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NORTHWESTERN CALIFORNIA ETHNOLINGUISTICS: A STUDY IN DRIFT

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1. SOURCE STOCKS & STRUCTURAL HALLMARKS. The native languages of northwestern California represent three of the major linguistic stocks of the North American continent, each arriving in the region along a separate route of migration. Each language, in turn, reflects a separate social history, while maintaining its own distinctive blend of structural characteristics.

Spoken along the coastal reaches of the area's watercourses, the Yurok language is a member of the extensive Algic stock (Sapir 1913; Haas 1958). Departing from the structural blueprint of its source stock, the Yurok language tends towards relative simplicity of word-structure, distinguishing itself not only from the members of its own family but also from the neighboring languages of the immediate geographical area. While the Yurok language does indeed possess an elaborate inflectional morphology, the general direction of drift is toward a paring down of complex morphological processes, otherwise widely attested within its ultimate source stock. Many sentences, for example, are purely isolating in technique, at least in terms of synchronic analysis, each word representing a single lexical entry, without either derivation or inflection, as illustrated in example 1 below.

(1) SAMPLE YUROK SENTENCE — Golla & O'Neill 2001:1017

šegep	*me*	*kʷeget*	*koʻhci*	*mʌkʷtikš*
Coyote	PAST	visit	once	crane.

This tendency towards relative simplicity of word-structure is a major anomaly, and probably reflects a process set into motion many eons ago, long before the Yurok arrived in their present geographical setting. Yet, in the context of northwestern California, this drift towards the isolating (or, at least, minimally inflective) structural type is certainly one of the features that sets the Yurok language apart from the neighboring tongues, which are otherwise massively polysynthetic in structural expression.

Spoken further inland—along the landlocked shores of the Trinity River—the Hupa language is a member of the Athabaskan family, a widely distributed group whose representatives stretch from arctic Alaska to the arid American Southwest. The original homeland of this group most likely lies within the northernmost portions of its overall geographical spread, suggesting a one-time southern migration for the present-day speakers of the Hupa language. True to the structural layout of its source stock, the Hupa language exhibits a characteristically Athabaskan brand of polysynthesis. Here a single word may be composed of a dozen or more structural elements whose individual meaning cannot always be clearly isolated; rather, these elements tend to occur in highly idiomatic clusters, wherein the meaning arises through their overall combination. As seen in examples 2a-c below, the elements *di-* and *l-* often occur together in constructions that otherwise refer to collective human action. Yet apart from this general characterization of their combined semantic import, it is difficult, if not impossible, to assign any individual meaning to either of these elements. Together representing the general notion of 'collective human action', these units are represented as X_1 and X_2 in examples 2a-c below.

(2) SAMPLE HUPA WORD FORMS

a. *čʼidiwilyeʔil* '(people) are dancing here and there'
čʼi-di-wi-l-yeʔ-il-i
AN.3SG-X_1-PROG-X_2-dance-PROG-REL

b. *č'idehɬc'e·* '(people) sit or dwell'
č'i-d(e·)-s-l-c'e·
AN.3SG-X_1-STATIVE-X_2-stay

c. *me·ya?diwilwa·W* '(people) began to talk about it'
m-e·=ya·=č'i-di-win-l-wa·W-i
INAN.OBJ-about=plural=AN.3SG-X_1-INCEPTIVE-X_2-chatter-REL

Time-perspective, above all, is highly refined among the Athabaskan tongues, a category of analysis that exerts its conceptual presence throughout almost every system within the overall grammatical plan. In 2a, for instance, the notion of dancing is twice marked for the progressive aspect, first with the progressive prefix *wi-* and then, once more, with the progressive suffix *-il*. In 2b, the basic notion of living or dwelling is contrastively placed in the stative aspect, here with the prefix *s-*, indicating that the event resulted in no discernible activity while extending over a great, and ultimately indefinite, period of time. Finally, in 2c, the basic notion of talking or chattering is placed in the inceptive aspect, with the use of the inceptive marker *win-*, here losing its final nasal (*n*) upon its juxtaposition with the following lateral element *l-*.

Spoken still further upriver, along the upper reaches of the Klamath River, the Karuk language has no close relatives anywhere else on the planet, though it shows a number of deep structural correspondences, at a highly submerged level, with the remaining members of the putative Hokan stock (Kroeber & Dixon 1913). This linguistic group was, in aboriginal times, widely distributed throughout much of native California, Arizona, and northwestern Mexico, so it is not surprising that Karuk should share some deep historical connection—genetic or otherwise—with the other languages long established in its general area. Yet the connection between Karuk and the remaining members of this stock is limited to a scarce handful of words, at the lexical end of the spectrum, and to a strong tendency toward a specific type of polysynthesis on the other, structural, side of things. As with the other Hokan tongues, most words in Karuk are massively polysynthetic in structural expression, while the internal analysis is often highly transparent, each structural unit conveying a relatively discrete element of meaning, thus providing a sharp contrast to the Athabaskan brand of polysynthesis illustrated above (in examples 2a-c).

