulism of Northwestern California. The Maidu and Yokuts tribes will be considered as brief examples from this class, designated as inhabiting the "California province," where annual salmon yields were more irregular and subject to marked cyclic fluctuations in quantity (Baumhoff 1963: 171).

The spring salmon run was most intensely ritualized in Northern California, occurring at a time when winter food stores were low and maximum community
energies were focused upon fishing efforts. A central core of northwestern tribes (Yurok, Karok, and Hupa) practiced the formulistic first-salmon rite, each group undertaking one spring ceremony at a specific location. Although superficially similar in initial ritual procedure to the protracted series of Jumping and Deerskin dances of the biennial World Renewal celebrations, the first-salmon ceremonies appear to have been held independent of these public display dances (Kroeber and Gifford, 1949: 105). The salmon ritual, among all these groups, incorporated common features which defined them as regulatory rites. The "first" spring salmon was always procured and ritually eaten by a priest or his assistant, who fasted, prayed, and sweated for a prescribed period of time. Fresh salmon were not to be consumed by the community until this ritual eating was performed, under pain of supernaturally induced illness or death. Throughout the period of days over which the ceremony was performed, the oral delivery of esoteric formulae, intended to induce and renew an abundance of salmon, was the main activity of the priest or formulist. The formulist's supervisory position in the rite was clearly based on his personal knowledge of the proper sequence of these narrative recitations, which were treated as private property and considered of supernaturally creative power.

In the performance of the salmon ceremony (which was the ritual reenactment of mythical times when immortal beings first instituted the rite), the formulist ensured positive response from the spirit forces of the salmon, while overtly regulating the inception of the salmon-fishing season.

The Yurok first-salmon ceremony was held annually in April at Welkwaw, a small village at the mouth of the Klamath River. Although mentioned by Kroeber (1925: 60-61), and Kroeber and Gifford (1949: 99-100), the rite is described in detail by a Yurok informant, Robert Spott, in Yurok Narratives (Spott and Kroeber, 1942: 171-179). Known as "helku menekuni ne' pui" ("the salmon spearing from shore"), the ritual was performed by an old formulist who lived in Welkwaw. Prior to the rite, no salmon caught at the mouth of the river could be eaten, although other species of fish could be caught and eaten at any time. The formulist began preparations seven days before the rite, arranging for and instructing his ritual assistant (who was to perform the actual first eating of the salmon), and in subsequent days cleared a path from the ceremonial house to the mouth of the river. The last day before the ceremony, he recited several formulae, praying for the well-being of the world and food resources. The day of the ceremony, the formulist moved to the mouth of the river and told men fishing on the bank (for species other than salmon, such as sturgeon and lampreys) to watch for the "first salmon." When the species was seen, the formulist was notified, and reciting a formula, he feigned the act of spearing the fish with his harpoon, and allowed it to pass upriver, as the "ne' pe' wo kewononor' apin" ("the first salmon that goes on up to the head of the river"). The next salmon to appear was speared, and after another recitation, taken to the ceremonial house where it was cooked and ritually consumed. The formulist prayed the entire night in the sweathouse, and the next day officially sanctioned salmon fishing (i.e. declared the season open) for all upstream Yurok villages.
After the performance of the Yurok first salmon rite at Welkwaum, the communal effort of dam-building at the upstream site of Kepel could begin, usually several months later in the early summer. The elaborate 10-day ritual of building this fish dam is described in detail by Waterman and Kroeber (1938: 49-80), Kroeber (1925: 58-60), Erikson (1943: 277-282), and Kroeber and Gifford (1949: 81-85). The dam structure consisted of a framework of poles, logs, and small stakes extending across the entire course of the river, and the building of this framework required the coordinated efforts of several hundred men from various villages to cut wood. As many as seventy individuals worked at the dam site itself, constructing the framework (Waterman and Kroeber, 1938: 54-55). At various intervals along the dam, openings leading into a small wooden enclosure were arranged, and during the ten days of fish collection at the structure, large quantities of salmon were harvested and dried. The entire process of construction, use, and eventual dismantling of the dam was directed by a formulist, who supervised in every way the work involved. It has been stated that the Kepel fish dam represents the largest mechanical enterprise undertaken in Northwestern California, and was clearly the Yurok's most communal subsistence effort (Waterman and Kroeber, 1938: 78).

The Karok first salmon rite (described by Kroeber, 1925: 104-105; Roberts, 1932: 426-440; and Kroeber and Gifford, 1949: 35-47) was held in March or April at the village of Amaikiaram on the west bank of the Klamath several miles below its confluence with the Salmon River. The formulist and his assistant were once again the ceremonial officials, reciting formulae, kindling a sacred fire, and cooking the first salmon for ritual consumption. These ritual activities were not to be witnessed by any other persons, and the community as a whole was obliged to leave the village and remain secluded in the surrounding hills. Roberts (1932: 430) mentions that salmon fishing might occur before completion of the rite, but any fish caught were saved and not consumed before completion of the ceremony. The ritual eating of the salmon accomplished, the people returned to the village, and all Karok were allowed to begin fishing and eating fresh salmon.

On the west side of the Trinity River, near the upstream end of Sugar Bowl Valley, the Hupa first salmon rite was held each spring (Goddard, 1903: 78-79; Kroeber and Gifford, 1949: 56-61). A formulist would go to a selected site before anyone had engaged in fishing activities and recite a formula over the first salmon.

3 Gibbs (1853: 146) and Wessells (1853: 64) noted that fish dams on the Klamath were effective in obstructing the salmon run and preventing passage of fish to tribes above these structures, presenting a constant source of complaint and dissatisfaction among upper riverine groups. Waterman and Kroeber (1938: 50) observe that the Kepel fish dam was torn down after ten days of use, undoubtedly to allow the run to proceed to upriver tribes and prevent such potential inter-group conflict over the critically important salmon resource.
procured, narrating the mythical creation and journey down the river and back, and
detailing ritual restrictions to be observed in fishing matters. Having cooked and
eaten the first salmon, he prayed for an additional ten days, while he continued to
catch salmon which were smoked and dried in preparation for a feast on the last day
of the rite. During this period, as before, fishing was not permitted to the public.
On the tenth and final day, a community feast ensued and the salmon season was
declared officially "open."  

A final example of formulistic ritual for salmon in Northwestern California,
outside the previous Klamath-Trinity focal area, is found among Tolowa groups of
the Smith River drainage (Dubois, 1932: 258-259; Drucker, 1937a: 261). At the
onset of the spring runs, a formulist performed the "ha'guClI xa'c Renic" (salmon-
go-out-to-catch) in which he entered the sacred sweathouse or "salmon's home" and
recited prayers during a five-day fast. On the last day of the fast, the formulist
catch the first salmon, built a fire, and cooked the fish, placing it upon a basketry
tray on which were represented the roots, leaves, and fruit of all available plant foods.
He then began a long formulistic recital, requiring several hours, describing the origins
of the world and the Salmon's primeval journey up the Smith River. The "first foods"
were divided by the formulist among the adult spectators and consumed; "After this,
everyone could catch and eat salmon; he opened the season" (Drucker, 1937a: 261).

In general, the procedures of the first salmon ritual in Northwestern
California, and the manifest control functions of the formulist in determining the proper
time for the beginning of the fishing season, are an extension of the need for careful
maintenance and harvest of this essential resource. The annual spring run of salmon
was the mainstay of native populations in this region, and the elaborate formulae and
ritual restrictions assigned to the fish resource are indicative of this dietary emphasis.
However, among other native groups outside the Northwestern culture area, where
salmon was of subsidiary importance, ritual activities surrounding the spring salmon
run were of a different nature. The formulist is absent, and taking his place as the
central ritualist is the shaman or a moiety chief who derives supernatural support from
shamanistic ritual.

4 The Hupa, as distinct from other Northwestern California groups, also performed
an organized formulistic first acorn rite, a brief description of which is included
here for comparison. Held at Takimilding on the Trinity River, the precise time
of the ceremony was determined by the autumnal conditions of the new tan-bark oak
acorn crop (Lithocarpus densiflora); "as soon as the acorns began to fall freely"
(Goddard, 1903: 80-81; Kroeber and Gifford, 1949: 56-59). In aboriginal times,
a quantity of the first acorns was gathered and prepared by several women. The
formulist, ritually dressed in mink and deerskin, in impersonation of "Yinukatsisdai"
(master of the vegetable world), built a fire to cook the first acorn meal. The
formulist directed the ritual bathing of community members in the river, and thus
assembled, a meal of acorn soup was eaten by all. No one of the Takimilding div-
ision was allowed to eat new acorns until the formulist initiated this feast.
Among the northwestern foothill Maidu, the first salmon observance was undertaken by a shaman, who caught the first fish of the season, cooked it, and distributed morsels of the food to all in the community. This ritual opened the fishing season for the year. Further detail on the structure of the ceremony, as to whether it included the recitation of a particular formula by the shaman, is lacking (Kroeber, 1925: 437; Dixon, 1905: 198) although Voegelin (1942: 57) notes the existence of a definite taboo against eating salmon before the rite was performed.

Yokuts and Western Mono tribes on the San Joaquin River and Yokuts divisions on the lower Kings River held spring salmon ceremonies at their principal fishing sites (Aginsky, 1943: 398; Gayton, 1949: 256). As previously outlined for the Yokuts "Seed Dance" ceremony, a supernaturally prophetic ritual by shamans preceded the first salmon rite by several weeks or months, apparently undertaken to inform the community of resource areas to be fished in the upcoming season. In late winter, shamans performed the "ohowis" or wishing ceremony in a specially constructed house or behind a tule partition, upon which were hung the skins of otters and beavers, believed to be the personal spirits of the shamans whose power was connected with water fauna (Kroeber, 1925: 507). A magic display was performed in which fish were made to appear in a vessel of water or to drop from the animal skins hung on the walls of the ceremonial structure. While this performance continued, the shaman called out the names of fishing camps where the people went in the spring to harvest the salmon run (Gayton, 1948a: 121-122). When the spring salmon arrived, a chief (the headman of the moiety ritually "responsible" for the salmon) speared, cooked, and ate the first salmon at these supernaturally sanctioned localities, and prayed to the salmon spirit for an abundant supply of fish. All lineages then participated in a general salmon feast, and the season was officially opened (Gayton, 1949: 256).

The ritual regulation of spring salmon fishing, in the contest of formulistic and other esoteric ceremony, has been briefly outlined in this section, with close attention paid to the central ritualist of the performance and the regulatory role he plays in the subsistence activity. Whether a formulist, shaman, or ritually obligated moiety chief, he appears to have played an important part in the direction and focus of communal subsistence energies at a time when potential salmon yields were highest. The brief examples in this section reveal a remarkable similarity in form and function, and have been presented as a cultural synopsis of the first salmon rite in native California.

Communal Hunting Ritual: Organizational Aspects of Deer, Antelope, and Rabbit Ceremony.

As a food resource of distinct importance throughout native California, game animals, and the ritual surrounding their communal hunting, form the last topics of discussion in this "operational" analysis. Deer and elk were a major secondary resource to aboriginal economies, everywhere of lesser importance than the acorn, but ranking higher than fish in areas without good salmon streams (Baumhoff, 1963: 167).
Communal deer hunting activity usually took place during the fall mating season, when females and competing males were concentrated in large herds.

Ranging over a variety of life zones, predominately in grassland, chaparral, woodland, and other transitional habitats, the mule deer (*Odocoileus hemionus californicus*) was found throughout the south Coast Ranges, Transverse Ranges, and southern Sierra Nevada. The Columbian black-tailed deer (*O. hemionus columbianus*) occurred in a complementary northward distribution, throughout the north Coast Ranges to the Cascades and in the Sierra Nevada southward to Lake Tahoe. The Roosevelt elk (*Cervus canadensis roosevelti*) and Tule elk (*Cervus nannodes*) also inhabited the north Coast Ranges and Central Valley respectively. Of more regional importance, the pronghorn "antelope," *Antilocapra americana*, inhabited the Central Valley in aboriginal times but by the ethnographic period, (c. 1900) was limited principally to the marginal desertic regions of Northeastern and Southern California. Although of smaller size than deer or elk species, the large pronghorn herds were amenable to surround and drive hunting techniques. Of similar regional importance in the drier scrub and woodland areas of Northeastern and Southern California were rabbits in the genera *Lepus* (jack-rabbit) and *Sylvilagus* (cotton-tail) which were often taken in great quantities through large-scale cooperative drives in the fall.

The ritual organization of communal hunting for deer, antelope, and rabbits was often the prerogative of shamans, hunting "bosses," or other ritualists whose specific task was the direction of hunting or driving activities. Description of the various aspects of ceremony surrounding each game resource, in selected cultural contexts, provides further evidence of the regulatory nature of subsistence ritual.

Among the Atusgewi, the fall deer hunt was organized around a communal sweating ritual called by the chief, followed by a singing and praying ceremony conducted by a hunting shaman, at which plans for the hunt were discussed. The shaman would tell who was to kill a deer, or guarantee that every man in the party would be successful. When groups of hunters moved to temporary camping sites in search of deer, the shaman accompanied them to "charm" the animals, and during the hunting activities, he smoked his pipe and called each mountain in the vicinity by name:

"Don't hide your children (deer); give my boys good luck; give them your children" (Voegelin, 1942: 172).

Upon return from the hunt, the shaman assembled all the hunters in one group, and before the meat was divided, all were compelled to sweat and cleanse themselves "under the armpits" while the shaman sang.

Western Achomawi shamans practiced a more elaborate "deer calling" ritual in which concealed pits along deer "runways" were utilized. These trapping
pits, as noted by Kroeber (1925: 309), were between six and nine feet deep, and their excavation was an arduous task. At sunup of the selected day, the shaman would cause a brief rain to fall, then sing from behind a blind of tules stretched out in front of the village. The deer ran and jumped (were driven?) into the pit as the shaman "called" them, and the assembled people killed and ate the animals thus trapped. An informant spoke of a particular shaman who performed this ritual:

"(This doctor) had very strong power to do this; he did it for everybody in his tribe; he got people something to eat, this way" (Voegelin, 1942: 171). 5

Shamans of the eastern Achomawi also held a ceremony for the fall deer hunt at which they assembled ten or more men for an all night ritual of singing and praying. The deer doctor, who might derive his power from a weasel spirit-guardian, burned marrow from the leg-bone of a deer in small holes in the ground, "feeding" his power to give the hunters good luck. This shaman also accompanied the hunting party.

Wintu shamans were customarily consulted about the location of game and as to who would be the most successful hunters of the next day's outing. The entire night previous to the hunt, the assembled group of hunters lay on their backs in the sweathouse, hitting their chests with slender sticks in time to the singing of the hunt "leader" who knew the supplicatory songs the best. The shaman also sang, charming the deer spirits and telling the hunters where to find the game (Dubois, 1935: 106; Voegelin, 1942: 171).

Fall communal deer hunts were similarly preceded and regulated by shamanistic ritual among the Maidu (Voegelin, 1942: 54, 171-172). Southern and Valley groups held a ceremony the night before the hunt, after an acorn soup dinner which the entire community attended. Shamans or secret-society headmen prayed and sang so that the hunters would sight game. The next day, a shaman or "luck-bringer" would go with the hunting party, walking ahead of the hunters to "spot" the deer. The shaman might also place "medicine" on a stick in deer tracks to give the animals cramps in their legs, facilitating their easy capture. When the deer were discovered feeding, the shaman would go around the herd with medicine to prevent their escape from the surrounding hunters. For this service, he was given a share of the deer meat (Beals, 1933: 348). After a successful hunt, the deer were brought back to the assembly house whole, where the meat was distributed in a feast which again included acorn soup. This hunting ritual was also practiced by northeastern mountain Maidu groups. The shaman conducted singing, dancing, and praying the night before

5 This account appears to attribute magical compulsion, similar to antelope charming, to the procurement of deer in pit traps. Deer were not usually subject to "charming" rituals. However, the driving of deer into enclosed pits is reported among the Western Achomawi by Voegelin (1947: 51, 52). Whether or not shamans were directly associated with drive activities of this kind is not recorded.
the hunt in a group ceremonial, charming the deer for the hunters both on this occasion and during the hunt on the following day. Before the deer meat from the hunt could be consumed, the services of the shaman again were required for a ceremony, as an informant stated:

"Do not eat meat, after big hunt, until somebody prays, talks" (Voegelin, 1942: 172).

Similar shamanistic ritual concerning deer hunting is noted by Aginsky (1943: 444-452) for the Yokuts, Western Mono, and Sierra Miwok. Deer shamans fortold the success of hunting parties, telling hunters where to go to find game, and often accompanying the hunting group, receiving a share of the kill for their supernatural services. Group ceremonies were held both before and after hunting activities.

In contrast, the ritual of the deer hunt in Southern California, among the Cahuilla and Serrano, was centered around the ceremonial leaders who have been previously described as important in the organization of the acorn and pinyon pine-nut harvest. When Cahuilla hunters killed a deer, the animal was often presented to the net in the kis’amna’a (ceremonial house) and preparations for the deer ceremony were begun. Food was collected by the net from all families in the village, and all community members were invited to take part in the feast (Strong, 1929: 77; Bean, 1972: 146-147). The ceremony consisted of singing over the body of the deer, with the manifest intent of encouraging the favor and cooperation of the animal spirit and expressing appreciation to the deer for allowing themselves to be killed. During the morning after the ceremony, the deer meat was distributed to the community at large. Bean (p. 147) notes that this ritual was held frequently enough to exist as a principal mechanism for the distribution of sizable amounts of animal meat to the community.

The Serrano practiced a similar ceremony; the kika conducted an all night ritual in the ceremonial house whenever deer were killed, and in the morning, summoned the people of the village to distribute the meat (Benedict, 1924: 379).

The most specialized ritual organization of hunting activity is undoubtedly expressed in the "antelope charming" ceremonies of the Achomawi, Atsugewi, Northern Paiute (of Surprise Valley) and the Washo, all of which are tribes who inhabited the northeastern California desert range of Antilocapra americana in ethnographic times. A special "antelope shaman" was in all cases the instigator of this community effort. In winter or early spring, when large herds of pronghorn ran in open country, the shaman would inform the people of the presence of a herd in a certain location. The shaman might dream of the animals (which might be his spirit guardians), or send several scouts to locate a herd nearby. Once the antelope were sighted, the construction of a sagebrush corral or a circular sagebrush rope fence, with an opening at one end, was directed by the shaman. A charming ritual was usually next performed inside the brush corral, the shaman leading dancing and singing of the assembled people, and
often falling into a trance-like state in which he allegedly experienced visions of a successful drive. At the conclusion of this performance, the antelope herd was driven into the corral by groups of fast runners, the entrance closed, and the surrounded animals slaughtered and divided among the participants. The shaman usually received the first and largest share of meat for conducting this ceremony.

Among the Apwaruge (eastern Atsugewi) a "power man" (shaman) sang all night to entice the antelope into a sagebrush rope surround. The next day, everyone in the community participated in the killing of the antelope; "even women could participate in the kill because the antelope were all doped" (Garth, 1953: 133). The Achomawi antelope shaman smoked and passed his pipe, leading an antelope dance before the charming ritual, which took place in the evening (Steward, 1939: 366-367).

Several informants' accounts of the antelope ceremony among the Northern Paiute groups of Surprise Valley are presented by Kelly (1932: 83-86). Accounts mention that the antelope shaman called together the inhabitants of 15 or 20 camps from the surrounding areas, perhaps as many as 100 men, to assist in the drive. As many as 200 antelope were killed in a single drive and distributed among the participants. One informant reported:

"Just one man can charm antelope; I don't know how he learns. He is like a doctor. He sits with everyone in the circle and sings making music on a doe hide (deer or antelope) that is stuffed with clothes and tied with string. If the people know how, they help him sing. A plain stick (unnamed) is wrapped with any kind of braid, and the charmer works it back and forth on the bundle. After a long time he says, 'They (the antelope) haven't looked at us yet.' Finally he says, 'The deer are coming,' and falls senseless on his drum and visions an antelope. Finally he recovers, sits up, says: 'We are sure to kill antelope. I see them coming inside the corral. I see them lying there.'

"They have already placed sagebrush, root ends up, in a big circle, about as far as from here to camp (about a half-mile). There were many people so it didn't take long to pile the brush. Men and women line up in wings by an opening in the circle, the women nearest the corral, the men at the outer ends.

"Then the fastest runner goes out, returning when he has sighted a herd of antelope. Then the men go out in two parties and circle the herd and drive them in. They close the opening of the corral and
stand between the piles of sagebrush that form the corral. If an animal starts their way, they head him back.

"The fastest runner chases the antelope around in the corral until they are tired and frightened, when he kills a doe and throws it on top of a sagebrush pile in the center, and then a buck. They eat these two and then everybody get a share. Then the headman (shaman) tells his people it is their turn to shoot. They shoot from the circle as the animals approach. A wife stands with each man and drags away his kill...

"When they stop for the night, the fastest runner guards the antelope. They set fire to that sagebrush to frighten the animals.

"(The next day) The headman tells them to go ahead and kill. There are so many animals that they don't have to divide them; they never kill all of them, some escaping. Almost everyone kills one. Sometimes an antelope becomes so tired that it falls down and a woman kills it. A woman might even kill two or three.

"The headman shoots too; he takes most of the buck horns, but not the does'. They put the horns on a pile of sagebrush in the middle of the camp circle. All the heads are turned toward the charmer's camp. He wants everyone to come. They cook the heads under the ashes and all eat, each person perhaps getting one head.

"They butcher the antelope and dry the meat on the sagebrush bushes. Coyotes and wolves never bother it.

"When there is no sagebrush for a corral, they braid sage-brush bark and make a fence by tying it to posts about four feet tall. Loose strands of bark hang down the poles and when the antelope are in the corral the people pull the braid and the loose strands wave.

"I have done this kind of antelope hunting. In winter the antelope are in big herds and that's the time to kill them. This kind of hunt is called ku'a'; many camps join. They tell everybody to come.

"It takes just one day to charm antelope (but the killing evidently continues into the second day) (Kelly, 1932: 84–85).

The Washo antelope shaman (ai' yes kumomli) utilized his supernatural dream-power in organizing the antelope ceremony and drive as recorded by Lowie (1939: 324–325):
"The antelope chief sees some antelope in a dream. He reflects about it and goes to the place dreamt about in the mountains. He sees two or three head, then he knows his dream is true. He begins to talk to them. He does not tell anyone as yet, but keeps his own counsel and studies the matter himself. He continues dreaming three or four times. Then he begins talking to the antelope, taking a pipe. He wants to see what he can do. He looks at the antelope, he lets them see him walking along side of them; they do not run away. He does this two or three times. Soon he tells the people to come together and says, 'My people, I have dreamt truly or falsely, I don't know which. In the place I dreamt of last night, there were forty antelope banded together. If I dreamt truly, you'll see them there this morning.' He sends two boys to the place as scouts. They look for game and see ten or fifteen head feeding there together. The boys do not let the antelope see them. They go back and tell the chief, 'Your dream is true, we saw the herd right there.' That evening, he studies the matter again while in bed. He dreams again and tells his people, 'Well, I dreamt again last night, I dreamt right before. I dreamt of two antelopes last night, you fellows drove them into the corral, we all killed them, and had something to eat.' The old people answer: 'Yes, if you dreamt right, we'll have meat, we'll try tomorrow to go after them.'

A corral was constructed, of approximately one acre in total size, with a chute leading to the entrance. The sagebrush was piled so high that the antelope could not jump out. The shaman stood in back of the corral while a group of men went out to drive the antelope in:

"He says, 'I'll stay home behind the corral. If I dreamt right, you'll drive them in and we'll kill them. If they get scared at you fellows, we can't help it; but I think we'll kill them easily in the corral.' When the antelope are near, he says to the beasts: 'Don't get scared, come on easily now, don't get discouraged, listen to my words. We are making a home for you, you have come a great way.' The antelope stop and look toward him. They are not afraid at all, but keep quiet like sheep driven into a pen. Instead of scattering they come into the sagebrush pen, the people close up, and the chief bids them commence killing."

In aboriginal times, bows and arrows and clubs were used to dispatch the antelope, and the largest buck was killed for the antelope shaman himself. Of the rest,
three or four men would divide the meat of one antelope:

"(The shaman says) I dreamt antelope for you, I got the best one, I am satisfied.' Nobody eats while he is speaking."

The antelope was divided among the people, the meat was packed home and all had "plenty that night."

Finally, among rituals concerned with the acquisition of game animals by communal methods are the annual rabbit drives, which were conducted by groups in whose geographic range these animals were a major seasonal food source. Among tribes in which this activity was organized by a ritual specialist, the Washo and the Cahuilla are exemplary.

The Washo "rabbit boss" was a special leader distinct from the political headman or antelope shaman, who set the time for the fall drive, which was held every year in late October or November over a period of several days (Lowie, 1939:327). A large group of people were organized by the boss, and up to fifteen men among them had rabbit nets which were united into a single unit 200 yards long and four feet high, supported by sticks six or seven feet apart. The line of nets was straight except at the ends which curved inward in the direction of the drive-line movements. 200 Washo, the rabbit boss among them, joined in the drive, scaring the quarry into the net where a boy or an old man would dispatch them with a stick, or the hunters themselves would kill them with a bow and arrow. The total kill might average between 400 and 500 rabbits a day, each man who participated obtaining three or four animals apiece. The next day, a new location several miles distant was selected and the procedure repeated. When all the people were heavily loaded with animals, the rabbit boss would say: "We stop today, we have all we want today. Let us go home."

The ritual aspects of the rabbit hunt are somewhat unclear, but the rabbit boss was apparently an hereditary position and in later ethnographic times, assumed by an individual with supernatural powers acquired in dreams. Downs (1961: 380) proposes that the introduction of agriculture and firearms during the historical period sufficiently decreased antelope and deer populations to cause an associated increased dependence upon rabbit as a major source of food. Ecological factors may thus have facilitated a more recent transference of ritual traits from the antelope charming complex to the rabbit drive (i.e. a "dreamer" directing the hunt). Formalized prayers were said before the hunt by the boss, and in the period covered by the memory of the oldest informants, dancing was often staged nightly during the rabbit drives. Downs elicited data concerning the character of the last Washo rabbit boss:

"There was... a special leader who directed the hunt who had dreaming power, 'Jack Wallace would dream
where the rabbits were and when it was time for hunting he would send out a call.' The man mentioned was described as the last of the real dreamers; this power made him extremely influential among the Washo; his descendants are claimants for the 'chieftancy' (1961: 380).

The Cahuilla rabbit hunt was a ritually regulated activity undertaken to provide a large number of animals for various ceremonies and feasts which occurred when rabbit populations were at high density (Bean, 1972: 147). In the fall, these animals were hunted in the mesquite and pinyon-juniper woodlands, where herbaceous plant resources were plentiful. Their presence was significant to Cahuilla subsistence during the winter months when fresh vegetable resources were unavailable. The hunt involved the cooperative effort of large numbers of men, women and children, and was usually organized by the paxaa?, the ritual assistant to the net (the paxaa? might also be a shaman) who supervised the proper arrangement of the rabbit nets into a large arc, directed the drive movements, and organized the collection and counting of the game that was killed (Bean, 1972: 113). In some instances several hundred rabbits were collected in a single day's activity.

The Functional Context: Model and Analysis

Throughout the preceding sections, the ideational and operational contexts of subsistence ritual have been briefly reviewed in selected cultural settings of native California. It has been proposed that native world view incorporated two basic postulates which reinforced the ritual regulation of economic activity: (1) the world of supernatural cause and effect required proper human attention and respect in the form of prescribed ritual behavior for the continued positive response from spirits in control of food resources, and; (2) the organization of these rituals associated with large-scale gathering, fishing, and hunting activity was usually accomplished under the direction of a shaman, formulist, or other specialist who functioned as a regulatory force by virtue of his ritualized power to control or mediate supernatural phenomena. The general structure of the subsistence rituals previously discussed appears consistent throughout native California: an essential food resource (an "ecological determinant") such as acorns, salmon, or antelope, is available in a relatively concentrated supply during a limited seasonal interval, and often requires the intensive, coordinated effort of human groups to maximize potential yield. Economically productive individuals are organized to collectively accomplish the subsistence activity and/or distribute the product in a ritual context, and are often constrained from individually exploiting or consuming the available resource until a ceremony is performed by a specific ritual functionary. In the case of most plant food and salmon rituals, the conclusion of this ceremony (which may last a variable number of days) commences the "resource season" during which the harvest and use of the food is not further restricted. Table 1 summarizes the operational contexts of subsistence ritual in native California as outlined in the previous section.
<table>
<thead>
<tr>
<th>Resource</th>
<th>Season of Ritual Management</th>
<th>Culture Group</th>
<th>Ritualist(s)</th>
<th>Regulatory Pathways (1), (2) as Represented in Figure 1</th>
</tr>
</thead>
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<tr>
<td>acorns</td>
<td>fall</td>
<td>Maidu</td>
<td>shaman</td>
<td>restriction upon gathering activity (1), or restriction upon consumption (2)</td>
</tr>
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<td></td>
<td></td>
<td>Central Miwok</td>
<td>secret society headman</td>
<td>direction of gathering activity (1), restriction upon consumption (2)</td>
</tr>
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<td></td>
<td></td>
<td>Yokuts - W. Mono</td>
<td>shaman moiety chief</td>
<td>restriction upon consumption of stored product (2)</td>
</tr>
<tr>
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<td></td>
<td>Cahulla</td>
<td>shaman</td>
<td>direction of gathering activity (1), storage and distribution of product (2)</td>
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<tr>
<td></td>
<td></td>
<td>Luiseno</td>
<td>secret society shaman</td>
<td>direction of gathering activity (1), storage and distribution of product (2)</td>
</tr>
<tr>
<td>pine-nut</td>
<td>fall</td>
<td>Washo</td>
<td>&quot;religious man&quot; (dreamer)</td>
<td>supervision of gathering activity (1), distribution of product (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Serrano</td>
<td>kika paha</td>
<td>direction of gathering activity (1), storage and distribution of product (2)</td>
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<td>misc. root, seed products</td>
<td>spring</td>
<td>Atsugewi</td>
<td>shaman</td>
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<td></td>
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<td>summer</td>
<td>Yuma</td>
<td>kwexot</td>
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<td>formulist</td>
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<td>spring</td>
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<td>shaman</td>
<td>restriction upon fishing activity (1), restriction upon consumption (2)</td>
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<tr>
<td></td>
<td></td>
<td>Yokuts</td>
<td>shaman moiety chief</td>
<td>supernatural direction of fishing activity, restriction upon fishing activity (1), restriction upon consumption (2)</td>
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<td>fall</td>
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<td>distribution of product (2)</td>
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<td>Serrano</td>
<td>secret society shaman</td>
<td>distribution of product (2)</td>
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<td>winter</td>
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<td>shaman</td>
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<td>rabbit boss</td>
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<td></td>
<td>Cahulla</td>
<td>paxaa'</td>
<td>direction of drive activity (1)</td>
</tr>
</tbody>
</table>

Table 1. Ritual Regulation of Large-Scale Subsistence Activity in Native California
It would thus appear that the subsistence rituals surrounding major food resources specifically controlled and directed the flow of potential energy between environment and human cultures. The control interactions of ritualists over subsistence work potentials and food energies during periods of maximum resource availability may be considered as a basic "program" for efficient harvest and distribution of major food resources. In brief analysis, a simple diagram can be devised to qualitatively represent the energy flow system of ritual regulation, utilizing a set of circuitry symbols designed by Odum (1972: 38) to model energy flow in human ecological and cultural systems. For the purposes of the proposed model, these modules of energy "language" are defined as follows:

1. **Source.** The circular symbol represents the initial source of energy for the ecological system, in this case, input of radiant energy from the sun.

2. **Passive Storage.** This symbol represents "passive storage" of potential energy at some location in the system. No new potential energy is created, and some work must be performed both to place this energy in storage and to release it for subsequent flow. This storage includes the "holding" of restricted products until consumption is ritually sanctioned, short-term collection of resources for ritual redistribution, or more protracted storages for future distribution.

3. **Heat Sink.** Required according to thermodynamic law; all processes of energy transformation deliver potential energy into heat, which is effectively lost for further useful flow.

4. **Work Gate.** This module represents a point in the system where work performed (a) allows a subsequent flow of energy (b). It includes the energy required by communal groups in subsistence activities, and the organizational expenditures of the ritualist in directing these activities and distributing products to the community.
(5) **Green Plant.** This symbol represents plant food resources (acorns, pinyon nuts, mesquite beans, etc.) which capture radiant energy through photosynthesis for production and energetic maintenance.

(6) **Self Maintenance.** Symbol representing the "autocatalytic" self-sustaining units of the system in which stored potential energy is used for the maintenance, work, and resupply of the unit. Heterotrophic organisms such as salmon, deer, antelope, rabbits, and man, which depend upon input from lower trophic levels as energy for maintenance and work may be considered as examples.

(7) **Ecosystem.** This symbol is a combination of (5) and (6), and represents trophic relationships in the natural sector. Specifically, it represents energy available from the major food resources of aboriginal cultures, both plant and animal, which were highly seasonal in abundance, requiring communal extractive efforts for maximum yield, and subject to formal ritualization. Flow from this module will be considered as the concentrated, short-term potentials represented by a mature acorn crop, salmon run, antelope herd, etc.

(8) **Switch.** This symbol represents flows which have **only** on and off states controlling other flows by "switching" actions. The availability of a major food resource has definite on and off states, production and concentration fluctuating with season. The "on" state, i.e. impending to maximum availability, is an informational flow from the ecosystem which acts as a switching action for regulatory activities of ritualists.

Figure 1 is a **composite** representation of subsistence ritual in native California detailing the basic components and flow characteristics of examples previously discussed.
Figure 1. Composite Flow Diagram of Subsistence Ritual Energetics in Native California
A central, self-stimulating subsistence loop is established: between the organized subsistence group (represented here as ten individuals, although the actual size of ritually organized groups was often considerably larger) and a subsistence work gate. Gathering, fishing, and hunting at productive seasonal intervals provide energy flow which, in part, is returned back to the work gate for further subsistence activity. At two positions along this basic feedback loop are located the regulatory gates of the ritualist. Flow from resources may first be regulated along the subsistence energy circuit (1) by the organizational activity of the ritualist, which may include the actual direction or participation in the activity (e.g. the deer hunt shaman) or simply the release of a restriction (taboo) upon the particular subsistence pursuit by the performance of a symbolic rite (e.g. the salmon formulist). This ritual regulation of the actual subsistence activity may act in conjunction with or mutually exclusive of a secondary energetic restriction; (2) that the food resources must be held in passive storage until a ritualist performs a ceremony in which the collected goods are distributed (either immediately or over a protracted period of time), or a general restriction on the consumption of a particular food item is lifted (e.g. first-fruits rites for plant foods). The food energy having reached individuals within the community, it may be used to perform further food gathering activities (perhaps not regulated) completing the subsistence loop originally organized by the ritual specialist, or resources may be "paid" to the shaman or other ritualist for his services. The initial period of supervision or restriction ends upon ritual performance and/or successful accomplishment of harvest or hunt, and the short-term subsistence energy "program" is terminated.