(3) SAMPLE KARUK WORD FORMS — Bright 1957

a. *kunitfúnnukva* 'they look into an enclosed space, sweathouse' (T5.95)
kun-it-fú(n)uk-va
they-look-into.an.enclosed.space-plural.action

b. *máruk* *kunithvíripuraa* (T35.36)
máruk *kun-ithvírip-uraa*
far.uphill they-DUAL.run-hence.uphill
'two beings ran a great ways uphill'

c. *ishnimvánakach* 'little target shooting down from upriver' [BIRD NAME] (p. 351)
ishri(m)-va(n)ak-a-ch
shoot.targets-down.from.upriver-NM-DIM

As illustrated in the Karuk forms 3a-c, spatial concepts are often highly refined among the northern members of the Hokan stock, with dozens of directional distinctions often finding routine expression within the structure of even basic words, whether nouns or verbs.[1]

2. THE SPATIAL WORLD. Owing to the rugged nature of the local geography, the native peoples of northwestern California have settled fairly unanimously on a common environmental orientation to the surrounding world of space. In each of the area's languages, mountains and rivers tend to provide the primary points of reference for identifying spatial relationships in the

[1] For comparative evidence see Talmy 1972 and Sliver 1966.

surrounding universe (Kroeber 1925:15-16). That is, geographical spatial conceptions such as 'upriver' versus 'downriver' or 'uphill' versus 'downhill' predominate in the vocabularies and grammatical systems of the area's languages. Yet most spatial conceptions stemming from the geometry of the human figure are relegated to a place of little use, where present at all—thus, all but eliminating such anthropocentric concepts as 'left' versus 'right' or 'front' versus 'back'. The basic conceptual structure of this system is diagrammed in figure 1 below.

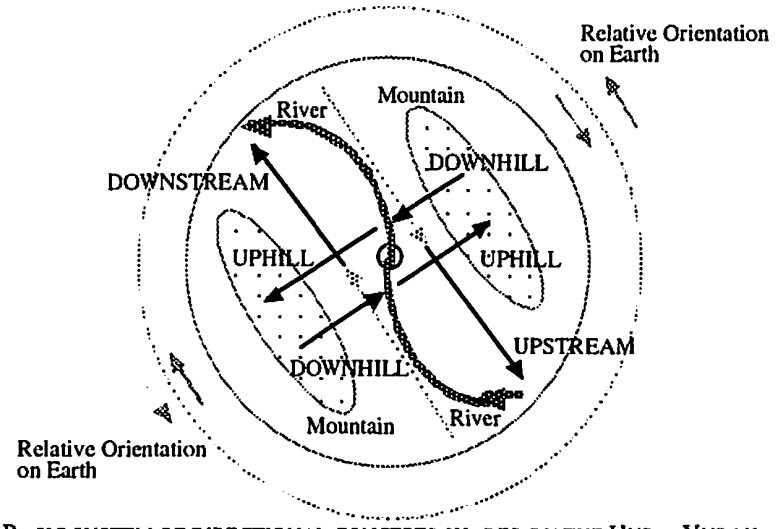

FIGURE 1: BASIC SYSTEM OF DIRECTIONAL CONCEPTS SHARED BY THE HUPA, YUROK, AND KARUK.

In the linguistic traditions of the region, these basic geographical concepts are highly relative in potential reference, and may be fixed, for any particular purpose, almost anywhere within the surrounding territory, much as with their English equivalents 'uphill', 'downhill', 'upstream', and 'downstream'.[2] Yet these basic geographical ideas, shared among the area's languages, occur in a number of distinctive configurations within the regular conceptual patterning of each of the area's linguistic traditions.

2.1. KARUK SPATIAL EXUBERANCE. These geographical spatial concepts reach their highpoint in the regular structural patterning of the Karuk language, where they are most pervasive in everyday vocabulary and grammatical paradigms.

Structurally speaking, Karuk directional markers tend to occur in complementary pairs, with separate suffixes routinely differentiating such perspectives as 'coming here from upriver' from the contrasting viewpoint 'heading toward someplace upriver from here'. Figure 2 below illustrates the complementary nature of Karuk directional categories within the terrestrial and riparian spheres.

[2] By contrast, many spatial systems grounded in the neighboring geography are entirely fixed, or absolute, in their reference to the directional bearing of local mountain chains and river systems. In this other major type of geographical spatial thought, the concepts 'uphill' and 'downhill' refer to a single set of basic directional trajectories whose bearings hold roughly constant throughout a territory, following, in turn, the general path of the mountains slopes and valley floors, whose respective inclines run along in a roughly linear fashion. The mountains of northwestern California, on the other hand, are far too numerous, and altogether too variable in bearing to allow any such system of absolute spatial reckoning.