The entire system of energetic regulation theoretically functions on the principle of positive feedback, whereby the more energy supplied to the community from the organizational and distributional efforts of the ritualist, the greater the intensity and organization of the work directed back into subsistence activity. Through this flow interaction, the ritualist controls the magnitude and timing of flow from essential resources and ultimately directs the distribution of this potential energy. Occupying a position at the convergence of many energy pathways, the subsistence ritualist makes possible high magnitude energy flows into the system, with a relatively small expenditure of ritual work. Dependent upon the success of the subsistence behavior he directs, the ritualist also derives continual loop verification from community members (in the form of food "payment" and cognitive support) as to the efficacy of his control activities. This actual decentralization of control mechanisms toward community members from whom energy is derived (i.e., the economic community insures energy delivery to itself by rewarding and supporting the ritualist) is described by Odum (1972: 212-213) as an energetic "democracy," and was perhaps functionally basic to the noted efficiency of ecological adaptation among native tribes of California. World view and elaborate ritual mechanisms which supported regulatory roles of ritual specialists may be viewed as adaptations for the introduction of feedback stability and amplification of energy delivery in aboriginal social systems during periods of maximum productivity of natural resources. In the various cultural manifestations of shaman, headman, formulist, hunting boss, etc., the subsistence ritualist stands out as an energetic organizer.
in native California, utilizing cognitive support and ritual prerogatives to stabilize and direct input and flow of energy from important environmental resources. Ritual structure required a series of support interactions between ritualist and community which served as the basis for a stable, dependable, energy exchange system during intervals of concentrated availability of major food resources, and maintained a power base adequate for the support of culturally complex and densely populated hunting and gathering societies.

The energetic structure of subsistence ritual in native California was undoubtedly a functional response to environmental conditions at various adaptive levels. However, the following proposals must remain largely theoretical in the fact that they do not quantitatively emerge from the ethnographic evidence available:

(1) The regulation of harvest procedures for essential resources may have assumed a distinct conservation and management orientation, with ritual specialists serving as short-term "environmental managers." Heizer (1955) has previously presented evidence of deliberate conservation practices in aboriginal North America, noting that these practices were often "masked under guise of magic or ritual." Bean (1972: 147) has suggested that the Cahuilla rabbit hunt encouraged the regular "culling" of large populations of these animals, which, if allowed to remain at maximum density, would be potentially disruptive to new vegetation growth upon which the Cahuilla also depended. Rostlund (1952: 16) notes that intensive salmon fishing of native groups at run intervals (the timing of this activity was strictly controlled by the formulist) probably benefitted the production of Pacific salmon by preventing overcrowding at upstream spawning beds. Ritual direction of plant food harvests undoubtedly served to organize efficient collecting efforts before natural competition from insects, birds, and mammals could reduce the quantity of these resources. The strict enforcement of ritual restrictions concerning the exploitation of "new" resources (particularly plant foods and salmon) maintained the subsistence base of the community by preventing harvest of important food resources prior to periods of maximum productivity.

(2) Large, communal groups were organized at critical seasonal periods, when efficient gathering, fishing, and hunting activity was energetically crucial to the subsistence base of many groups. Ritualists called attention to the onset of periods when specific products were available in large supply and cooperative action was important.

(3) Ritual organization decreased potential intra-group competition for a seasonally limited resource (which was energetically wasteful and
time-consuming), rather focusing community energies toward maximum cooperative effort by structuring the commencement of a particular subsistence activity so that participants started large-scale gathering, fishing, and hunting work at the same time.

(4) Significantly, most subsistence ritual was a mechanism for decentralization of energy flow and distribution of food resources to the community, in public ceremonies held after the successful harvest or hunt. Ritual restrictions prohibiting the consumption of resources before the ceremony ensured the distribution of the entire supply of collected food according to individual, family, or lineage need.

(5) Finally, successful application of socio-energetic principles of subsistence ritual to a critically needed food resource provided relief from psychological stress and anxiety over the availability of food, supporting the ideology of adherence to ritual behavior as a means for achieving positive response and balanced reaction from the natural environment.

In summary, native cultures were confronted by an ecological and seasonal diversity of natural resources which required accurate control and supervision of subsistence energetics for the maintenance of human populations. A basic response of aboriginal peoples to variable input of natural resources appears to have been the regulation and organization of communal subsistence activities through the ritualization of economic behavior. At intervals of seasonal availability of major food resources, native world view reinforced a set of regulatory prerogatives undertaken by shamans, formulists, and ceremonial leaders which served to organize the work potentials of large cooperative groups. Energy flow from environmental resources and subsistence work potentials were regulated by ritualists in order to facilitate the efficient harvest and use of concentrated, short-term food yields, including seasonal products such as acorns, salmon, and game animals. As functional mechanisms for the systematization of human ecological relationships, world view and ritual were operative ideological institutions of broad adaptive importance to aboriginal societies of native California.
List of Abbreviations of Serials

AA American Anthropologist
AAA-M American Anthropological Association Memoirs
AMNH-B American Museum of Natural History Bulletin
BAE-B Bureau of American Ethnology Bulletin
SJA Southwestern Journal of Anthropology
UC-AR University of California Anthropological Records
UC-ASR University of California Archaeological Survey Reports
UC-PAAE University of California Publications in American Archaeology and Ethnology

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CALIFORNIA INDIAN WARFARE

Steven R. James
Suzanne Graziani
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INTRODUCTION

With the exception of the Mohave and the Yuma Indians along the Colorado River, the tribes of California were considered to be peaceful, yet peaceful is an ambiguous word. While there was no large-scale or organized warfare outside the Colorado River area, all tribes seemed to be, at one time or another, engaged in fighting with their neighbors. There was a great deal of feuding between groups (tribelets or villages) within the individual tribes, also. The basic cause for warfare was economic competition, which included trespassing, and poaching, as well as murder. The Mohave and the Yuma, on the other hand, glorified war for itself.

The ambiguity of the word "peaceful" is increased by the accounts in the ethnographies. For example, a tribe may be described as being "peaceful;" yet, warfare with certain neighbors was said to be "common." At times, there were actual contradictions in the information concerning tribal warfare and intertribal relationships.

Apparently, each California tribe had contact with most of its neighbors, but for the purposes of this paper, we have divided the state into the following five areas of interaction: the Northern tribes, the Central Coast tribes, the Southern tribes, the Central Interior tribes, and the Colorado River tribes. Within each area, we have attempted to ascertain which tribes were in agreement and which tribes were in conflict, and if the conflicts were chronic. Unfortunately, what is impossible to determine is the extent of white influence on the native patterns and relationships which were reported to ethnographers as though they were wholly aboriginal.
NORTHERN CALIFORNIA TRIBES

The tribes of Northern California may be divided into two major groups, the Northwestern Coast and the Northeastern tribes, based on economy and material culture. However, the basic characteristics of their warfare and the attitudes toward war were similar throughout the entire area. These tribes, therefore, will be treated as a unit.

White influence up to 1850 was not as great in northern California as it was in most of the rest of the state. The white population was smaller than that which moved in farther south, and the land itself was more bountiful with fish and shellfish from the waters, and vegetable and game food on the land. In addition, there was no concern with forcible religious conversion as happened along the coast south of San Francisco. However, the ethnographies contain discrepancies, especially as to the details of warfare, which may have arisen from the informants' lack of first-hand observations of the true native patterns. Of the white influences which are apparent, perhaps the most important was the introduction of the horse. This brought groups formerly having little or no interaction into contact with each other and changed the relationships between them. For example, the Paiutes were described as the "worst" enemies of the Atsugewi (Garth 1953: 180) until the acquisition of the horse allowed the Paiutes to travel extensively and eventually begin trade with the Atsugewi (Garth 1953: 183).

The general attitude of Northern California Indians was peaceful. The Northwest Coast tribes appeared to be more warlike than the Northeastern tribes, but this may be due to the fact that more actual battles were recorded for them. The land area of these tribes was small, and it is possible that sheer numbers alone could increase friction, even if the basic attitude toward war was negative. Inland, the Atsugewi were reported to "avoid war" (Garth 1953: 182). The Wintu were described as "non-belligerent people" (DuBois 1935: 36). Most of the tribes in both areas equated war with murder (Dixon 1907: 453; DuBois 1935: 37; Kroeber 1951: 421; Gifford and Klimek 1936: 74) and had elaborate tribal procedures to avert actual fighting (Dixon 1907: 453; Foster 1944: 188; Loeb 1926: 205). The most aggressive tribe in Northern California were the Modoc, and they were influenced by their allies, the Klamath of southern Oregon (Ray 1963: 134). Powers (1877: 253) gave the Modoc credit for being "fierce warriors" in their battles with the whites in Oregon, but Kroeber (1925: 134) stated that their warfare may have been "overrated." It is not possible to tell now how much of the fierceness described was due to the fact that the whites who wrote the accounts were also doing the fighting. It is also not possible to tell how much the frequency of conflict between Indians increased from the threat of white settlement throughout Northern California.
Here, as in the remainder of California, the warfare of the Northern California Indians was economic in nature. The basic reason for fighting was the retaliation of a trespass, a poaching, or a murder -- serious offenses which upset the balance between the Indians and nature. Gould (1966: 80) said for the Tolowa that warfare was not organized by instead involved a surprise attack by one or two men on an unsuspecting victim to retaliate an injury or a death. Even so, attempts were made to avert actual fighting.

This idea of negotiating for peace before war began, despite the seriousness of the precipitating action, stresses the fact that warfare was looked upon as being undesirable. Fighting could not be encouraged, because the tribes were too small to afford the loss of life, and they were too dependent upon hunting and gathering cycles to afford the loss of time involved in warfare.

A distinction should be made between fighting within the tribe and fighting with other tribes. While both were disruptive economically, in-group wars destroyed the co-operation which was necessary for the society to function efficiently in subsistence activity, and they left the group defenseless against threats coming from the outside. In-group fighting, however, was fairly common. The Modoc fought each other (Kroeber 1925: 331), as did the Wintu (Voegelin 1938: 108) and the Pomo (Kroeber 1925: 235-6; Barrett 1908: 243). Kroeber described such hostilities for the Pomo:

"This feud may be placed between 1830 and 1835, or earlier. According to the Yokala-pomo, they owned the entire valley, up to the mouth of the East Fork of Russian River, but had allowed a body of northern Pomo to settle at Komil and utilize the northern end of the valley. A dispute arising about hunting or fishing rights, the southerners attacked the hitherto tolerated intruders and drove them to Scott Valley or Clear Lake, from where the local chief, probably of Noboral, finally purchased peace for them.

"The northern Pomo assert that one end of the valley had always been theirs, and that the trouble arose not over violations of boundaries but because their famous shaman Sikutsha was accused of having "poisoned" a man in one of the central villages. An attempt was made to obtain revenge by force, but Sikutsha escaped to friends in the Upper Lake region. The Komil people as a whole had not been drawn into a battle, but were ill at ease, and left their village, journeyed up the East Fork to Blue Lakes, and finally settled in Scott Valley.

"It is not impossible that both conflicts took place as stated, though at different times" (Kroeber 1925: 235-236).

Intervillage feuding occurred between Maidu villages (Kroeber 1925: 400-1) and between Yurok villages, the latter having a yearly intratribal settlement ritual because
the frequency of such hostilities was too much of a threat to the tribe (Thompson 1916: 143). Any intratribal dispute was detrimental to the group, and as a result, such problems were considered to be private between families rather than involving the entire group, and attempts were made to settle them quickly. Intertribal wars, while disturbing economic patterns within the groups involved, also created antagonism between neighbors who needed to trade with each other and so could not encourage hostilities.

Frequently, and especially among the Northwest Coast tribes, a monetary compensation was offered in lieu of resorting to warfare. If this was refused and a battle occurred, peace was ultimately made with a monetary settlement. This practice served two purposes: 1) it was a reminder of the economic factor of warfare, a compensation for the loss which caused the hostilities, and if war had occurred, for the hardships and losses caused by the fighting; and 2) it discouraged further fighting because war was too costly.

The chief, or an intermediary sent by him, arranged the compensations and settlements. As with the rest of California, the chief in Northern California was not a war-leader and did not fight. In intratribal disputes, the Yuki chief arranged payments for murder (Gifford 1965:72), while the Shasta chiefs acted as mediators between the opposing parties and exacted the compensation payments (Dixon 1907: 453). With the Northeastern tribes, problems could be settled without compensation. Pomo chiefs settled intervillage boundary disputes (Loeb 1926: 205). Even the fierce Modoc settled internal disputes through mutual friends (Ray 1963: 12-14). In neither case is there mention made of compensation. However, the Atsugewi chiefs sent messengers to arrange settlement payments for murders (Garth 1953: 179); Spott and Kroeber (1942: 152-3) mentioned an instance when a girl was paid in settlement for a murder. In the event of an outside war, the Yuki chief held his people in check while he sent a messenger with a claim for payment to the other tribe; if in spite of this, war resulted, the Yuki offered payment when they were the victors (Foster 1944: 189). In this way, the losers were paid not to retaliate. The Pomo took this procedure one step further by expecting a reciprocal compensation from the losers (Loeb 1926: 203-204). The Shasta arranged reciprocal settlements a year after a battle (Holt 1946: 313-314), when the original source of friction had been forgotten, which stressed the prohibitive economic aspect of war. The Wappo had the losers pay for a battle (Driver 1936: 214); so, while winning may have been profitable, it was not worth the risk of losing. The Nomlaki offered no monetary settlement but initiated mutual trading (Goldschmidt 1951: 337).

As a result of the economic factor, warfare was probably fairly uncommon, even between tribes who considered themselves to be traditional enemies. The Modoc, mentioned before as one of the most aggressive tribes in Northern California, did not have a class of warriors; instead the men joined war-parties randomly if they were interested in fighting (Ray 1963: 137). Frequent warfare requires a standing
class of warriors, as existed among the Colorado River tribes. On the other hand, the Hupa of the Northwest Coast had a warrior class, comprised of young men guided by visions, but this class had no special status within the tribe which would glorify participation in warfare (Wallace 1949: 2). Goddard (1903: 63) said that warfare involving the Hupa was "probably not frequent." Also, in general, there was no feeling of total tribal unity necessary for large-scale warfare. However, one of the earliest ethnographic accounts, that of Kostromitonov of the Russian colony Ross in 1839 (1974: 11-12), mentioned a dispute involving two tribes probably of the Pomo which lasted a year and took the lives of 200 men. In contradiction, Kostromitonov also said, "Peacefully disposed by nature, the Indians wage war against each other only rarely..." and since the feud had occurred prior to his arrival at Ross, it may be assumed that either Kostromitonov or his native informants exaggerated the number of Indians killed.

Very little economic raiding occurred. After the whites arrived, the Modocs raided the Achomawi for slaves, but according to Kroeber (1925: 308), this may have started as a method of revenge which was intensified by mobility through the use of the horse. The Modoc were the only tribe in Northern California that raided for slaves. Other tribes may have taken captives in war who were made into slaves, but the reports vary in this respect. For example, both Dixon (1907: 441) and Voegelin (1942: 110-1) said that the Shasta enslaved prisoners, but Holt (1946: 313) said that they took no captives. Voegelin (1942: 110-1) said that the Wintu killed most of their captives, while DuBois (1935: 39) said that this tribe took no prisoners. Some accounts also said that captive women were married by the Northeastern tribes. This is mentioned for the Maidu (Faye 1923: 44), the Atsugewi, the Achomawi and the Wintu (Voegelin 1942: 110-1). In contrast, along the Northwest Coast, women captives of the Hupa, Karok, and Yurok were generally killed (Driver 1939: 358). Apparently, taking captives was not a main objective of warfare, nor were female captives taken primarily as a means of increasing the tribal population.

There is little mention of warfare involved with territorial expansion. The Wappo gained Alexander Valley from the Pomo (Barrett 1908b: 226, Cook, 1956: 122). In another case, the Yana attempted to extend their fishing rights on the Sacramento River through Wintu territory, but were defeated (Merriam 1955: 15-16). Most warfare seems to have been concerned with maintaining the existing boundaries.

As a result, the majority of fights occurred between neighbors. The Hupa, for instance, were said to have clashed with all their neighbors at some time (Wallace 1949: 9). Tribal boundaries were definite, and if a member of a neighboring group was seen hunting or gathering too close to one's land, the incident could provoke a general conflict with the offending group for poaching, or if the trespasser or the one who sighted him was killed, a retaliation for murder might occur. In this way, warfare, while being economically disruptive, served to support the existing balance between the Indians and nature. Each group had definite rules governing the use of
the land, and these varied depending upon what subsistence resource was most plentiful in the area. For instance, one group of the Achomawi allowed their neighbors to fish in their waters of the Pit River, but guarded their hunting rights, while another Achomawi group shared their hunting rights (Kniffen 1928: 307-309). The Eastern Pomo allowed the Wintu to fish and hunt on their land, but they could not gather without prior approval (Gifford 1923:80). Allowing neighbors to gather with prior approval was common among the Pomo. The Wintu and the Yana fished together on the Sacramento River (Sapir & Spier 1943: 270), but the text made no mention of gathering procedure for that area.

In short, the land provided enough for living and some for sharing, but the sharing could not be overdone. Infringement of the established procedures led to retaliations. For example, the Northern Pomo and the Huchnom fought constantly over fishing rights on the Russian River (Loeb 1926: 210). A particular battle is on record between the Pomo and the Patwin which resulted from their arguing over acorns. This ended with the death of a Pomo woman (Gifford & Kroeber 1937: 198). Another occurred with the Pomo who were allied with the Kato, against the Yuki to retaliate the deaths of two Pomo women who had been gathering clover too close to the boundary of Yuki territory (Stewart 1943: 33).

The Northwest Coast tribes appeared to trade rather than to grant reciprocal gathering rights, although the Northeastern tribes engaged in trade also. The Mattole traded with all their neighbors to some degree, but principal contact was with the Hupa (Nomland 1938: 105). The Shasta traded with the Yurok, the Karok, and the Wintu (Dixon 1907: 436). The Achomawi traded with the Atsugewi and the Wintu (Kroeber 1925: 309), and some groups of the Achomawi traded with the Modoc while others warred with them constantly (Ibid.: 320). The Maidu traded extensively with the Atsugewi, as did the Wintu (Garth 1953: 183). As mentioned before, the Paiutes traded with the Atsugewi.

The breaking of trade agreements could lead to war. In one case, the Potter Valley Pomo raided the Northeast Pomo for salt, rather than trading for it, and the Northeast Pomo retaliated, killing some Potter Valley people (Kroeber 1925: 236):

"The Potter Valley people were long in the habit of visiting across the mountains and purchasing salt. A party that attempted to make away with a supply secretly was discovered, attacked, and in part destroyed. In revenge the Potter Valley people killed certain of the northeasterners who happened to be among them, after which they thought it wisest to refrain from attempting to reestablish intercourse and secured such salt as they could get from the ocean. This was before the arrival of the Americans."
Arguments over trade between the Mountain Yuki and the Nomlaki resulted in an ambush attack upon a Nomlaki party be allied Yuki forces (Goldschmidt, Foster & Essene 1939: 143-134).