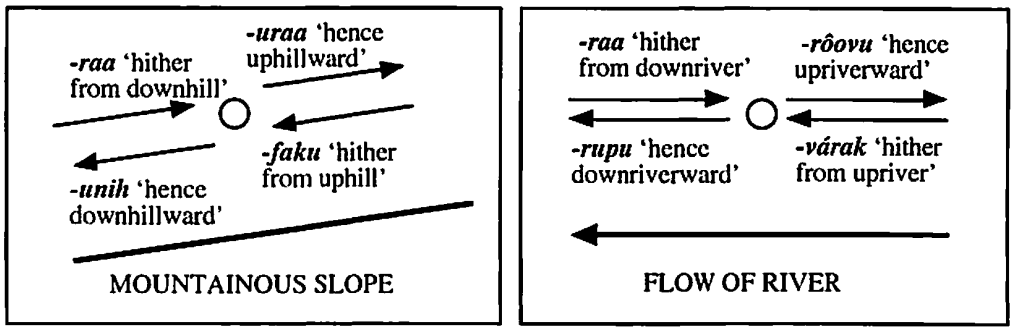

FIGURE 2: COMPLEMENTARY NATURE OF KARUK DIRECTIONAL SUFFIXES.

Such subtle shifts in spatial outlook are consistently marked with separate verb-forms among speakers of the Karuk language. Starting with the possibilities surrounding water flows, two pairs of potential paths are regularly distinguished relative to any given point of reference, two heading into the current and two traveling against the flow of the water. Take the case of a body floating 'upstream', against the direction of the water flow. In such a case, the Karuk speaker must always indicate whether this object is approaching the reference point, from downstream, or moving away from it, and, thus, heading still further upriver, beyond the point of reference. Were the object moving 'upstream' and away from this hypothetical reference point, one could say, *ʔuʔárihroov* 'one being went upriver from here', an expression based on the general verb of motion *ʔárih-*, here with the 3rd person subject marker *ʔu-* and the directional suffix *-rôov(u)* '(heading) upriver from here'. Yet if a similar object were, again, moving upstream, but this time toward the point of reference from a downstream source, one would need to say something like, *kunipviitraa* 'they paddled back here from someplace downriver', a contrasting expression based on the general verb of conveyance by canoe, *vit*, here with the iterative prefix *(i)p-* 'back again', the plural subject marker *kun-* 'they', and the directional suffix *-raa* '(coming) from someplace downriver'. Similarly, if a body were floating downstream, into the current, one would always need to indicate whether the object was approaching the point of reference from upstream, or 'moving away' from it, and, thus, heading further still further downriver. If the body were moving downstream, away from the point of reference, one could something like *ʔukvíriprup* 'one being ran downriver from here', an expression built around the singular verb of going *ikvirip-*, here with the third person subject marker *ʔu-* and the directional suffix *-rupu*, '(heading) toward someplace downriver from here'. Yet, if the body were moving 'downstream', toward the point of reference from someplace upstream, one would need to say *ʔuʔárihvarak* 'one being ran downriver toward here from someplace upriver', a contrasting expression based, again, on the singular verb of going *ʔárih-*, here with directional suffix *-várak* '(coming) from someplace upriver'. The same pattern holds also true for mountain slopes, where another four directional paths are routinely differentiated.

At the same time, Karuk adverbial elements routinely distinguish the relative distance of specific geographical reference-points; thus, separate terms distinguish *'a long ways downriver'* from *'a short ways downriver.'* Each directional bearing is split into several contrasting terms distinguishing relative distance, as illustrated in table 1 below.

	ROOT	SHORT DISTANCE	LONG DISTANCE
UPHILL	*maʔ*	*mâakam*	*máruk*
DOWNHILL	**saʔ-*	*sâakam*	*sáruk*
UPRIVER	*kaʔ*	*kâakam*	*káruk*
DOWNRIVER	**yuʔ*	*yûkam*	*yúruk*

TABLE 1: KARUK GEOGRAPHICAL ADVERBS, WITH 3 DEGREES OF RELATIVE DISTANCE.

Thus, for any event bearing uphill, three degrees of relative distance are regularly differentiated, one represented by the adverbial root itself, *ma?*, the most general member of the set, another by the derived term *mâakam*, indicating a path heading just 'a little ways' up this slope, and still another by the separate term *máruk*, indicating a path heading a considerable distance along some uphill trajectory. Combining the adverbial categories with those expressed on the verb itself, one could create a regular distinction between such phrases as *máruk ?ukvíripuraa* 'one ran a considerable distance uphill from here' and *mâam ?ukvíripuraa* 'one ran a short ways uphill from here'. Similarly the root *ka?* 'downhill' yields another set of adverbs of relative distance, *káruk* 'a great ways upstream' versus *kâakam* 'a little ways upstream', allowing one to say *káruk ?u?árihroov* 'one went a great ways upstream' versus *kâakam ?u?árihroov* 'one went a short ways downstream'. Finally, still another adverb of relative distance, *yiiv*, one holding no specific geographical reference, would allow the specification of even greater extents, giving rise to such formulations of as *yíiv máruk ?ukvíripuraa* 'one ran a great ways uphill from here' or *yíiv káruk ?u?árihroov* 'one went a great ways upstream'. Though spatial concepts are quite elaborate within the system of directional suffixes, the series of free-standing adverbs only further subdivides the realm of space into a series of paths heading off to various extents into the surrounding world.

Furthermore, among storytellers, a single scene is often surveyed from two opposing points of view at once, creating a kind of double directional perspective. Thus, one might say 'COYOTE WAS COMING A LONG WAYS DOWNRIVER FROM SOMEPLACE UPRIVER', explicitly identifying both the ultimate 'upriver' source and eventual 'downriver' goal of the stated event. Further examples are given in 4a-c.

(4) DOUBLE DIRECTIONAL EXPRESSIONS IN KARUK (SOURCE & GOAL) — Bright 1957

a. *máruk* *?úkfuukraa* (T57.68)
máruk *?u-ikfuk-raa*
far.uphill 3SG-climb-up.from.downhill
'one climbed a great ways uphill from downhill'

b. *sáruk* *?u?árihfak* (T51.10)
sáruk *?u-?árih-faku*
far.downhill 3SG-one.goes.(quickly)-down.from.uphill
'one came a long ways down from uphill'

c. *sáruk* *?uvuunváraktih* (T1.65)
saruk *?u-vu(n)-varak-tih*
far.downhill 3SG-flow-down.from.upriver-DURATIVE
'(the river) flows a great ways downhill from upstream'

So enormous is the emphasis on these geographical concepts, among the Karuk, that the directional bearing of an event is very often stated twice over, or considered simultaneously from two points of view, once from the vantage of the source and once again from the vantage of the goal.

Finally, these fine-grained geographical distinctions are copiously applied to a sweeping range of word-forms in the regular vocabulary of the Karuk language, yielding many idiomatic expressions such as those found in 5a-c.

(5) SPATIAL IDIOMS IN THE KARUK LANGUAGE — Bright 1957: 313-403

a. *?iinvárak* 'Northern lights'
?iin-várak
burn-down.from.upriver

b. *pikvahrúpukva* 'to sing good-luck songs for hunting'
pikvah-rúpuk-va
tell.stories-out.of.an.enclosure.(toward.river)[3]-plural.action

c. *ʔímkara* 'to drown'
i(m)-kara
die-into.the.river

Finally, sleight of hand in gambling is known—if only metaphorically—as the act of 'shuffling cards into the river', as reflected in the expression, *ʔeéthkaanva*, a form derived from the verb root *ʔêeth* 'to carry', here occurring with and the directional marker *-kaan* 'into the river' and the plural suffix *-va*, denoting the motion of several sticks 'submerged' in succession. In this expression, moving something beneath the cloudy surface of the water is implicitly compared with shuffling gambling sticks beyond easy view. Such is the spatial exuberance of the Karuk language.

2.2. HUPA & YUROK REFLECTIONS. On a far lesser scale, similar directional conceptions also hold sway among the Hupa and Yurok, though with differing conceptual implications within each linguistic tradition.

To begin, relative distance is not systematically expressed in either Hupa or Yurok, as it certainly is among the Karuk. That is, neither the Hupa nor the Yurok are obliged to state the relative extent of any given spatial path along a watercourse or mountain-slope, as one certainly must when speaking Karuk. Among the Hupa, geographical adverbs merely indicate general bearing of an event, without any regular division into trajectories heading 'near' and 'far' into the surrounding spatial world. Similarly, Yurok geographical adverbs show no systematic division into contrasting terms of relative extent, with possible exception of the riparian sphere, where several uncertain divisions at least seem possible.[4] The adverbial inventories of the Hupa and Yurok languages, in the sphere of geographical directional categories, are given in table 2.

	HUPA	YUROK
UPHILL	*yidaa*	*hełkew*
DOWNHILL	*yic'eʔn*	*ʔoslo·kʷ*
UPSTREAM	*yinaa*	*pecku, pecow, pecu, hipec, pecik*
DOWNSTREAM	*yideʔ*	*pelekuk, pelekʷ, pulik*

TABLE 2: GEOGRAPHICAL ADVERBS OF THE HUPA AND YUROK LANGUAGES.

[3] Traditional houses generally face the river in this area. The Karuk directional marker *-rúpuk* '(heading) outdoors' is very probably derived from the marker *-rupu* 'heading downriver', as the exit to the living house usually pointed down toward the river below. The marker *č'e·=* in Hupa, for example, generally referring to motion out of an enclosure, such as a house, also conveys a similar meaning. Thus, the Hupa form *č'eʔninyay*, literally translating 'one came out of an enclosure', could sometimes also refer, more generally, to the process exiting the house, descending the riverbank close by, heading all the way down to the river below.