The Indians of Northern California were usupicious of strangers. To the Maidu, they were "natural enemies" (Faye 1923: 43). The Shasta killed strangers on sight, as did the Wintu (Voegelin 1942: 108). The suspicion was based on the idea that strange people arrived, "it must be for a bad purpose" (Kroeber 1925: 13). The Lassik were said to kill traders (Nomland 1938: 105), probably because they were suspicious of the real motives of the strangers in their territory. Two recorded instances of warfare between other tribes support this idea. A trading party of Yuki was killed at a Kato village, leading to a retaliation by the Yuki and a counter-retaliation by the Kato (Kroeber 1925: 157-158). In another case, some Yurok men who had Hupa wives were attacked while visiting their wives' village, resulting in retaliation and counter-retaliation (Ibid.: 50-51). Other cases of warfare over the death of a stranger involved trespassing incidents. In a specific instance, several Yuki poachers attacked a group of Kato women, leading to a retaliation years later and then a counter-retaliation by the Yuki (Essene 1942: 93). Another account mentioned that a Wailaki killed two Yuki boys on their home territory which resulted in two retaliatory attacks by the Yuki (Gifford 1965: 73). In this case, it is probable that the Wailaki was poaching and killed the Yuki boys in self-defense. Other accounts did not mention that the person killed was poaching or was even on another tribe's territory -- for example, one battle resulted from the killing by a Wintu of two Nomlaki who were gathering seeds (Barrett 1908a: 344), the account giving no mention of where the seeds were being gathered -- but it may be inferred that the person who did the killing viewed his victim as either a trespasser or a potential poacher, and in any case, a threat because he was a stranger. Being too close to tribal boundaries could be as dangerous as crossing them.

As mentioned before, certain tribes in Northern California considered other tribes to be their traditional enemies. With one exception, these pairs were members of different linguistic families. The one exception was the chronic hostility between the Shasta and the Madesi group of the Achomawi, who were both members of the Hokan family; however, throughout California, poorer tribes tended to raid the richer ones, and the Shasta were said to be "jealous" of the Achomawi "wealth" (Kniffin 1928: 314). For the others, the existence of traditional enemies from different linguistic stocks can be explained as long-standing enmity which began as a conflict over territory when a new group of foreign-speaking people moved in and began to establish themselves in the area. The fact that the newcomers spoke a different language made communication between groups difficult and kept alive through generations the idea that the other people were different and therefore suspicious.

Fighting was chronic between the Wintu of the Penutian linguistic family and the Yuki of the Yukian family; in fact the Wintu word for "Yuki" means "enemy" (DuBois
Of the Northeast California tribes, the Penutian-speaking Modoc engaged in traditional warfare with certain groups of the Hokan-speaking Achomawi (Kroeber 1925: 320; Ray 1963: 12, 134). The Modoc also fought extensively with the Hokan-speaking Shasta as allies of the Klamath, who considered themselves traditional enemies of the Shasta (Garth 1953: 331; Holt 1946: 313; Powers 1877: 254). The Shoshonean Paiutes were chronic enemies of the Achomawi (Kelly 1932: 185). It was mentioned before that the Paiutes were traditional enemies of the Atsugewi until the horse increased the contact; instead with the Modoc and the Paiutes, the horse produced chronic enmity (Ray 1963: 134). While being of a different linguistic stock, the Paiutes were also better classified as Great Basin people rather than Californian; so, there were other differences besides language which made them seem suspicious to their neighbors. Among the Northwest Coast tribes, only one mention of traditional enemies was made. The Mattole exchanged "constant" hostilities with the Wiyot (Nomland 1938: 105), the Mattole being of the Athabascan family and the Wiyot being Algonkin speakers. Warfare between the Yuki and the Kato, Athabascan speakers, was common (Kroeber 1925: 157-158; Essene 1942: 93; Kroeber 1928: 396-398), as it was between the Yuki and the Pomo of the Hokan family (DuBois 1935: 38; Barrett 1908a: 134-136), and between the Yukian-speaking Wappo and the Pomo (Barrett 1908a: 256-266; Kroeber 1925: 220-201; Gifford & Kroeber 1937: 198). None of these sources refers to these tribes as being "traditional enemies," but this may have been merely the preference of the ethnographers, for the number of recorded battles encourages this inference. Certainly the chronic hostilities between the Yuki and the Nomlaki, for example, could be seen as being traditional, as with other tribes who fought each other constantly.

Witchcraft and shamans figured heavily in Northern California Indian warfare. Sometimes a shaman was hired to "kill" an enemy instead of a tribal expedition, as with the Shasta, Achomawi, Atsugewi, Modoc, and Wintu (Voegelin 1942: 109). The Modoc also hired shamans to retaliate in intratribal disputes (Ray 1963: 10). A shaman could be the cause of warfare, also, instead of averting it. The Yana were said to have once been friendly with the Atsugewi until the Atsugewi accused a Yana shaman of "poisoning" one of their people (Sapir & Spier 1943: 270). Presumed witchcraft deaths precipitated fighting between some Pomo groups. In one report, a Point Arena man killed a Yorkville shaman for causing his wife's death, and the Yorkville people attacked in revenge (Loeb 1926: 212):

"The Point Arena Indians of the coast had wars with Stewart Point, Yorkville, Yokaia, and Mendocino (Buldam). It is said that most of these wars were due to deaths from poisonings, and that there was little trouble about boundaries. A man would get sick. Then he would remember who stood in back of him at the last feast. An accusation and a war would follow."
Kroeber's opinion was that the Patwin also staged similar avenging attacks within their tribe (Kroeber 1932: 298).

The use of ritual in warfare emphasized the fact that fighting represented a disturbance in the balance of the Indians' lives, which required the aid of supernatural forces in remedy. Ritual supplied luck; Pomo war-chiefs made offerings of beads prior to a battle (Gifford & Kroeber 1937: 154), and shamans used witchcraft to bring good fortune to their people. Shasta shamans sang all night prior to a battle to "charm" the enemy (Voegelin 1942: 109), while Atsugewi shamans cast spells of drowsiness upon the enemy camp (Garth 1953: 182). The Modoc shamans used magical "devices" to bring success (Ray 1963: 136). The Tolowa, Yurok, and Hupa shamans employed "formula-magic" against their enemies (Driver 1939: 359). A shaman sometimes used his powers also to foretell the outcome of a battle, such as with the Nomlaki, whose shamans were "seers" (Goldschmidt 1951: 342), and the Atsugewi whose shamans prophesized when the expedition was half completed (Garth 1953: 182).

Dances of incitement were held for most of the Northern California tribes. These gave the fighters courage and allowed the shamans to work their magic. With the Yuki, both men and women danced (Foster 1944: 189). Shasta men told of their expected deeds in battle (Dixon 1907: 430-440), Atsugewi men pantomimed their fighting (Garth 1953: 181), and Modoc women scorned the enemy through songs and mock battles (Ray 1963: 139). The Yurok held a noisy dance with the men in a single file line, imitating the shooting and dodging of arrows, according to von Loeffelholz from his study 1850-1856 (Heizer & Mills 1952: 163). Atsugewi women danced daily while the men were on an expedition to give them "strength" (Garth 1953: 181). Dances were held also for the Karok, Hupa, and Kato (Driver 1939: 359) and the Cloverdale and Sherwood Valley Pomo (Gifford & Kroeber 1937: 155).

The White Deerskin Dance of the Hupa was held as a world-renewal ritual to atone for broken taboos, but it probably had its origins in the war-dance. Goldschmidt and Driver (1940: 127-130) described the dance as having the "routines and objects" of the war dances of other tribes in Northern California, in that Hupa territory was divided into two sections characterized by distrust so that in the dance, the two groups became "ceremonial rivals," while the lavish costumes of the dancers were equated to the wealth displays in warfare that encouraged the enemy to seek a settlement, and the linear arrangement of the dancers was like an actual battle formation. The Hupa regarded the war dance and the world renewal dance as being one ceremony (Ibid.: 128).

Dancing after a battle took two forms: the victory dance and the settlement dance. The former was more prevalent according to the texts, but some ethnographers may have considered both types to be victory dances. There are conflicts in the records concerning post-war ritual and the taking of scalps. For instance, Kroeber (1925: 50) said that the Yurok neither took scalps nor had dances, but Driver (1939: 359) stated that the Yurok danced for both victory and settlements, with scalps being
displayed on a pole for the victory dance. Goldschmidt and Driver (1940: 128) described Yurok settlement dances as being like those of the Hupa and the Karok, with the dancers in lines facing each other and compensations being paid if no hostilities arose during the ceremony. Other tribes had victory dances with scalps on a pole, including the Karok and Sinkyone (Driver 1939: 359), and the Northern Pomo, Central Pomo and the Patwin (Gifford & Kroeber 1937: 156). The Pomo passed their scalps from village to village to be danced over (Ibid.: 198). The Yuki showed the scalps at their victory dance (Foster 1944: 189), as did the Kato (Kroeber 1925: 157) and the Atsugewi (Garth 1953: 182), but for none of these tribes is there mention made of the scalps being on a pole. The Wappo held a victory dance and feast with their allies, but they took no scalps (Driver 1936: 213-214). The Wintu did not scalp (DuBois 1935: 39), nor did the Hupa (Goddard 1903: 62), and the Shasta did "little" scalpng (Driver 1907: 441). Settlement dances, held after compensation payments were made, were reported for the Yurok, Tolowa, Karok, and Kato (Driver 1939: 360).

Only three tribes were reported to hold special rituals for those who had killed an enemy in war. The Northern Pomo killers had to be purified and could not attend the victory dance (Gifford & Kroeber 1937: 156, 198). Yuki killers were purified (Foster 1944: 189-190). The Atsugewi purified all warriors, but the purification of killers was more "rigorous" (Ray 1963: 182). This type of procedure probably occurred in other Northern California tribes but is not recorded, for it emphasizes the fact that killing, even if done to avenge a serious offense against the tribe, was taken to be evil.

While no fighting was looked upon with favor, intertribal warfare acted as a unifying factor since it over-rode intratribal feuding and strengthened the co-operation and sense of solidarity necessary for a hunting and gathering society to exist. In view of the dancing and accompanying ritual, it provided a break from the usual routine, almost as an expensive form of entertainment, which gave expression to group solidarity. Since most battles were retaliatory in nature, warfare among the Northern California Indians also served as a warning to the offending group, to keep them from repeating their actions. However, was was economically impractical, and since there were procedures to avoid actual bloodshed, fighting was probably fairly uncommon.
CENTRAL COAST TRIBES

The Coast Miwok once occupied the territory between the Pomo tribes and the northwestern end of San Francisco Bay. Like most tribes who inhabited the central coast of California, not much material was written on their warfare activities. A war song of the Coast Miwok, recorded in an account by a Russian at Fort Ross prior to 1839, is practically the only information on their warfare. Kostromitonov wrote:

"At the beginning, or as they make ready for war, they sing:

<table>
<thead>
<tr>
<th>Song</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temoi hoibu</td>
<td>Leaders, let us</td>
</tr>
<tr>
<td>Onigi tschinami</td>
<td>Go out to war!</td>
</tr>
<tr>
<td>Temai ilawak</td>
<td>Let us go and capture</td>
</tr>
<tr>
<td>Temai o tomai</td>
<td>A pretty girl!</td>
</tr>
</tbody>
</table>

Upon approaching the enemy settlement:

<table>
<thead>
<tr>
<th>Song</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indi mi schojugu</td>
<td>When do we cross the mountain?</td>
</tr>
<tr>
<td>Pari o londo</td>
<td>Who do we see first?</td>
</tr>
</tbody>
</table>

Upon beginning to shoot:

<table>
<thead>
<tr>
<th>Song</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buteki landa</td>
<td>Sharp are our missiles</td>
</tr>
<tr>
<td>Junawschi landa</td>
<td>Keep putting forth yours.</td>
</tr>
</tbody>
</table>

Then the toyon (chief) sings to give his warriors courage:

<table>
<thead>
<tr>
<th>Song</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Otuplek - otilek lilem</td>
<td>Forward, forward,</td>
</tr>
<tr>
<td>Lile oje lippe</td>
<td>Now to the battle,</td>
</tr>
<tr>
<td>Lile oje lili lippi</td>
<td>Stouthearted, follow me!</td>
</tr>
<tr>
<td>Nawu elendu</td>
<td>Fear nothing, enemy arrows</td>
</tr>
<tr>
<td>Indi kotscht ma iwid elendu</td>
<td>Do you no harm.</td>
</tr>
</tbody>
</table>

Each of these couplets is repeated several times on the occasions indicated"(Kostromitonov 1974: 11).

Very little information exists on Costanoan relationships among themselves or with outside groups. Early Spanish accounts describe them as generally friendly to the Spanish yet warlike to other groups. They fought among themselves as well as with the Salinan, Esselen, Coast and Plains Miwok, and Yokuts.

"Of the little wars -- or village feuds -- that agitated the Costanoan groups from time to time, the following have been recorded:

The Salso-n against the natives of San Francisco; the Sakla-n against the same, or against the Oakland tribe transplanted to the mission; the Ausai-ma against the Mutsu-n; the Wacharo-n or others of the Soledad region against the northern Salinans" (Kroeber 1925: 466).

Father Palou reported that on August 12, 1776, the village of San Mateo attacked and burned the village near the San Francisco mission. Many were killed or
wounded on both sides, but the latter were defeated. After their defeat, the Indians near the mission fled across the bay to the eastern side (Bolton 1926: 135). No reasons for the fight were given.

Jose Espinosa y Tello wrote that the Monterey Bay Costanoans waged wars with little energy for a short duration and few were killed. Truces were unstable because "memory of some old antipathy or perhaps some new caprice suffices to produce hostilities." At times, differences between tribes were decided by a duel (Heizer and Whippel 1954: 217-218).

Fages reported that there was continual warfare between the hill Indians of the Sierra de Santa Lucia (Salinan) and those around the region of San Carlos Mission (Costanoan). They fought each other over acorn grounds (Fages 1937: 64).

In her paper on the Costanoans, Linda Switzer included a brief summary of the information on Costanoan warfare as mentioned in the accounts by early explorers and priests.

"Beechey describes these wars as being very frequent and sometimes leading to complete annihilation of the tribe (Beechey 1831: 77). Anza reported that the Indians he met were generally friendly, but would usually accompany him only to the boundaries of their lands 'without going a step outside of their respective territories because of the enmity that is common among them' (Anza, 1930: 129). Near San Mateo Font came upon a village fighting a group of invaders and was warned by the Indians to stay back until the enemy had been chased away (Font 1930: 388). Anza's lieutenant, Moraga, also encountered a group of 40 armed Indians who were on their way to avenge themselves for the wounding of a companion (Moraga 1930: no page given).

"The Indians living around San Pablo Bay are described by some of the explorers as being more unfriendly and warlike. Langsdorff described them as being fierce and having nothing to do with either the Spanish or the Mission Indians (Langsdorff 1814: 107). According to Choris, these same Indians also prevented an excursion, consisting of 12 soldiers, from ascending the Sacramento River on an exploratory expedition (Choris 1913: 15).

According to Stephen Fields, around the 1830's and 1840's fights between the Tulares (Yokuts) and Carmel Indians (probably Costanoans) occurred at Monterey Bay. Evidently the Tulares came each year to gather mussels and abalones and to bathe in the bay (Pilling 1950: 440). In a newspaper article from March 23, 1869, Alexander S. Taylor reported that in May of 1859, about 50 Indians from the Merced
River area (Yokuts) entered Monterey Bay, mounted on horses and armed with rifles. They, too, came to gather mussels and abalones (Pilling 1950: 438).

Whether or not Yokuts visited Monterey Bay in aboriginal times is hard to tell.

"This violent contact between the Tulare and Mission Indians suggests the aboriginal view of trespass causing feud or bloodshed. The lateness of contact would make it appear that such precontact notions would be lost and that a more satisfactory explanation would be one of traditional enmity based on trespass" (Pilling 1950: 440).

Aboriginally, the Yokuts may have been prevented from visiting the coast at Monterey because of the Costanoans. In the historic period, the territory between the Yokuts and the coast was left vacant since the Costanoans and other tribes in between were taken to the missions or died from epidemics. This allowed the Yokuts to roam freely over an area that had formerly been restricted territory and dangerous to pass through.

The reasons for enmity among Costanoan tribes and between them and outsiders included revenge for a wounded companion, trespassing, and fights over acorn gathering lands. Kroeber reported that "songs of insult or vengeance were common both as an aftermath and as a new cause of fighting" (Kroeber 1925: 469).

However, not all offenses resulted in fighting. Fages observed that for the Indians from Monterey to San Francisco Bay, cases of robbery were reported to the captain in charge of four to five villages. This captain "holds a council of all Indians to deliberate concerning the punishment and reparation due" (Fages 1937: 73).

In another account, Father Crespi of the Portola expedition interpreted offerings left around a cross by Indians near Monterey as a sign of peace.

"We found the cross all surrounded by arrows and darts with plumes stuck in the ground; a dart with a string of sardines, still nearly fresh; another dart with a piece of meat hanging to it; and at the foot of the cross a little pile of mussels, all put there by the heathen in token of peace" (Crespi, in Bolton 1927: 51).

Wars for the Costanoans were short by very intense, and were fought by the bravest. Warfare adversely affected their subsistence patterns, thus permeating their daily lives but was a means of protecting their subsistence resources.
Information on Esselen warfare and intertribal relations is practically nonexistent. They probably warred with the Salinans and Costanoans but there are no specific accounts supporting this.

The little information on the Salinan indicates that they were on bitter terms with the southernmost Costanoan and probably the Esselen but on more amicable terms with Yokuts. The Salinan even made trips to Tulare Lake and reciprocal visits were made by the Yokuts to the sea. To the south, relations with the most northernly Chumash were probably unfriendly (Mason 1912: 108, 181).