[4] The Yurok directional terms given in table 2 appear with the general glosses provided in Robins 1958. It is possible, however, that Yurok riparian adverbs feature far greater subtlety than previously described. Some appear in contrasting configurations with or without the element *-k*, an in *pul* versus *pulik* or *pulekʷ(s)*—all translating 'downstream' according to Robins. The second set of forms may have been historically derived from the element *-k* 'at', perhaps at one time conveying the sense of 'going all the way in a given direction to the end'. Other appear in alternate forms with or without a rounded segment such as *-ew*, *-u*, or *-ow*, as in *pecku* versus *pecik*; these perhaps emerged historically from a marker conveying the sense of 'toward' or 'all along the region in question, though without reaching the end'. Finally, still others would occur with or without the demonstrative element *hi-*, as in *pec* versus *hipec*, both conveying nearly the same meaning, 'downstream'. T. T. Waterman (1921), who spent many years among the Yurok in the early part of the 20th century, once suggested that the element *hi-* conveys the sense of relative proximity, or perhaps even visibility, though none of the subsequent investigators ever confirmed this important insight.

Furthermore, neither the Hupa nor the Yurok are obliged to state both the SOURCE and GOAL of an event when reporting its general bearing in the act of storytelling, as is often the case among Karuk speakers. Instead—as illustrated in 6a-d below—the direction of motion is generally stated within only one grammatical system at a time, most often indicating only the general bearing of the event, yet not both the source and goal at once.

(6) SINGULAR EXPRESSIONS OF DIRECTION IN HUPA AND YUROK

a. *xoda?wila·d* — Hupa
xo-da·=č'i-wi(n)-la·d-i
areal.downward=3SG-INCEPTIVE-float-REL
'one group floated downriver'

b. *yide?* *č'itehsyay*
yide? *č'i-te·-s-ya·-i*
downriver AN.3SG-along-STATIVE-one.goes-REL
'one being goes along downstream'

c. *sloyecok'* — Yurok
sloy-ec-ok'
downhill-go-1SG
'I go downhill'

d. *wohpeku* *so·no?ł*
wohpeku *so·n-ol-?*
across.the.water thus-fly-3SG
'it flies out to the middle of the water'

Yet, in those rare instances where the direction of motion is stated twice over—or within two grammatical systems at once—it is usually the goal alone that is reinforced with the addition of this second semantic element, as illustrated in the Hupa examples given in 7a-b below.

(7) DOUBLE DIRECTIONAL EXPRESSION IN HUPA (GOAL STATED TWICE OVER)

a. *yidaG* *xa·?isyay*
yidaG *xa·=č'i-s-ya·-i*
uphill up.to.the.top=3sg-STATIVE-one.goes-REL
'one went all the way uphill, ultimately reaching the top'

b. *yide?* *xoda?winyay*
yide? *xo-da·=č'i-win-ya·-i*
downriver areal-downward=3SG-INCEPTIVE-one.goes-REL
'one started off downriver '

In unusual cases, one may state the source of motion in one grammatical system and the ultimate goal in another, as illustrated in the Hupa phrase *hayi yinah-č'iŋ xoda·nč'e·* 'the wind that blows down from upriver'.[5] In this form, the adverb *yinah-č'iŋ* '(coming) from upstream' indicates a motion which emanates from an upstream source, while the verbal marker *xo-da·=* indicates downward motion, here, by context, referring to motion bearing down a stream. However common in Karuk, such double expressions of direction—stating both the source and goal at once—are exceedingly rare in the Hupa and Yurok languages.

Turning to language-specific conceptual entailments, spatial expression, for the Hupa, is closely tied to temporal perspective, so much so that every directional prefix is consistently associated with one—and only one—of several contrasting temporal markers (8a-d).

[5] This unusual double-directional construction occurs in a religious text, otherwise filled with the colorful expressions of ritual speech. Appearing in Goddard's *Hupa Texts* (1904:227), I was able to re-elicit the same form during my fieldwork. Reconstruction mine.

(8) OVERLAP OF SPATIAL AND TEMPORAL MARKING IN THE HUPA LANGUAGE

a. *xoda?winyay* 'one being headed down (a hill or river)'
xo-da·=č'i-win-ya·-i
areal-downward=AN.3SG-INCEPTIVE[6]-one.goes-REL

b. *xohč'iwinyay* 'one being started down a ridge, ultimately heading toward the bottom'
xoh=č'i-win-ya·-i
down.to.bottom-AN.3SG-INCEPTIVE-one.goes-REL

c. *xa·?asyay* 'one being went up to the top of the slope'
xa·=č'i-s-ya·-i
up.to.the.top-AN.3SG-STATIVE[7]-one.goes-REL

d.

yima·n	*na?ninyay*	'one being went across the stream'
yima·n	*na·=č'i-ni-n(in)-ya·-i*	
across.the.water	across.water$_1$=an.3sg-across.water$_2$-CONCLUSIVE[8]-one.goes-REL	

To assume a directional bearing, within the semantic framework presupposed by Hupa grammar, one must also assume some general temporal perspective regarding the situation at hand. Yet this is not a requirement among speakers of the Yurok and Karuk languages. Thus, when reporting that an event that is bearing either 'downhill' or 'downstream', the Hupa speaker is obliged to mention, from the obligatory temporal perspective pre-selected by the language, that this situation is merely in its initial stages, as illustrated in examples 8a and 8b. Yet, when making the difficult ascent up a mountain slope or riverbank, one, alternatively, assumes that the situation is merely in its middle phases,[9] here illustrated with form 8c. Finally, when 'crossing' a body of water, one is obliged to mention that the event is decisively heading toward an inevitable conclusion (8d), to assume still another temporal perspective pre-selected in the regular structure of the language.