According to Lt. Pedro Fages, an early Spanish explorer quoted earlier, the Indians of the Santa Lucia Mountains (Salinan) gave "no quarter to strangers" (Mason 1912: 180). Fages described these Indians as being "continually at war with their neighbors ... The affair is limited to setting fire to this or that village of the adversary, sacking it, and bringing away some of the women, either married or single" (Fages 1937: 58). The hill Indians of the Santa Lucia Range who lived between San Carlos Mission at Monterey and San Antonia Mission keep the other Indians around this region (Costanoan) from gathering acorns in the hills. The hill Indians "encounter the same resistance when they go along the beach above Monterey on the same quest" (Fages 1937: 64).

Although relations between Salinans and Yokuts appear to have been amicable, a conflict between them is recorded in a myth. In this fight two Salinan out hunting in their territory ran across ten Tularenos. The two Salinans killed four Tularenos and drove the rest off. They then cut off the heads of the four slain Tularenos and returned home for a victory dance (Mason 1918: 104). In another conflict, a shaman raiding party (either Salinan or Chumash) supposedly once entered Yokuts territory (Gayton 1948b: 259).

The practice of cutting off the heads of slain enemies is reported among other sources for both the Salinan and Costanoan. Taylor wrote that the Salinan took scalps for their war dance, and cut off the heads and arms of their slain enemies to inspire them with valor (Mason 1912: 180). Among the Costanoans around Mission Santa Cruz, the limbs and top part of the skull of enemies killed in battle were cut off, and the skull was carried in triumph to the village on a pike (Kroeber 1908a: 25). Also among Costanoans or Esselens near Monterey Bay, some of the enemy's flesh was eaten by the parents of the slayer (Fages, in Mason 1912: 180) or to gain the enemy's courage (Perouse, in Harrison 1892: 58). These practices seem to be a ritualized aspect of warfare for the Salinan and Costanoan.

Mason feels the wars of the Salinan were short with some cruelty but little bloodshed and quickly settled. There was fighting among themselves as with their outside neighbors. Hostilities were always present and raids could be expected anytime.
The reasons for hostilities were trespassing on acorn and hunting grounds and women stealing.

On the whole Chumash relationships with outside groups were amicable, but occasionally conflicts did occur. There is no mention of traditional enemies. Their primary reason for interaction with outside groups was through trading. In their own territory, however, the literature suggests that much intervillage warfare occurred aboriginally.

Outside groups traded with the Chumash frequently and over long distances. Longinos Martinez wrote that trade occurred frequently between the Chumash and the mountain people (Simpson 1961: 54). Landberg suggests that these were either Buena Vista Yokuts or Tubatulabal (Landberg 1965: 89). Tubatulabal came to the coast to trade with Chumash villages near Ventura, a trip which took four days on foot. Sometimes the Chumash visited the Tubatulabal (Voegelin 1938: 51-52). In another account, a Yowlumne Yokuts listed the trails that Yokuts traders took to the coast (Latta 1949: 67-68).

It is not known if these visits occurred aboriginally. The account of trade between the Chumash and Tubatulabal was reported in this historic period after the missions were established (Voegelin 1938: 9), but this does not preclude the possibility that these visits occurred before white contact.

Although specific tribes are not mentioned, a few conflicts between Chumash and what look like outside groups are reported. Portola's expedition reported on August 18, 1769, two destroyed villages on the Santa Barbara coast between the settlements of Pueblo de la Carpinteria and Pueblo de la Laguna. Indians in the area said one village was destroyed three months before by Sierra Indians who came to fight (Bolton 1927: 164). Landberg believes the reason for the fight was due to low food supplies in early spring (Landberg 1965: 88).

Among themselves, the Chumash appear to have been quite hostile at times. Many accounts report that there was much intervillage fighting or feuding. The causes for these conflicts varied considerably and included trespassing, food stealing, disputes over women, and witchcraft.

Loginos Martinez in 1792 reported that:

"if a chief merely makes an attempt to pass through another's jurisdiction, fighting and quarreling result, so great is the distrust that these nations have of one another...Their wars are frequent and always originate over rights to seed-gathering grounds, or in disputes over concubines" (Simpson 1961: 58).
In this excerpt, Longinos Martinez is confusing as to whether he means Indians in general or those of the Santa Barbara Channel he was previously describing.

In another Spanish account, Fages described the Indians at San Luis Obispo (Chumash) as good dispositioned and "friendly toward the Spaniard." In the next paragraph, however, he wrote that "they are a warlike people, always roaming from village to village at odds with everyone." The inhabitants between La Carpinteria and the Punta de los Pedernales (Chumash) were described similarly (Fages 1937: 31, 47-48).

Font described the Chumash as friendly and not very warlike, although he mentions some villages that were abandoned because of war (Bolton 1931: 256, 262).

Father Palou wrote that on November 29, 1776, Mission San Luis Obispo was attacked by Indians from a village ten leagues away. Part of the mission was burned as a result of this attack. The reason for the attack seemed to have been for revenge on the Indians at the mission who were the enemies of the attacking party (Bolton 1926: 157-158).

In 1891, Yates described a fight told to him by an informant:

"When Justo was a small boy he had witnessed some fighting at the Estero, about one mile from the city of Santa Barbara, between the Indians of El Rincon (a point about 15 miles distant) and those who lived where Santa Barbara is located. Their method was to open a battle by tossing up a lot of feathers. One Indian would leave his companions, advance toward his enemies, and shoot a number of arrows, which were generally dodged by the opposing forces. When the Indian got tired he retreated or fell back, and another would advance.

"The fighting did not result in much loss to the participants. In the instance referred to, the Santa Barbara Indians lost one of their number; the Rincon party, two" (Yates 1891: 394).

Kroeber wrote that "all accounts unite in making the Chumash an unwarlike people, although intervillage feuds were common and the fighter who killed was accorded public esteem" (Kroeber 1925: 556). Most of the accounts presented here in this paper give the impression that the Chumash were warlike but only among themselves. In view of this fact, the word "unwarlike" used to describe the Chumash by Kroeber should be defined. The Chumash were "unwarlike" and friendly with outside groups but were warlike among themselves.

Fights among the Chumash themselves were short with few casualties, like other tribes in the Central Coast region. The reasons for these fights were many.
some of which have already been mentioned. Trespassing was probably a major reason for conflicts. Of the Indians around San Luis Obispo, Kroeber wrote that poaching of a rich crop causes wars if done "without previously paying or notifying the legitimate owner" (Kroeber 1908a: 16-17). In such situations, trespassing was most likely done with the intention of poaching.

Witchcraft and magic were a part of Chumash warfare. Kroeber mentioned that a chief would invite visitors to ceremonies and a refusal caused war because it created the suspicion of witchcraft (Kroeber 1925: 556). In an article written in 1889 by Yates, an informant acknowledged that warriors wore a plummet stone

"...and said it was worn suspended from the neck for defense, and to make the wearer impervious to arrows, and that in time of war any one biting this implement was rendered invisible to his enemies, and enabled to travel with safety" (Yates, in Heizer 1955: 152).
CENTRAL INTERIOR TRIBES

The Washo inhabited the area around Lake Tahoe in the Sierra in both California and Nevada. They had contact with three other tribes: Maidu, Miwok, and Paiute. The Carson Valley Washo visited the Paiute near Walker River and the Maidu near Placerville and Colfax. Hostilities occasionally took place with these two tribes (Lowie 1939: 301). The Washo were said to have defeated the Northern Paiute around 1860 (Kroeber 1925: 570).

According to Kroeber, the relationship between the Washo and the Miwok was friendly, the latter even recognizing Washo hunting rights on the Stanislaus River almost down to the Calaveras Big Trees (Kroeber 1925: 570). And Barrett wrote:

"Neither Miwok nor Washo inhabited the very high mountains during the colder season, but during the summer both camped there and seem to have been on very friendly terms. It also appeared that although the ownership of the respective territory of each was fully recognized by the other, there were no exacting restrictions placed by either upon the other in their territory" (Barrett 1908b: 347-348).

Lowie reported that "sometimes there was friendly competition with aliens." In the incident mentioned, a Washo killed a grizzly bear to put the Diggers (probably Maidu) to shame (Lowie 1939: 329).

One reason for hostilities was that the Washo tried to exclude the Maidu and Paiute from Lake Tahoe. Another reason was that "the Maidu often took game away from the Washo, even killing them, and thus precipitated fighting." In one conflict, the Washo held a war dance afterwards to celebrate their victory. They danced over the "best fighter's scalp" and tied it to a pole; whereupon both women and men shook the pole (Lowie 1939: 301, 329-330).

From what has or has not been written, the Interior Miwok seem to have been a peaceful tribe, perhaps one of the more peaceful tribes in California. There is very little mention of fighting in the literature. However, their culture was disrupted; and the Miwok were wiped out so swiftly by the forty-niners, which may account for the reason that not much information was available on them.

The Miwok were on friendly terms with the Washo, as previously mentioned. Relationships between the Miwok and Mono Lake Paiute appear as mostly friendly although some hostilities took place at the headwaters of the middle and southern Stanislaus River.
"There was hostility between the Miwok and the Shoshonean 'Paiutes' along the portion of their boundary line at the southern head of Stanislaus river, although still farther to the south, in the vicinity of Yosemite Valley and southward, the people of the two stocks were on very friendly terms, making amicable trading trips both ways across the summit of the Sierras" (Barrett 1908b: 348).

"...it may be noted that in the region of the headwaters of the middle and south Stanislaus the Miwok and Mono were on bad terms in recent times, while along the Merced they were more at ease with each other" (Kroeber 1925: 443).

Yosemite Valley, in Southern Miwok territory, was a focal point for trade among the Miwok, Mono, and even the Washo; and then, as now, was a summer resort for the three tribes (Barrett and Gifford 1933: 129, 256).

Unlike the amicable relations that prevailed in Yosemite Valley, Hetch Hetchy Valley appears to have been disputed by the Miwok and the Eastern Mono. This was probably part of the same conflicts reported by Kroeber and Barrett above. Ralph S. Kuykendall writes that before the Hetch Hetchy Valley was discovered in 1850 by whites, "the Valley was disputed ground between the east and west slope Indians, but the Piutes from across the range had gotten the upper hand and were accustomed to spend time in Hetch Hetchy in the fall of the year gathering acorns" (Kuykendall, in Hall 1921: 38).

Long distance trips by the Miwok to the coast to obtain marine mollusk shells were reported by these took place after the coming of the Spanish (Barrett and Gifford 1933: 256). Since the defense of territory among the California Indians was very strong, trespassing, in many cases, was considered a reason for fighting. This tended to restrict movements among most tribes to their own territory. The territory between the Sierra foothills and the coast may have become vacant when the Indian groups who had occupied it were removed to the missions or died from epidemics. This would have allowed the Miwok to travel across formerly inhabited territory with little resistance.

The Northern Miwok were said to be hated enemies of the Plains Miwok with boundaries being crossed only in large groups (Bennhoff 1961: 19). This would support the idea that long distance trips occurred after the Spanish. However, the large groups referred to could have been trading parties. Adjacent to the Miwok were the Nisenan (Southern Maidu). Beals reported that foothill Nisenan traded with valley Nisenan in parties of 100-200 men who traveled by night and never stayed in the valley overnight (Beals 1933: 365). This could have been the same among the Miwok, but it does not indicate that long distance trading trading trips to the coast were made aboriginally by the Miwok.
Interaction between the Chukchansi Yokuts and the Miwok on the upper Fresno River was evidently friendly, the former entering Miwok territory without hesitation (Kroeber 1925: 481). Long distance trips to the coast could have been made through Yokuts territory, but this sort of conjectual reasoning opens up more unanswerable questions. Just how the Interior Miwok and other Yokuts tribes got along is not known.

According to Kroeber:

"When the Miwok fought, which was not very often, it most frequently took the form of a feud for revenge. They usually shot at each other at fairly long range; enough, at any rate, to make possible the dodging of arrows. Each line of warriors therefore capered and danced about to render it difficult for their opponents to take aim, and jerked forward and sideways as they saw arrows coming. As might be expected, casualties were rather light. It was only when one party could ambush another, or pounce on a settlement asleep just before daybreak, that fatalities would run high" (Kroeber, in Hall, 1921: 58).

One cause of war was the kidnapping and raping of women. A Southern Miwok informant reported that in the old days they would capture Paiutes, rape the women, and kill them. Another informant reported he often saw some men capture a woman from another tribe. Then they would bring her back to the round house where 50-60 men raped her all night and released her the next day (Aginsky 1943: 461).

A major cause of war was trespassing and poaching upon acorn grounds. Witchcraft and murder were other reasons. The Central Miwok tribes held dances of incitement and most Miwok tribes held victory dances. The Northern Miwok were said to take scalps or heads and place scalps on a pole (Aginsky 1943: 434).

The Northern Miwok and Valley Nisenan were both hated enemies of the Plains Miwok; and only large groups crossed these boundaries (Bennyhoff 1961: 19-20). Plains Miwok relations with the Yokuts appear to have been friendly, especially between the Muqueleme Miwok and the Chilamne Yokuts (Ibid.: 185).

The last remembered fight between the Foothill Nisenan and Plains Miwok (who could have also been Northern Miwok) occurred around 1847-1850. In this battle the Plains Miwok attacked the Foothill Nisenan. The reason for the conflict could have been that the Foothill Nisenan forced their entry into Plains Miwok territory (Bennyhoff 1961: 140).

Plains Miwok tribelets also fought among themselves, maybe more often than with foreign tribes. "A Miwok tribelet was just as ready to attack another Miwok
tribelet as it was to fight a Yokuts or a Nisenan one, and in some cases more so" (Bennyhoff 1961: 25).

The main reason for fighting was poaching, but wife-stealing and witchcraft are also reported. Crossing into another tribe's territory without permission caused war. Sometimes permission to enter another tribelet's territory was given when that tribelet lacked certain resources.

For the Plains Miwok, Bennyhoff believes that battle were "sportsmanlike archery contests in which one or two deaths prompted retreat. To reestablish peace, the victor had to pay for any imbalance in casualties" (Bennyhoff 1961: 15, 19, 25).

Most of the Yokuts tribes, of which there were probably 50, were apparently amicable among themselves, but they had their differences at times. Kroeber wrote:

"Conflicts between tribes were apparently about as frequent as with aliens; and with many of their neighbors they were on friendly and intimate terms. Yokuts were evidently on the whole a peaceable people"(Kroeber 1925: 497).

"All the Yokuts tribes from the Kaweah River south, except perhaps the Wowol and Chunut of Tulare Lake, and at least most of the adjacent Shoshoneans, were friendly and appear to have ranged over one another's territory amicably and almost at will. The northern Yokuts were more divided by distrusts and hostilities: definite intertribal boundaries are known in several cases; and southern tradition speaks of invading war parties from the north" (Kroeber 1925: 479-480).

The war parties from the north referred to above were probably Chauchila who of all the Yokuts tribes were considered quite warlike (Latta 1949: 3; Kroeber 1925: 485). Fights occurred among tribes of the north as well (Kroeber 1925: 484).

It was stated that Tulare Lake belonged to three warlike Yokuts tribes: Wowol, Chunut, and Tachi (Kroeber 1925: 483). Hostilities between these three tribes and other tribes probably resulted because they may have tried to keep the other Yokuts from the lake. The Washo around Lake Tahoe came into conflict with other tribes in their area for this same reason (Lowie 1939: 301). Some tribes not adjacent to Tulare Lake were, however, granted permission to use it. Gayton wrote that the Choinimni group from the north bank of the Kings River visited Tulare Lake annually to fish and hunt, as guests of the Tachi. On the other hand, tribes along the Kings River drainage were quite friendly, sharing fishing and seed and acorn gathering areas (Gayton 1948b: 143-144).
The relations among the Wowol, Chunut, and Tachi were not always friendly either (Kroeber 1925: 483). One informant stated that the Chunut and Wowol were on bad terms with the Tachi and Nutumutu to the north. Yet in another account the Tachi were reported as being "on friendly terms with all the groups bordering the lake, but particularly with the Wowol" (Gayton 1948a: 7, 9). So it was with most of the Yokuts tribes. Sometimes a Yokuts tribe was on good terms with all or most of its neighbors and at other times, a tribe may have only been on favorable terms with one or two of its neighbors.

As among themselves, the interactions of each Yokuts tribe with its foreign neighbors varied considerably. Naturally, Yokuts tribes on the borders had more contact with outsiders than interior Yokuts, simply because of their close proximity to alien tribes. In one case, the Wobonuch (Western Mono) and Entimbich (Yokuts), who bordered each other's territory, were on friendly terms. They fought two other tribes, the Waksachi (Western Mono) and the Wukehumni (Yokuts), who had the same intertribal relation (Gayton 1930: 383).

Further to the north near the upper Fresno River, the Chukchansi Yokuts bordered the Southern Miwok. They were friendly with the Miwok and "had no hesitation in entering their territory" (Kroeber 1925: 481).

With the Paiute from the Sierra who the Yokuts greatly feared, a long-standing enmity appears to have existed. According to Stewart, "if a small party of mountain Indians appeared in Yokut territory, they were generally attacked to even up old scores; but if the party was a large one, there was no fighting unless the invaders were the aggressors. The Yokuts attacked only small numbers unless forced to fight" (Stewart 1927: 392).

Yokuts maintained trade with the Western Mono (Monachi) and the Eastern Mono (Owens Valley Paiute), even though hostilities existed between the Yokuts and these two Paiute groups. Amicable relations did exist between the Yokuts and Western Mono after 1860, but only due to pressure from the white man forcing them into mutual contact (Gayton 1948b: 143, 159).

Before 1860, relations were reported as being hostile. Lieutenant Estudillo in 1819 wrote:

"From the people of the interior I learned some particulars of the people who live on the other side, who, they told me, gather their harvest of pine nuts and seeds from both sides, but that they themselves did not go far into the mountains for the inhabitants were very bad people" (Gayton 1936: 75).

The people Estudillo speaks of are probably both Western and Eastern Mono.
Although Gayton thought the "bad people" were just Western Mono (Gayton 1936: 67), intertribal relations between the Eastern Mono and Yokuts were unfriendly, also.