In Yurok, on the other hand, spatial and temporal perspective are entirely separate matters. One either states the directional bearing of and event or its temporal status, though one is not required to state both at once, as one must when speaking Hupa. A verbal root can be modified with either a spatial or temporal prefix, yet not both at once; as a result, one category is expressed at the expense of the other. Thus, the root *-o?r*, generally portraying scenes of running, occurs in such forms as *no·wo?epeƛ'* 'I arrive running' or *himo?repeƛ'* 'I run fast', the first with directional marking and the second with temporal marking. Here the first form, *no·wo?epeƛ'* 'I arrive running', features the directional modifier *no·w-*, indicating motion which approaching some fixed point of reference, while the second form, *himo?repeƛ'* 'I run fast', contain the temporal marker *him-*, indicating an event that is carried out at rapid pace. Similarly, the root *-(e)c*, generally portraying scenes of going, occurs in such forms as *sloycoƛ'* 'I descend, head downhill' or *woycoƛ'* 'I am gone overnight', the first, again, with directional marking and the second with temporal marking. In this set of examples, the first form, *sloycoƛ'* 'I descend, head downhill', features the directional modifier *sloy-*, indicating motion which descends down a slope, while the second form, *woycoƛ'* 'I am gone overnight', would contain the temporal marker *woy(k)-*, indicating an event which continues over the extent of one night. Finally, the root *-ekoyo?*, generally portraying the motion of water, could occur in such forms as *ho·lekoyo?* 'water flows around' or

[6] Elsewhere in the language, the prefix *win-* derives verbs of onset or transition from those representing ongoing states, as in the forms *niWoŋ* 'it is good' versus *niwiŋWo?n* 'it became good', distinct only in terms of this single prefix and otherwise based on the underlying verb theme *ni-Won* 'it is good'.

[7] Elsewhere in the language, this prefix, *s-*, is associated with STATIVE verbs referring to ongoing states, lacking a particular onset or conclusion, though with a potentially infinite, or unlimited, duration, as in the forms *sita·n* 'a stick-like object rests motionless (indefinitely)' or *sixa·n* 'a filled container lies motionless (indefinitely)'.

[8] Elsewhere in the language, the prefix *nin-* is associated with directional markers suggesting a definite end point, conclusion, or moment of culmination, as *ninyay* 'one being arrived' or *no·na?niŋ?a·n* 'he put it back down'.

[9] Perhaps reflecting the inherent struggle against the force of gravity.

ɬ?koyo? 'the water is placid, stops flowing', the first with directional marking and the second with temporal marking. Thus, the first form, *ho·lekoyo?* 'water flows around', features the directional modifier *ho·l-*, indicating motion which circles around, while the second form *ɬ?koyo?* 'the water is placid, stops flowing', contains the temporal marker *ɬ?-* indicating an event which has come to a point of conclusion, all motion being withdrawn.[10]

Finally, the Karuk verb carves the realms of space and time into two independent aspects of grammatical analysis.[11] Here any event, regardless of its directional bearing, can be portrayed from any temporal perspective the speaker might wish to designate. Thus, from the vantage of even a single directional path, in Karuk, a number of distinct phases of motion can be differentiated. Without any overt marking for time-perspective, the verb is ambiguous as to whether the motion is in its initial, middle, or final stages, as represented by the unmarked form *?u?árihroov* 'one goes upriver'. Such verbs are formally neutral with respect to the internal temporal dynamics of the scene. Placing the verb in the perfective mode with the addition of the profix *t=*, the reference is restricted to a single, internally complete occurrence of the event, often with an implicit focus on culminating stages of the total path of motion, here represented by form *tu?árihroov* 'he went upriver'. In the durative mode, marked with the suffix *-tih*, the middle stages of the event are brought to the fore, without any explicit allusion to either the beginning or concluding phases of the total activity, illustrated here with the form *?u?árihroovutih* 'he is going upriver'. From the perspective of the iterative mode, marked with the prefix *ip-*, a repetition of the entire act is invoked, without explicit emphasis on any specific phase within the total flow of motion, here represented by the form *?uppárihroov* 'he went on upriver (once more)'.

3. THE REALM OF TIME. While the native peoples of northwestern California settled on a common view of cosmology, situating all events in the universe within a parallel series of greater mythic epochs, the local sense of time nonetheless shifts quite dramatically as one passes from one community to the next.