In a later article, Gayton wrote that:

"...trade relations between Eastern Mono (Owens Valley Paiute), east of the Sierra Nevada, and their linguistic relatives and neighbors of the Yokuts, the Western Mono, were limited to few summer weeks when known mountain passes were open to foot travel. The trans-Sierra visitors, not welcome in Yokuts villages, rarely ventured alone beyond the Western Mono groups. The topographic barrier was surmounted, but the weather barrier could not be, and it presumably served to maintain the strangeness and hostility between Eastern Mono and Yokuts, which only was assuaged temporarily and periodically by the presence of the mutually acculturated intermediaries, the Western Mono" (Gayton 1946: 258-259).

A war between the Yokuts and Eastern Mono was recounted by an informant which took place before she was born.

"Long ago (before E. M. was born) a number of Yokuts people from the Chukchansi, Kechayi, and Gashowu tribes were camping east of Friant. They had all gone there for acorn-gathering. It was the general practice that the men, immediately after the morning meal, went out to shake down the acorns. Leaving these to be collected by the women, they then went off for the day to hunt or fish. Toward sundown they returned and helped the women crack the nuts.

"Now some Monachi (Eastern Mono) had come over the mountains: their chief had told them to 'go over and kill those people like birds.' While the Yokuts men were away, the Monachi surrounded the women's camp. One man came closer to spy. He saw the women cracking the acorns with their teeth and thought they were eating. He went back and reported this. Several times he came close to spy and each time say the women putting the nuts to their mouths: he 'thought they just ate all day long.'

"Next morning the Yokuts men went out very early to knock down more acorns. They found a series of stakes, with feather bunches (so nil) tied to their tops, which had been set up by the Monachi. They knew the Monachi were near by, so they returned to camp and sent the women off. The women fled across the river (San Joaquin), leaving everything behind. The men went in pursuit of the Monachi. Their camp was located, and the Monachi were found asleep. Rushing in, the Yokuts killed all of them, save one man who smeared himself
with his comrades' blood and pretended he was dead. Later on this man went back to his village and reported events to his chief. The chief was very angry; he determined on revenge.

"Soon after that a Yokuts was working for a white man and was sent up into the mountains with some hogs. Some Monachi lurking about on this side of the ridge saw him; they came down to him and asked him who he was. When it was time for the Yokuts man to return to the valley, his employer warned him not to make the trip alone. But the man was anxious to get back home and went anyway. The Monachi were ambushed along the way and killed the man and his horse" (Gayton 1948b: 159-160).

That trade was carried on with hostile neighbors seems quite odd, but the trade relations were for the "mutual benefit" of each group. The direction of trade seems to have been east to west. The Yokuts reportedly never went to the east side of the Sierras; and the valley Yokuts traveled west to the coast (Gayton 1948b: 2, 160).

The Yauelmani Yokuts lived on the southern edge of Yokuts territory. They reportedly once had a fight with a Mohave war party who invaded their territory and killed some women. The Yauelmani hired some neighbors and drove the Mohave out (Driver 1937: 134).

A myth of the Yaudanchi Yokuts tells of a fight between them and probably the Tubatulabal (or Pitanisha). Another Yaudanchi myth is about a war between the foothill and plains people (Kroeber 1907: 221, 223). The Yaudanchi bordered on Tubatulabal territory which could account for conflicts between the two tribes.

The Yokuts carried on trade relations with the Salinan and/or Chumash. The Wowol obtained shells from the Tokya (Salinan) (Gayton 1948a: 7). One informant believed the Yokuts went out to the coast rather than the coast people coming inland (Gayton 1948a: 9). The was generally the case, but reciprocal visits are not unheard of. Another informant, a Yowlumne Yokuts, told of the trails taken to trade with the inhabitants on the coast (Latta 1949: 67-68).

One incident of hostility between the Yokuts and either the Chumash or Salinan is reported. Here is the account with a forward by Gayton:

"A shaman's raiding party. -- The tribes living on the Pacific Coast were known to the Wobonuch as the To'kya. The Tokya are properly the Chumash or Salinan, but both M.J. and G.D. placed them at Monterey. Certainly they were known to the upland Western Mono only by hearsay, and the following story of an event which took place in the youth of G.D.'s grandfather can scarcely be accepted at its face value. An encounter
undoubtedly occurred, but the length and motivation of the raiding party's trip as stated is scarcely credible. One suspects that tales of mission raids for converts may have generated the explanation of the stranger's presence in the foothills, for the time was probably in the first quarter of the nineteenth century. The account follows as given by M.J., G.D. interpreting.

"Mutulu was a bit shaman from the Tokya. He had a lot of companions who also had much supernatural power. Every year they would come over to get young girls. One year Mutulu brought his men over as far as lower Mill Creek where the Choinimni lived. They picked up all the nubile girls, no matter how hard the people fought, and went on to the next village and did the same. They took all the girls back to the coast. The next year they came up as far as the Waksachi, and the year after that to the Michahai, Entimbich, and Wobonuch. They came right up to Ko'onikwe.

"The people there had been warned of their approach. The girls were all taken off and hidden far from camp. Supana and Wilolohi were young men then. Supana conferred with the old people in the village and discussed whether or not to have an open fight. The men replied that, if Mululu and his companions were backed by more supernatural power than themselves, 'they'd die anyway and if they could manage to kill him it would be good riddance.' So they decided to try. When the Tokya shaman came, followed by his men and the girls they had collected, he walked up to Supana, who was standing out to meet him, and said, 'We want girls.' Supana told him to get out, but Mutulu replied, 'No, we'll have war first.'

"The Wobonuch had planned just what to do. They suddenly jumped on all the intruders. Supana, Wilolohi, and a third man seized Mutulu and held him while another man shot at him. They they 'threw him down and broke his neck, they cut his throat and threw his head away off.' And far over there they heard the head say, 'It's a good thing you killed me. I've been doing this just for meanness.'

"Supana then told the men from the coast to go back at once and tell their own chief what had happened and, if they did not go, the Wobonuch would drive them out. After they went the girls came out of hiding. Many of the girls who had been captured were returned to their homes, but some stayed right there (at Ko'onikwe) from preference" (Gayton 1948b: 259).

Fighting among Yokuts tribes was caused by suspicion of witchcraft, revenge for murder, squabbles between women over seed-areas, killing of women (probably raped before killed), and quarrels in general. "Sometimes arguments between women did grow into family feuds, which the chief attempted to control by council" (Gayton
Often the chief settled quarrels between individuals or families involving serious injury or death (Gayton 1930: 381).

Trespassing among themselves does not appear to be a reason for hostilities as it was among most California tribes. Gayton writes:

"Adjacent tribes between whom relations were friendly often asked permission to come onto each other's territory to obtain food if there was a shortage within their own bounds. The property sense in regard to land was so undeveloped that there was little formality regarding such invasions, and they rarely if ever resulted in hostilities" (Gayton 1930: 365).

"Generally members of a village moved about as they pleased... On moving into another village or camping in its vicinity, the chief of that place was notified by the customary call. Persons who camped without advising a chief in the neighborhood of their business were open to suspicion" (Gayton 1930: 381).

Conflicts with outside groups were caused by some of the same reasons already mentioned. Although among themselves trespassing was not a major reason for hostilities trespassing or invasion by foreign groups resulted in fighting. A traditional enmity existed between the Yokuts and the Western Mono. The original reason for this enmity was probably invasion of Yokuts territory by the Mono. After that, the fact that they were traditional enemies was enough to cause conflicts.

Quite often battles were prearranged. At other times, ambushes involving only a few men occurred (Gayton 1948b: 176). As for another technique in a war, the Yauelmani and possibly the Paleuyami Yokuts hired neighboring tribes (Driver 1937: 94). For Yokuts of Valley speech on the San Joaquin River, fighting was preceded by a dance of incitement (Aginsky 1943: 434). Dances of incitement were also reported among the Plaeuyami Yokuts (Driver 1937: 94).

A Chunut Yokuts informant, J.A., gave her account of warfare:

"There was no war chief, nor did an ordinary chief take any special part in battles, though the account secured by Newman indicated the contrary. Any brave man, particularly one with Raven (ho' toi) as a supernatural helper, would lead war expeditions. Rarely were more than two or three persons killed. J.A. thinks the bodies remained unburied (which seems unlikely unless the losers were completely routed). She disclaims knowledge of motives of war" (Gayton 1948a: 9).

An informant of another Yokuts tribe described warfare among tribes in his
area:

"B.O. stated that the Wechihit, Choinimni, and Hoshima (Northerners in general) would come over jointly to fight the allied Waksachi and Wukchumni. These fights were rare and were tactically simple; they were called una' na pi 'dikan. There were no special officers of war, but certain brave men would be acknowledged leaders on these occasions. The leader stood back and directed the fighting while the opposing warriors lined up, each man shooting at the one directly opposite. Bows and arrows were the only weapons; no spear or shield was used. There was no waiting for a dream or omen before going into conflict. The causes of these hostile interludes are obscure" (Gayton 1948b: 215).

There are discrepancies in the record concerning post-battle activity. An informant for Gayton said that shamans were "sought out as victims in battle; and vengeance was wreaked by flaying and impaling their corpses. Head-taking was practiced as well as flaying" (Gayton 1948a: 9).

According to the data collected by Driver, scalps and head-taking was not practiced by the Yokuts; however, a Yauelmani quoted his stepfather as saying that a hand may have been cut off and taken home as a trophy. Also, for the Yauelmani Yokuts, a hand on a pole was reported. From this same data, victory dances only took place among the Yauelmani and the Paleuyami Yokuts, but a Yauelmani informant denied this existed for the Yauelmani (Driver 1937: 94, 134-135).

Kroeber, on the other hand, wrote:

"It has been said that they did not scalp. As an absolute statement, this is surely incorrect, for a myth tells how the prairie falcon after a battle hung the hair of his slain foes on trees, where it can be seen to-day as moss. But this is certainly a strange use to which to put trophies, and one arguing a lack of the usual Indian sense of such matters. There also appears to be no record of any Yokuts scalp celebration or victory dance. It can accordingly be concluded that scalping customs were of relatively little moment in Yokuts life" (Kroeber 1925: 497).

Aginsky also recorded that no victory dance or scalp on a pole occurred among the Yokuts (Aginsky 1943: 434).

Although these discrepancies exist, what matters is that scalping and victory dances or war, for that matter, did not play a large part in the everyday world view of the Yokuts.
Most of the material on the Western Mono (Monachi) has already been presented with the Yokuts. Only a few things need to be added. Powers described the Western Mono as warlike and that they "were anciently a great terror to the Yokuts... Many years ago -- it is impossible to ascertain how long ago -- they came over from Owen's River Valley, and conquered for themselves a territory on the upper reaches of the San Joaquin and King's River..." (Powers 1877:397).

Although there were hostilities between the Yokuts and Western Mono, the latter served as middlemen in trading between the Yokuts and Eastern Mono. The Western Mono were very close with the Eastern Mono, their cultural kin. Of the Northfork Mono (Western Mono around the Northfork of the San Joaquin River, Gifford wrote:

"Some Northfork Mono crossed the Sierra Nevada into Eastern Mono territory to gather pinenuts, sometimes remaining a year or two. People from a number of villages traveled together in the trip to Owens valley, always in summer, on account of the deep winter snows" (Gifford 1932: 19).

The Western Mono probably were on friendly terms with the Southern Miwok, visiting them at Yosemite Valley in the summer (Barrett & Gifford 1933: 256). Inter-tribal relations with the Tubatulabal are not mentioned in the literature. There was also fighting among themselves and combination Yokuts and Mono fighting against Yokuts and Mono or just Mono tribes (Gayton 1930: 383; Driver 1937: 134).

The following is a quote from Steward about what Owens Valley Paiute (Eastern Mono) informants said on warfare and tribal relations. The initials are those of the informants.

"AC thought all Indians had formerly been at peace with one another. GR had heard only of wars with Indians west of the Sierra and thought the battles had been fought by Paiute who crossed the mountains. TS recounted only a single minor local engagement with a small party of invaders from the south. Paiute bands did not fight with one another or with Shoshoni. Conflicts over pinenut areas were brief and never involved weapons more dangerous than the sling, which did little damage" (Steward 1938a: 55).

Another informant, Panatubiji, related one conflict between Owens Valley Paiute and Tubatulabal, who came to raid Paiute villages. Two invaders stayed behind to hunt rabbits. One left, being forewarned by a supernatural power; the other was killed for revenge by a Paiute war party formed from different villages.
Panatubijji and several other men made a trading visit to the Western Mono about this time and then participated in a deer drive below Owens Lake into Monachi territory (Steward 1938b: 188).

In addition to the Owens Valley Paiute trading with Western Mono, Mono Lake Paiute traded with Miwok who made reciprocal visits (Steward 1933: 258).

Steward summarized warfare of the Owens Valley Paiute as follows:

"Fights between Paiute bands were rare, amounting only to rock throwing -- slings sometimes used -- during squabbles over food territory. Relations with Shoshoni were generally peaceful. Chalfant recounts a foray against 'Diggers' (Western Mono?). District head men were war leaders upon occasion.

"War paint and dances were denied. Scalping was not usual. T.S. says the scalp -- i.e. all of the hair -- of a 'Digger' chief, Poholwic, was brought back by a war party for exhibition, then thrown away" (Ibid.: 306).

Disputes were settled by head men, if possible. Fear of witchcraft aided pacific settlement. Disputes between members of different districts were sometimes handled by head men" (Ibid.: 305).

Kroeber and Voegelin sum up Tubatulabal intertribal relations and warfare fairly well. Kroeber stated:

"The Tubatulabal are the people upon whom in particular has been fostered the slander, or the undeserved reputation, of issuing in warlike mood from the highland fastness and raiding the sluggish, peaceable Yokuts of the plains, dispossession these, indeed, until the southernmost Yokuts were almost separated from the main body to the north. The story even goes on to picture how they could have seized the entire Tulare Basin had they not become enervated by malaria -- somewhat as Greek and Latin civilization perished before the same disease, according to a more recent and famous fancy. Even the fact that the Tubatulabal were all found living in the mountains when the white man came is explained: the same scourge drove them back to the salubrious hills whence they had emerged, and utilized their conquests only for an annual or occasional visit" (Kroeber 1925: 605-606).

"As a matter of fact, the visits took place; but they were the visits of guests. The southern Yokuts tribes, both of the plains and of the foothills, were generally quite thoroughly friendly, and joined one
another in their respective territories to such an extent, according to the season of the year, that it is almost impossible to assign an exact habitat to any of them. The Tubatulabal, in spite of their separateness of origin and speech, were also in the main on amicable terms with these Yokuts tribes; and so came to join them in their little migrations. Just as they came down to Bakersfield, to Kern Lake, and to White River, probably even to Tejon and San Emigdio, the Yokuts, as occasion warranted, ascended the Kern for miles to fish, and to its forks, the center of the Tubatulabal home, to visit.

"The entire little pseudo-history rests neither upon evidence nor even native tradition, but is solely an imagination developed from a knowledge of the facts that the Tubatulabal are Shoshoneans and that eastern tribes are often more aggressive than those of the Pacific coast area.

"Of course the amity between Yokuts and Tubatulabal suffered intermissions. But the Yokuts tribes fell out among each other also, now and then; and the relations do not seem to have been different in more than moderate measure" (Kroeber 1925: 606).

Voegelin, on the other hand, believes the Tubatulabal fought more than Kroeber suggests and gives a more detailed picture of relations with outside groups.

"Although Tubatulabal were probably, as Kroeber points out (Handbook, 605-606), not markedly aggressive group, nevertheless they engaged in hostilities with neighboring tribes to greater extent that did, for example, their Shoshonean neighbors, Owens Valley Paiute (Steward, 1938, 306). Various central Yokuts groups made raids into Tubatulabal territory, which were followed by reprisals on part of Tubatulabal. 'The Kawaiisu used to go and fight with the Tejon people (s. Yokuts), but the Tubatulabal never did.' Although SM, FP said that to their knowledge relations with Koso and Kawaiisu had always been friendly, Tubatulabal even engaging Koso as allies during war with Yokuts (below), FM said he had been told by 'Little Bill; Chico that Tubatulabal ' often fought with the Kawaiisu, who had no friends, and with the Koso; the Tubatulabal and the Koso once had a big fight at Walker's pass.' FC had picked up arrowheads on a battlefield on Nichols peak, which lies on border of Tubatulabal-Kawaiisu areas. As among most California tribes, wars did not last long, nor were fatalities heavy.

"Motives. -- Motives for making war of usual variety (Kroeber, Handbook, 843), except witchcraft not mentioned by informants. Not
every quarrel led to war; when Tubatulabal on one occasion broke formation at communal antelope drive and Yokuts killed some of Tubatulabal taking part in drive, revengeful actions by their hosts did not lead to Tubatulabal-Yokuts war; 'the Kawaiisu, Tubatulabal, Tejon, and Ventura people who were taking part in the drive just went home right away, and the Tubatulabal didn't keep fighting with the Yokuts because of this' (SM). On the other hand, theft of seeds from women by strangers might promulgate series of intertribal raids' (Voegelin 1938: 49).

Voegelin also gave two accounts of actual fighting which occurred between Tubatulabal and Yokuts. In the first, a Tubatulabal man killed a Yokuts man who had stolen seeds from his wife; the Yokuts' relatives raided the Tubatulabal and killed six women, which led to a confrontation between the two tribes in which they "settled up." In the second account, Yokuts had been killing Tubatulabal women and taking their beads from them, and finally a group of Tubatulabal men attacked the raiding Yokuts and fought with them all afternoon, eventually chasing them off (Voegelin 1938: 50).

According to the record, the Tubatulabal took no prisoners and no scalps, nor did they hold dances for incitement or victory. One informant mentioned that a "round dance" was sometimes given by the chief prior to a battle, with war songs performed for the dancers, but such a dance was not held in the event of a retaliatory war (Ibid.: 49-50).
Specific information on many of the tribes along the Southern California coast below the Chumash and in the adjacent interior is rather sparse. In most cases there is no information as to which tribes were friends and which were enemies. Even so, a general idea of how they might have interacted can be inferred.

Practically the only detailed account of the Indians on the coast comes from Father Boscana at Mission San Juan Capistrano between 1812-1826. Boscana describes the battles of these Indians as being frequent

"...and often declared from the most trivial causes... War was never waged by them for conquest, but for revenge; and in many cases for some affront given to their ancestors, which had remained unavenged. Their quarrels and disputes arose from trivial motives... Also, when a chief neglected to return the customary present at their festivities, of which I have before treated, war was declared, and without even giving him notice. Again, if an Indian of one place stole anything from one of another place, although it might be so trifling a thing as a rabbit, a squirrel, or, ornament of some kind, it was sufficient among them to cause a war.

"Whenever a captain determined to make war upon another chief, he called together the puplem, and revealed to them his desire to made war upon such a town, for reasons which he explained, and it was discussed by the body, whether they were sufficient to themselves to conquer. If sensible of their inferiority, some other friendly tribes were invited to join with them, to whom they sent presents of as costly a kind as their treasury would admit...

"When celebrating their grand feasts, it was customary to expose in public the scalps taken in war; and for this purpose they were suspended from a high pole..." (Boscana, in Robinson 1846: 306-309).

According to Kroeber, the Indians around San Juan Capistrano were Juaneno but he says that a large part of Boscana's information was about the Gabrielino who were also at the mission. On Juaneno warfare, Kroeber quotes and paraphrases Boscana, so possibly the warfare patterns mentioned by Boscana were for the Juaneno (Kroeber 1925: 647).

In a more recent article, however, Bernice Johnston applies Boscana's information on warfare to the Gabrielino (Johnston 1962: 25). More than likely the warfare practices of each group were quite similar so the Boscana had no reason to differentiate between the two groups. At any rate, an idea of warfare practices and how tribes or groups in the area interacted with each other can be gained from Boscana.
After a battle, the victors killed the wounded of the defeated group who were left behind on the field. Women and children were taken as slaves while male prisoners were decapitated. Wars were decided by council action and were fought purely for revenge. The process of avenging could take generations to complete satisfactorily, since a council proclaimed war only if sufficient means had been gathered to insure a victory. The slights which created hostility were the failure to reciprocate gifts, the theft of goods or women, and witchcraft (Johnston 1962: 25).

For Gabrielino warfare, Johnston also quoted a paragraph by Hugo Reid describing a war of songs between two families. These two families once lived at San Bernardino but were moved separately to Missions San Gabriel and San Juan Capistrano, where they continued their verbal war (Technically speaking, Kroeber placed San Bernardino in Serrano territory, but the two families could have been Gabrielino since the division between Serrano and Gabrielino is so near San Bernardino). The "song fight" lasts eight days and according to Reid, "animosity between persons or families was of long duration particularly between those of different tribes" (Reid, in Johnston 1962: 26). Song wars or enemy songs are also reported for the Cahuilla.

Intertribal relations among the Luiseno bands were quite interesting. According to Sparkman, the Luiseno lived in the San Luis Rey Valley, on Mount Palomar during the acorn harvest, and migrated to the coast in winter.

"Each band seems to have guarded its allotted territory with the greatest jealousy, and more quarrels are said to have arisen over trespassing than from all other causes combined. When questioned as to when or how the land was divided and subdivided, the Indians say they cannot tell, that their fathers told them that it always had been thus. Many of the older ones remember how they were cautioned when young never to trespass on the land of others in pursuit of game or food without permission. Yet occasionally a band would become dissatisfied with its habitat, and forcibly intrude itself into that of another. An instance of this took place so recently as still to be remembered and spoken of" (Sparkman 1908: 191).

Below the Luiseno were the Diegueno. Longinos Martinez reported that "in the vicinity of San Diego they are warlike and proud, and are to be feared because of their treachery" (Simpson 1961: 59). Kroeber wrote that in their attitude to the missionaries, the Diegueno were unlike the "passiveness" of the other California Indians. "Not especially formidable as foes, they at least did not shrink from warlike attempts." A month after its founding, the Diegueno attacked the mission at San Diego; and seven years later, they attacked, burned, and killed three Spaniards, one of whom was a priest (Kroeber 1925: 711).
On the Cupeno, Kroeber wrote:

"They represent a southerly advance guard which was crowded back into intimacy with its congeners by an expansion of the Diegueno. In either event, relations with the Diegueno appear to have been an important factor in Cupeno tribal history" (Kroeber 1925: 690).

Koreber does not say just what these relations were.

For the Kamia, the only mention of any kind of tribal interaction was with the Mohave. The Mohave distinguished between the Kamia and the foreign or strange Kamia awhe.

"Kamia awhe they identify with the Diegueno, state that they did not farm, but ate snakes and other strange foods, and place them in the mountains that run south of San Jacinto Peak. Alone of all the Yuman tribes, they did not travel or visit -- hence their name as foreign people; and captive women from them made no attempts to escape" (Kroeber 1925: 724).

For the Cahuilla, information on tribal relations comes from an ethnography by Lucile Hooper. In the section on war she states:

"The Cahuilla, like most of the California Indians, have been a very peaceful people. Their main troubles were between villages, and were caused by boundary disputes. Each village had definite boundaries, within which the inhabitants lived, hunted, and gathered mesquite and other food products. Food was very scarce in the old days and any infringement of one group on the land of the adjacent group was considered grounds for enmity and often subsequent war.

"Long ago, there was a clan or village called Simotakiktem about six miles south of Agua Caliente. There was one man in the clan who caused a great deal of trouble for the surrounding groups. So these got together and decided to make war on the entire group. When the Simotakiktem say the other Cahuilla coming, they hid in a big round rock which was just like a room and had a stone door. The Cahuilla surrounded them, forced the door, and threw firebrands inside, and then closed the door. They were all suffocated.

"There was a village by the name of Sewekiktem. The people there were very wicked. Once, while they were in the big-house, the Cahuilla surrounded them and killed them all" (Hooper 1920: 355-356).

She mentioned that the war tales she related may have been mythical.
The use of enemy *songs* are also recorded for the Cahuilla. According to Hooper, at fiestas clans sang certain songs to other clans who were their enemies. Hooper believes this custom probably began with real troubles. After some years the actual incident had been forgotten, yet the descendants still sang these songs. The purpose of these songs was to show the other clan that their secret name was known. Sometimes fighting broke out among the women as a result of these songs.

The following are a few songs:

1. His food gave out, his water gave out,
   Leave him now, go away from him:
   Isilwelnet (enemy name)
   (Repeated as many times as desired).

2. Bury him now, plant him now:
   And then they buried him, and then they planted him:
   Pehuete matewilwish.

3. There stands the whirlwind, there stands the whirlwind,
   Where they burned him, where they burned him:
   Puechueulchalmalmia.

4. In the middle of the desert land,
   Lying on his back,
   Lying on his stomach:
   Tamiotingish.

5. They are coming back again,
   They are coming back again,
   Those moon-eaters and sun-eaters,
   Those moon-eaters and sun-eaters.
   (Hooper 1920: 345)

There are few references to conflicts with outside groups. According to one recollection of pre-white times, the three Palms Springs Cahuilla clans "went together to fight with a desert group that had trespassed upon their food-gathering territories" (Strong 1929: 103). The "desert group" was unidentified. Other accounts of Cahuilla warfare described battles which occurred after white settlement. One was a battle between the Cahuilla and the Luiseno in 1847 at Aguanga, in which the Luiseno were defeated. The reason for this battle was due to Caucasian influence, but possibly an old enmity was an underlying factor. Evidence for this is lacking, however.

In examining this last battle, Strong wrote that "exactly what the facts were
is hard to determine at this late date, and is a problem historical rather than ethnological" (Strong 1929: 149). At this time the U.S.-Mexican War was then taking place. Evidently the Cahuilla sided with the Mexicans, and the Luiseno sided with the Americans. This situation between the two tribes caused the fight.

Another war in historic times is reported between the Mohave and the Chemehuevi. Since this occurred after contact, Caucasians could have disrupted the patterns of these two tribes, causing friction between the two who were formerly friendly to each other. Kroeber, however, believes that the conflict occurred without influence from the white man.

"The Chemehuevi are one of the very few Californian groups that have partly altered their location in the historic period, and that without pressure from the white man. Their shifts emanated in disturbances of the still more mobile and more compact Yuman tribes on whom they border..." (Kroeber 1925: 593-595).

Kroeber continued with an account of the Chemehuevi movement into land that the Mohave had cleared of its owners, and the subsequent removal of them by the Mohave. The interactions between these two tribes will be discussed later.

Further information on this war comes from the Cahuilla and the Mohave.

"The Cahuilla state that these Indians (Chemehuevi) did not formerly lived at Twenty-nine Palms, but to the east near the Mohave, and that when they fought that tribe many years, ago, they were defeated and fled to this place. This statement corresponds with a quotation made by Dr. Barrows from an Indian Office report, according to which a number of Chemehuevi had in 1867 fled from their enemies, the Mohave, across the desert into Cahuilla territory. Mohave accounts also tell of this war about this time with the tribe with which they had previously maintained friendly relations" (Kroeber 1908b: 37).

Apparently after their defeat, the Chemehuevi went to "their friends the Cahuilla living just below Palm Springs" (Woodward 1953: 64-67).

The Serrano groups are composed of the Kitanemuk, Alliklik, Vanyume, and Serrano proper. Information on their intratribal relations could not be found; and the intertribal relations of each group varied.

Kroeber wrote:

"The Mohave or 'Amahaba' of the Colorado River were known as 'muy bravos' and were welcome guests among the Kitanemuk,
penetrating even to the Yokuts, Alliklik, and perhaps Chumash. They came to visit and trade. It is characteristic that the local tribes never attempted to reciprocate. Their range was not as confined as that of the northern Californians, but they still had no stomach for long journeys to remote places inhabited by strange people. The Mohave refer to the Tehachapi–Tejon region in their myths; it is not known and not likely that the Kitanemuk traveled as far as the sacred mountains of the Mohave even in imagination" (Kroeber 1925: 612).

The Vanyume were the Serrano of the Mohave River. Of them, Kroeber wrote that "the Mohave and Chemehuevi were at times friendly to the Vanyume, but hostile to the Serrano of the San Bernardino Range" (Ibid: 614).

Most intertribal relations for the Kawaiisu appear amicable. One Kawaiisu informant denied that warfare existed (Driver 1937: 135). Kroeber wrote:

"An offshoot of no great antiquity, apparently, from the Chemehuevi, the Kawaiisu have become differentiated from the parent body as a result of a new setting. They lived in the Tehachapi Mountains, and therefore half across the watershed that separates the great valley of California from the undrained Great Basin. Behind them remained the westernmost of the Chemehuevi; and nominally the two bodies were in contiguity. Actually, however, the Chemehuevi tract in question was perhaps the least frequented of all the barren lands of that people; and the Kawaiisu had more to gain by clinging to the timbered and watered slopes of their mountains than by wandering among the rare vegetation and dry soda lakes of the desert. Intercourse between the two groups was therefore probably not specially active.

"On the other side of the crest, however, the Kawaiisu were pressed close against a variety of neighbors. In the plains below them were the Yauelmani, and beyond them other Yokuts tribes. Relations with these seem to have been friendly, and intermarriages took place. "On both sides were Shoshoneans, but of quite distinct history and speech; to the north the Tubatulabal of Kern River, to the south the Serrano Kitanemuk; and a journey of less than a day led into Chumash territory" (Kroeber 1925: 601).

Even though relations between the Kawaiisu and other tribes were apparently friendly, in one conflict that was reported, the Panamint Shoshone fought the Kawaiisu because of women stealing (Steward 1941: 255).

Intertribal relations for the Panamint Shoshone were not specifically given,
but on the whole warfare does not seem important. A fight between the Panamint and Kawaiisu was mentioned above.

The Kuhwiji are a Shoshone band around Little Lake and the Koso Mountains. One informant thought they fought with no one. In a brief account, "he recalled but one fight, when some people from far south invaded the country. The fight occurred at Coso Hot Springs. The invaders were all killed" (Steward 1938a: 83).

Likewise, warfare for the Northern Death Valley Shoshone was not important. Another informant related that

"Sigai women picking sunflower seeds in upper Panamint Valley saw strangers. The next morning Sigai men pursued them into a dry cave and killed them. The identity of the invaders and the final disposal of them was unknown" (Steward 1938a: 91).

Although these accounts are vague as to the identity of the other tribes involved, trespassing and women stealing seem to be reasons for fighting. In talking about the Nevada Shoshone which included the Panamint Valley people, Steward said that "causes of strife seem most often to have been woman stealing" (Steward 1941: 255).
THE COLORADO RIVER TRIBES

For the Mohave, warfare was described as being an "obsession" (Stewart 1947: 257). This tribe, along with the Yuma and the other smaller tribes along the Colorado River in the southeast corner of the state were unlike other groups in California in that their social structure was geared to warfare. They were also different in that they were agriculture-based societies in which women were able to contribute substantially to the main part of subsistence activity. Economically, this made these people independent of hunting and gathering cycles, and created free time (Forde 1931: 162). Agriculture also lessened the need to trade, making these tribes less dependent upon their neighbors than other California Indians (Kroeber 1925: 727). On the other hand, Mohave and Yuma agriculture was dependent upon the flooding of the Colorado River which fluctuated (White 1974: 116; Ives 1861: 73). When crops failed, gathering had to be done and alliances with neighboring groups allowed a greater range of subsistence activity; at the same time warfare with weaker tribes had the effect of displacing them from areas of potential food resources in what White (1974: 119-122) called "competitive exclusion." As with the rest of California the poorer tribes may have attacked the wealthier ones for food.

The reasons given for Yuman warfare were different from those given by informants from the rest of California; begin the retaliation of past raids and for glory (Kroeber 1925: 843). Warfare had a "spiritual" nature (Forde 1931: 162). It did not gain overt economic aspects until the Spanish introduced the horse, which became such a dominant factor in warfare that raids were made to take horses and to take captives to trade for horses (Dobyns 1957: 48-49). Yuman warfare, like the subsistence pattern, showed characteristics from areas outside California: some of the ritual aspects and decorations came from the Plains Indians and the method of scalping came from the Southwest (Forde 1931: 174-175).

The presence of the whites began early in this area, so that white influence on the native way of life and the original intertribal relationships is difficult to determine. The earliest source consulted was a military report to the Senate from 1861, which was well after the Spanish had come into contact with the Yumans, and later sources contain evidence of further influence by the Americans. The land farmed by the Mohave and the Yuma was not in great demand after the first settlers because the Colorado River was too unpredictable, but while the Yumans did not lose all their fields to the whites, their water supply was made even more unpredictable by white irrigation which reduced the flow of the river from upstream (White 1974:116).

As mentioned, the economic raiding for horses arose from white contact, and in addition the shifting of tribes, due to white pressure, disturbed the relationships between neighbors (Dixon 1907: 92). Discrepancies arose in the testimony of informants presented in the texts because the original warfare pattern had never been observed
by them. There is no way to tell how much of the ritual involved in warfare was
native and how much was adapted from the whites.

It appears that warfare occurred between traditional enemies with the
smaller tribes in between being involved in minor skirmishes (Kroeber 1925: 596),
such as the raids staged by the Paiutes on Mohave fields and the retaliations by the
Mohave (Woodward 1953: 65). The Mohave, aided by the Yuma, were chronically
hostile to the Cocopa, and the Yuma, with the Mohave, were chronically hostile to
the Maricopa and their Pima allies (Stewart 1947: 135). Russell (1908: 38-46)
described in detail a series of hostilities between the Yuma-Mohave and the Maricopa.

The last big battle between these traditional enemies occurred in either
1857 (Kroeber and Kroeber 1973: 97) or 1858 (White 1974: 125) with the Mohave,
Yuma, and their allies being decisively beaten at Maricopa Wells by the Pima,
Maricopa and their allies. Kroeber and Kroeber (1973: 97) said it was the "last of
a ritualistic exchange of formal raids that had been going on for generations." The
Mohave lost 60 of their 200 men, and the Yuman 80 of their 82 men (White 1974:
125). The Pima and the Maricopa were more successful as farmers; they used the
Gila River for their water supply, which was more dependable than the Colorado,
and in addition the Pima practiced irrigation rather than the flood water farming of
the Mohave and the Yuma (Ibid.: 117). At the time of the battle, the U.S. military
reported that the Mohave were starving while the Pima had a large agricultural
surplus which they sold to the whites (Ibid.: 125).

In 1857 the first white settlers took the home valley of the Mohave and the
tribe divided into smaller groups to farm the remaining lands. White encroachment
upon the land and the water supply, the subsequent introduction of the horse which
allowed greater mobility, and the division of the tribe into smaller, less militarily
powerful groups intensified the chronic hostilities and turned neutral tribes into
potential threats.

A report of 1861 stated that both the Mohave and the Yuma were friendly
to the Chemehuevi (Ives 1861: 72). The Mohave allowed the Chemehuevi, who were
under pressure from the whites (although there is some doubt as to this fact, according
to Kroeber (1925: 593-595)), move into the area along the Colorado River low-
lands from which the Mohave had driven the smaller prior inhabitants (Dixon 1907: 3).
The loss of the Mohave home valley made the presence of the Chemehuevi a threat to
the Mohave food supply in the other valley. After Fort Mohave was built, and liquor
was brought to the Indians, drunken brawling resulted, and the friendly pattern of
interaction was disrupted (Stewart 1947: 258). In 1864 the Chemehuevi killed a
Mohave woman which was retaliated by the death of a Chemehuevi man by the Mohave;
later 100 Mohave marched up the Colorado River to the south end of Chemehuevi
Valley, killed one Chemehuevi and lost one of their own warriors in an attack which
ended in a tenuous peace agreement that lasted two years or so (Kroeber and Kroeber
1973: 19). The former allies had become enemies and fought an indecisive long war
over possession of a valley which they both inhabited (Kroeber 1925: 726).