3.1. COMMON COSMOLOGICAL FRAMEWORK. In the native conception of the universe, the world as we know it was set into motion, perhaps only a handful of generations ago, when a former race of spirit deities sprung spontaneously into existence, alongside those thereafter eternal forces of good and evil. Almost as soon as life had begun, a pantheon of myth figures began to embark on those missions and often-ironic misdeeds that would soon shape the world to come, all of their actions set squarely within this ancient period of creation.

Soon a great flood was to follow, and, subsequently, the sense that a new type of creature, the human being, was soon to arrive on the cosmic scene. At this crucial turning point in the history of life on earth, these ancient myth figures set out to prepare the world for the onslaught of a portentous new era, whose events, by-and-large, they could only partially foresee. An urgent sense of impending doom perhaps prodded them to institute the ceremonies and dances that are still practiced today among the native peoples of this region.

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[10] This final series of forms, concerning the spatial and temporal dynamics of water flows, occurs only in the notes of Paul Proulx (Ms.); remaining forms otherwise widely attested throughout the Yurok corpus.

[11] While Karuk directional suffixes are generally neutral with respect to time-perspective, two spatial frames in the verbal system carry a secondary temporal significance in certain metaphorical contexts. In scenes of little or no actual vertical motion, the primary directional significance of the suffixes *-sip(riv)* 'up to the height of a person' and *-ish(rih)* 'down from the height of a person' is figuratively extended to the dimension of time. The first suffix in the series carries an INITIATIVE significance in the temporal realm, focusing on the initial stages of such activities as 'running' or 'swimming', while the second suffix holds a RESULTATIVE significance in the dimension of time, designating the final or concluding stages of such activities as 'becoming quiet' or 'settling into sitting position' (Bright 1957:96-103). The secondary temporal significance of these suffixes perhaps rests on a common analogy to the usual images of volitional activity conveyed by these directional frames in their primary spatial sense—that is, to scenes of human agents moving things either to or from a position of rest on a roughly level surface against the force of gravity (e.g., initiating the movement of a stationary object in the act of lifting it up or dropping something to its ultimate resting place).

Following this great period of transformation, the principal concern of human life would not be the anticipation of some indefinite future, such as the coming of a messiah or a better age created through science or technology, but a pressing need to restore the world to the original standards put forth during the ancient era of the creation, when the myth figures still walked the face of this earth.

3.2. TENSE MARKING. Where tense marking comes into play, the Karuk alone posses a special marker referring specifically to the ancient era of creation, though, in general, this category is only sparingly applied in myth. Its distribution tends to be limited to scenes set squarely within the mythic past, though not to the remainder of those otherwise eternal scenes whose events otherwise retain a certain timeless validity. In perhaps the majority of cases, the narrator reserves the marker of the ancient past for that pivotal scene which brings the entire plot to some point of culmination, only announcing that the story was set in the myth-times after this crucial turning-point had passed. Yet all the episodes preceding this portentous moment, and those to follow it, would remain relatively unrestricted in potential temporal reference, without any specific marker to place these other scenes within any particular period—all of them, perhaps, holding a certain timeless validity. Perhaps the most common means of placing an otherwise timeless scene within the realm of the ancient past is with the terse, if efficient, construction *ʔukúphaanik*, translating 'this one did so anciently'; highly general in reference, this form could apply, backwards within the fabric of a story-line, to most any series of scenes which would precede its application. Thus, after all of Coyote's journeys have been depicted in a succession of scenes bearing no particular temporal reference, at the highpoint or denouement of these adventures, all of his deeds would be situated, perhaps with a mere hint of a single, well-placed form, in the ancient past. Yet, very often, the implication lurks, not far beneath the surface, that many of these deeds could still be witnessed, having become, after the era of transformation, part of the very fabric of the universe itself. Perhaps Coyote has gone out in search of money and women, only to get lost and thirsty, whereupon he would arrive at death's door and loose sight, entirely, of his original mission. Or, again, perhaps his body has withered away for lack of sustenance, only to rise again when the yellow jackets pierce the loins of his rotting corpse. Maybe he has tricked some women into having sex with him by pretending to be a doctor. At the end of any of these familiar episodes, which, by their timeless phrasing, could be taking place right now, the narrator announces, with a single artistic stroke, *ʔukúphaanik* 'he did so anciently'. Yet, in the majority of cases, this would be the only form in the entire story bearing any marker of tense to place it in a particular period. Yet, as much as these activities were a part of the ancient past, certainly some of these acts could still be witnessed, or in part projected, even today.