In 1866 the Chemehuevi attacked, killing five Mohave and wounding two boys, and while the Mohave sent for help to Fort Mohave, 50 more Chemehuevi attacked, wounding a Mohave woman, until they were driven off by Mohave reinforcements (Kroeber and Kroeber 1973: 39-43). Finally, the Mohave drove the Chemehuevi completely from the Colorado River lowlands and back into the desert (Kroeber 1925: 727).

In a more documented source, the war is dated 1865, based on newspaper accounts from that time. According to this source, the Mohave fought and defeated the Chemehuevi in September, 1865, then fought the Paiute and were defeated by them (Woodward 1953: 65). The Mohave fought the Chemehuevi first so that they would not have to deal with them at the same time that they were feuding with the Paiutes. However, in 1866, the Chemehuevi allied with some Paiutes fought with the Mohave (Ibid.: 67). The basis for hostilities with the Paiutes was probably the robbing of Mohave fields.

The Chemehuevi moved out of Chemehuevi Valley to Parker, Arizona (Kroeber and Kroeber 1973: 43). While this action did not end the enmity between the two tribes, it eased the tension because the Parker area was rich land and the Chemehuevi were content to stay there. However, from 1867 - 1869, Superintendent George Dent of the Colorado River Reservation brought many of the Chemehuevi back into Mohave lands in order that they might be budgeted for government food; this, of course, created tension between the two tribes, to such a degree that the Mohave began peace negotiations with their traditional enemies, the Maricopa, in an attempt to move to more fertile lands along the Gila River (Kroeber and Kroeber 1973: 87-88). Devereaux (1951: 36-37) recounted a Mohave informant's story of this period of negotiation with the whites and other Indian tribes in this area. Before the move occurred, a Chemehuevi was killed near Fort Mohave on the crowded reservation land, and his tribe staged a retaliatory attack on a Mohave settlement in which "many" Mohave and 3 Chemehuevi were killed on October 15, 1870 (Ibid.: 44-45).

Warfare between traditional enemies consisted of small-party raids by young men wanting prestige (Pathauer 1954: 111), and of tribal war-parties, which probably occurred rather infrequently. Both Spier and Stewart estimated that two attacks could have occurred within one year, but that probably several years elapsed between wars (Spier 1933: 161; Stewart 1947: 266). For the Mohave and the Yuma, all attacks had to be counter-attacked and all scalps taken had to be avenged (Forde 1931: 165), but rebuilding the ranks, equipment, and morale for a retaliation took time. Also, if warfare occurred during times of crop failure, it was probably infrequent because even though the Colorado River flooding was unreliable, it rarely failed enough to cause starvation.
There is no reason given in any of the texts as the basic cause which created traditional enemies. Each battle was perpetuated by the battle preceding it, the hostilities were long-standing -- the Congressional report of 1861 mentioned that the Yuma fought the Maricopa and that the Mohave "hated the Cocopa bitterly" (Ives 1861: 71-72) -- and the hatred was kept alive from generation to generation through ritual. Trippel described in detail the retaliation of a Yuma death against the Cocopa which happened prior to 1887 (Trippel 1889: 567). It is interesting to note that until white involvement traditional enmity existed between the numerically largest groups, that, because of their agricultural surplus, had a population of uninvolved men with no basis for social status and that could theoretically afford to lose relatively large numbers of the population in warfare. The predisposition toward this form of status-seeking could have come from the Southwest with farming, since enemies could be afforded economically. In fact they were almost a necessity, for at the same time feeding a large population needed a large food surplus and when the crops failed, it was logical that more successful neighbors should be attacked.

Warriors were not part of the functioning farming population, and their social class gave them prestige and honor even when they were old men who could no longer fight (Fathauer 1954: 105; Stewart 1947: 261). The process of becoming a warrior began in boyhood with dreams that influenced the subsequent behavior of the child; young men who "dreamed properly" went first on raids to gain prestige and then on war-parties as full warriors (Stewart 1947: 260-261). This preoccupation with becoming a warrior filled a boy's life and produced adults who, even if they were not warriors, were more interested in warfare than subsistence, and this interest kept alive hostility between traditional enemies.

Ritual was important in reinforcing a warrior's status. Prior to a battle, a meeting or dance of incitement was held (Stewart 1947: 266-167; Drucker 1941: 134). The main idea was to remind the warriors that they were "expecting to die soon (Fathauer 1954: 104), in short that they were different. The glory of warfare was stressed. Old scalps were used in the ceremony (Spier 1933: 134); this renewed the hostility toward the enemy in the minds of the fighters. Incitement rituals were a combination pep-talk for the warriors and reinforcement of the fact that they were different.

The importance of warfare is emphasized by the fact that the war-chief was more powerful than the peace-chief. The latter, as within other California tribes, was not a warrior and did not fight (Stewart 1947: 260); on the other hand, the war-chief was probably the bravest warrior and quite possibly a shaman (Forde 1931: 138). The peace-chief did not become important until the whites attempted to make him so, in order to make their dealing with the Mohave and the Yuma "more organized" (Fathauer 1954: 109-110).

Shamans traveled with the warriors to battle and could themselves kill people (Fathauer 1954: 104), and like warriors, they got their power through dreams.
and were indifferent to death (Stewart 1947: 260). However, they had an extra magical quality that made them fairly immune to the contamination of the enemy. Scalps could only be taken by a special shaman (the ahwe \textit{samadj}) -- who took only one scalp despite the number of enemies killed -- and they were kept between wars by the kowxot (Yuman, Mohave kohota) (Spier 1933: 137). The kowxot and kohota also kept captives. All warriors, especially those who had killed an enemy, had to be purified ritually of the contamination upon their return (Dobyns 1957: 51).

This idea of contamination is important in two ways: 1) it pointed out that while warfare was glorified, it had potential evil aspects; 2) it justified continued conflict with traditional enemies who, while the original cause was forgotten, were thought to be dangerous.

The Mohave and the Yuma took captives, generally killing the men and purifying the women and children to remove the contamination. Children could be adopted and absorbed into Mohave life, but women were thought to cause "insanity" and remained apart, untouched by Mohave men (Dobyns 1957: 51). The record does not mention much about final settlement on captives, but women probably took part in subsistence activity since they did not function as mothers. Their presence served also to remind the group of its traditional enemies. After the whites, of course, captives became an item of trade. Stewart (1947: 258) described such an instance:

"The other war with the Chemehuevi was also when the American troop was already here (1867). The Mormons in Nevada wanted some Mohave women for wives, so they gave guns to about fifty Ute (?), Paiute, and Chemehuevi, and told them to go down and kidnap some Mohave girls for them. They came through up at Forty Nine Road, the old military road up above Ghost Mountain (Avikwame). They went through on the south side of the big wash by Hardyville. Then they came to a place called Moss Mine (Kawacuthomb). A lot of Mohave were gathered to fight over a piece of land at a place called Sand Hill (Anikockwamb). So there were lots of Mohave there. They were camped and big dances were going on, singing nearly all night and day. At daylight the enemy attacked. Most of the Mohave were unarmed; so the Chemehuevi shot their guns and killed quite a few."

Scalp dances occurred after wars and were repeated at harvest time with ritual purification (Stewart 1947: 271). The purification aspect is interesting because it took the group's interest from the subsistence activity and redirected the attention to warfare; it strengthened the status of the warrior against that of the farmer because it was the warriors rather than the farmer who obtained food for the tribe through warfare, and it strengthened the traditional enmities by emphasizing the tribal interest
in war, because warriors took part in the dances (Drucker 1941: 136). The celebration itself would serve to take the collective mind of the tribe off starvation, if that have been a factor in the fighting.

Warfare increased "tribal strength" (Forde 1931: 174). According to Dobyns, it held the Mohave and the Yuma together against the Spanish (Dobyns 1957: 50). Thus, when the Americans moved in and shifted the tribes along the Colorado River, warfare served a dual purpose: 1) it showed the intruders, both white and Indian, that they were coming against a powerful fighting group; 2) it strengthened the already existing solidarity within and between the two tribes. In the latter point, the Mohave and the Yuma were like other California tribes, but in the institution of a high-status warrior class and the tribal preoccupation with war -- seeing warfare as a positive occupation -- these tribes were very different. Warfare also was a means of obtaining new food resources and retaining previously held areas of resource from other tribes, and in this economic sense it became an exaggeration of the basis for warfare in the rest of California, since for the Yuman tribes, warfare could save tribal group from actual starvation.

White influence in this area was blatant. It brought the Mohave to the point of starvation by taking the tribe's land and water, and shifted the tribe's relations with its neighbors such that her allies, the Chemehuevi, became enemies and her chronic enemies, the Maricopa, became seen as potential friendly neighbors. The whites facilitated the ease and possibly the frequency of warfare (certainly giving a reason for raiding) with the introduction of the horse, although it is impossible to determine the extent of the effect that the horse had on Colorado River warfare. More important than the horse was the rearranging of social relationships that the whites caused.
DISCUSSION

From the information available on California Indian warfare, it is difficult to get a true picture of aboriginal interaction because white influence was such a disruptive force. Most of the conflicts reported in the ethnographies occurred after European contact. With the introduction of the horse, a profound influence was exerted on the Indians by giving them greater mobility which could result in either increased warfare or in peaceful contact between originally isolated tribes. Certainly the pressure of white settlement increased economic competition, and tribes that were not directly in contact with the whites were influenced by them. The removal of certain tribes may have allowed other tribes to expand their territory, such as the Yokuts who freely moved through Costanoan territory to Monterey Bay; and white pressure created enmity between formerly friendly tribes, as between the Mohave and the Chemehuevi.

Warfare, in general, was concerned with retaliation for economic offenses. Poaching was a direct threat to survival; trespassing was a potential threat; and murder disrupted the normal pattern of social activity within the group. On the other hand, with the exception of the Pomo-Wappo conflict over Alexander Valley and the Chemehuevi-Mohave conflict over the Colorado River lowlands, there was no warfare which involved long-term takeover of another group's territory. Because of increased pressure from the whites, the economic factor became more important, and perhaps it was easier to fight another Indians group than the whites, who after all, had superior numbers and arms. This is true of the Mohave-Chemehuevi conflict since the whites had taken the best Mohave lands, and the Mohave, who had held the Colorado River lowland area prior to giving it to the Chemehuevi, found it easier to fight their former allies than the whites.

Witchcraft was another cause of conflicts which was used to explain mysterious deaths. In this way, someone was accused of practicing witchcraft and could be held responsible for a murder, thus precipitating fighting between two groups. In another way, witchcraft could be used just to take revenge upon someone by killing him without a large scale battle, or any fighting at all, taking place.

Trading between groups sometimes caused conflicts to arise. Breaking a trade agreement could result in an actual battle. Likewise, it is interesting to note that tribes who fought each other frequently also engaged in trade, as in the case of the Paiutes and the Atsugewi, and the Western Mono and the Yokuts. Both of these pairs of tribes were traditional enemies, but a trading relationship was maintained for the benefit of each tribe. For some tribes, war parties were distinguished from trading parties by paint, i.e. the Nisenan.

By the way Indian groups lined up on the battlefield and shouted insults at
each other, in some respects, their confrontations could be compared to a dangerous sport, a contest between two tribes. Bennyhoff suggested this for the Plains Miwok, and Kroeber mentioned this idea for other groups. Although a fight was a serious affair, a battle could have served to break up the monotony of cyclical activities of a hunting and gathering society. Whether the California Indians themselves considered a fight as a sport or contest will never be positively known. Certainly the ritual dances before and after fighting could be looked upon as a form of entertainment besides being the enlistment of supernatural support.

Generally, a major attempt was made to avert actual fighting, usually done in a well-defined, ritualized manner; and if warfare occurred, attempts were made to stop it before too many were involved. Peace usually lasted until new killings or trespassings occurred. Northern California tribes attempted to avert warfare by replacing actual fighting with monetary compensation. In Southern California, some tribes like the Cahuilla replaced warfare with enemy songs, as these songs were known. The Mohave and the Yuma were the only tribes that glorified warfare; yet, the evil aspects of it were still seen in the idea of contamination from the enemy necessitating ritual purification.

The chief in all tribes was primarily concerned with averting war and establishing peace. He acted as a mediator between feuding groups within the tribe and negotiated peace settlement with hostile neighbors. Despite efforts of the chief, in-group feuding was quite common. In fact, the only group that was exempt was the Colorado River tribes, because agriculture tended to unify them as a group and removed the tension of economic competition which faced the other hunting and gathering tribes. There was no over-all sense of tribal unity throughout the rest of California; groups fought each other within a single tribe, but at the same time, temporary alliances could be formed to fight other groups.

There was no strong political organization within each tribe, and thus, no lasting political alliances between tribes occurred. There was also no real organization of warfare outside the Colorado River area, even with the existence of traditional enemies, in the sense of nationalistic struggles. Nor did any Indian group attempt to obliterate another Indian group, as the whites did; the first bloodshed usually ended the conflict.

From an analysis of the data, it was found that within each tribe, the groups on the borders of the tribal area tended to fight with their outside neighbors more frequently than those groups in the interior of the tribal area. The primary reason, of course, was proximity of border tribelets to alien tribes. It can also be noted that most traditional enemies were members of different language stocks. In fact, of the fifteen conflicts between traditional enemies which were studied, eleven occurred between tribes of different linguistic families as compared to four conflicts between tribes of the same linguistic stock. Conversely, for the twenty-seven reported
conflicts which were not between traditional enemies, the results were about equal; fifteen conflicts occurred between tribes of different linguistic stocks, and twelve were between tribes of the same linguistic stock (See appendix).

Along these same lines, there seems to be a schism which quite often caused friction between hill tribes, and those tribes living in the valley below. This schism can be seen up and down the eastern side of the Central Valley and the adjacent Sierra Nevada foothills. In the Coast Ranges, opposition between hill and valley tribes seems to have occurred as well. The traditional enmity between the Yokuts and Western Mono is one manifestation of this type of conflict. Fighting between valley Nisenan and foothill Nisenan is another example, because warfare was more organized than among other Nisenan tribelets (Beals 1933: 366). The rationale behind this hill-valley type of conflict is that of the have and the have nots. The hill tribes generally viewed the valley tribes as having more food resources than themselves. Also, a sort of myth was built around the hill people as being fiercer, stronger, and more aggressive.

Because of the emphasis on peace, on averting fighting and stopping it as quickly as possible when it occurred, the number of casualties for California tribes outside the Colorado River area was slight. Each member of the group was too important, socially and economically, to be spared easily; thus, warfare could not be seen as a method of limiting population expansion. The number of casualties for the Mohave was higher than that for the rest of the tribes in California. For example, in the battle at Maricopa Wells in 1857, the Yuma lost 80 of their 82 men (White 1974: 125). But here too, it does not seem as though warfare served the function of keeping the population down because while these tribes had agriculture, it was unreliable (White 1974: 116), and the agricultural food source itself limited the population.

In concluding, warfare for the California Indian tribes served to maintain the balance between tribes by discouraging neighbors from taking advantage of other groups economically. Compared with other Indian groups, for example the Plains Indians, war played a very minor part in the lives of the California Indians, except among the Colorado River tribes. War was usually limited to small, yet intense, skirmishes which never lasted more than a day or so. Temporarily, wartime encounters strengthened the solidarity between members of the groups involved. Overall, war was viewed as a serious business, as shown by the attempts to avert bloodshed and by the ritual preparation involved in fighting, but one which was necessary to insure economic survival by protecting group territory.
APPENDIX 1 -- DATA FOR MAP 1
(Number next to tribe corresponds to number on map)

A LIST OF WARFARE ENCOUNTERS BETWEEN TRIBES

Traditional Enemies

Northern Paiute (41) vs. Atsugewi (19)
Huchnom (13) vs. Pomo (22)
Yuki (13) vs. Nomlaki (34)
Yuki (13) vs. Kato (7)
Shasta (17) vs. Achomawi (18)
Wintu (33) vs. Yuki (13)
Modoc (32) vs. Achomawi (18)
Valley Nisenan -- Maidu (35) vs.
Plains Miwok (38)

Modoc (32) vs. Shasta (17)
Palutes (41) vs. Achomawi (18)
Modoc (32) vs. Palutes (41)
Mattole (9) vs. Wiyot (12)
Costanoan (39) vs. Salinan (25)
Northern Miwok (38) vs. Plains
Miwok (38)

Yokuts (40) vs. Western Mono (44)
Mohave (31) vs. Cocopa (Ariz.)
Yuma (29) vs. Maricopa (Ariz.)

Reported Conflicts

Pomo (22) & Kato (7) vs. Yuki (13)
Wailaki (6) vs. Yuki (13)
Wappo (14) vs. Pomo (22)
Costanoan (39) vs. Esselen (24)
Costanoan (39) vs. Yokuts (40)
Pomo (22) vs. Patwin (34)
Washo (23) vs. Northern Paiute (41)
Miwok (38) vs. Southern Maidu (35)
Tubatulabal (46) vs. Yokuts (40)
Western Mono -- Monache (44) vs.
Owens Valley Paiute (43)

Tubatulabal (46) vs. Ko-so (45)
Cahuilla (57) vs. Luiseno (56)
Panamint Shoshone (45) vs. Kawaiisu (48)

Yurok (11) vs. Hupa (2)
Wintu (33) vs. Nomlaki (34)
Yana (20) vs. Atsugewi (19)
Costanoan (39) vs. Plains Miwok (38)
Salinan (25) vs. Yokuts (40)
Washo (23) vs. Maidu (35)
Miwok (38) vs. Mono Lake Paiute (42)
Yokuts (40) vs. Eastern Mono (43)
Tubatulabal (46) vs. Owens Valley Paiute (43)
Tubatulabal (46) vs. Kawaiisu (48)
Cahuilla (57) vs. Yuma (29)
Mohave (31) vs. Chemehuevi (47)
Kawaiisu (48) vs. Yokuts (40)
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AA
American Anthropologist

AMNH-B
American Museum of Natural History Bulletin

BAE-B
Bureau of American Ethnology Bulletin

CNAE

SJA
Southwestern Journal of Anthropology

SM-P
Southwest Museum Papers, Los Angeles

UC-AR
University of California Anthropological Records

UC-ARF
University of California Archaeological Research Facility

UC-PAAE
University of California Publications in American Archaeology and Ethnology

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