The Yurok, on the other hand, posses a special tense-marker that specifically refers to events whose lasting effects continue to influence the living present. Among the Yurok, this distinctive marker of the ENDURING PAST is frequently applied in myth, where it refers to scenes whose lasting effects continue to ring across all time. Thus, when it is announced that Dove was winning a round as he made the critical decision to forego his grandfather's funeral, this pivotal moment is announced in the enduring past, with the words, *kic* 'ENDURING PAST' *rewpeʔn* 'he was winning' (Robins 1958:155). Yet, if he hadn't been winning, world would be different today; Dove would neither be guilty nor eternally mournful. Or, again, when Across-the-Ocean-Widower opens the door for salmon, freeing them, for all eternity, from their primordial captors, this singular event is announced with the marker of the enduring past, with the words, *kic* 'ENDURING PAST' *ʔo* 'there' *genkek* 'he opened the way' (Robins 1958:162). Finally, when Crane's wives return to him, after having been stolen briefly by Coyote, the now reunited flock flew, together, once again, across the ocean, a sequence of events also announced in the enduring past, with the words: *ʔo* 'there' *piškaꞏɬ* 'at the ocean' *kic* 'enduring past' *ɬeʔm* 'they go' (Golla & O'Neill:1021). Though completed in the past, this event would have lasting implications for the present, where Crane and his wives, the ducks, may still be seen flying together today. Thus, those pivotal events that punctuate a story-line, influencing irreversibly the sequence of events to

follow, are often marked, among the Yurok, with a form that accentuates the lasting effect of this otherwise complete event.

Yet the primary past-tense marker of the Hupa language refers exclusively to scenes whose ongoing connection to the living-present has been decisively severed at some point. Thus, the Hupa marker of the IRREALIS—or 'no-longer-existing'—is used primarily to refer to states and conditions that have ceased to exist, such as the former presence of the spirit deities in the human world, before they finally fled for the heavens. For this reason, the Hupa make little use of tense in myth, leaving the audience to infer the era from the deeds that are taking place within the fabric of the storyline.[12] Though, in very specific cases, the past tense marker here labeled IRREALIS is indeed used in myth, generally only to refer to conditions that existed before the transformation, though which have subsequently disappeared or ceased to exist in their former state. The spirit deities, for example, who continue to watch over us from their home at fringes of the universe, did once inhabit this world before abandoning it. Thus, in Hupa myth, there is occasional reference to the former presence of these sacred beings within our world, whose severance from ordinary human experience, if not the universe itself, is considered to be a very real state of affairs. With reference to their former existence within this world, the expression *k'ixinay-ne?in* or 'spirit deities of a bygone age' is sometimes used, though the term *k'ixinay* 'spirit deity', whose literal meaning is 'THOSE-WHO-(CONTINUE-TO)-SURVIVE', otherwise rarely occurs in the past tense.

3.3. ETERNAL SCENES. Where the reference is to eternal acts, whose validity stretches from the ancient past into the living present, the Karuk principally draw upon DURATIVE forms, sometimes with reference to a general activity that reaches continuously across all time, in an essentially unbroken chain. These DURATIVE forms, featuring the marker *-tih*, are often used to draw a scene out over a period of considerable, though relatively unrestricted, extent. Often the reference is limited to a particular stretch of time within the fabric of the storyline itself. Coyote, for instance, always finds himself desperately thirsty when venturing out on one of his ill-fated missions to find money and women. When he finally arrives at a spring, only to hear the tantalizing sound of water flowing, the narrator generally announces this ironic scene with a durative form, saying, for example, *pa?íshsha* 'the water' *?úxxaasktih* 'was sounding' (Bright 1957:162). Yet, much to Coyote's chagrin, the water source generally vaporizes the minute he steps foot near it. Yet, in other cases, the activity which is drawn out with the use of the durative marker would continue, if only by implication, to reach outside the story-line, stretching, in part, from the ancient past into the living present, where the activity in question could still be witnessed, today, in the world around us. Thus, as mentioned earlier, when Coyote eats his own excrement, this act is set in the durative time-frame as he exclaims, *?aaf* 'excrement' *pani?áamtih* 'it is that I am eating' (Bright 1957:200). Or, again, when Coyote proclaims that the rivers ought to flow downstream, this incipient state of affairs, thereafter, continues to hold true for some time to follow, becoming a condition that would remain equally true today. Thus, it is with a durative form that Coyote wills this thereafter eternal state of affairs onto the world, saying *yúruk* 'downstream' *kámvuunupahitih* 'let it continue flowing down' (Bright 1957:200). Yet before Coyote

[12] The era of creation is most often evoked, in Hupa narrative, merely by mentioning the deeds that took place in this period, though without any explicit reference to the time frame, either through tense-marking or through processes of circumlocution. The audience, already aware of the status of the episode within the total system of mythology, could then place the surrounding sequence of scenes, if only through a process of inference, squarely within the realm of the mythic past—though without any need, on the narrator's part, to spell it out explicitly. Like the eras themselves, even the names of the myth figures are very rarely stated directly, the audience only inferring their identity, secondarily, through familiarity with their actions, exactly as a period in the creation lore might be surmised through familiarity with the episodes that took place therein. Thus, even the central text in the Hupa creation pantheon begins only with the simple words, 'This one grew up a creation place', the audience, from there, inferring both the time frame and the identity of the protagonist on the basis of this single event alone, the mere act of growing up at this specific site. In the words of Emma Frank, who dictated this story to Goddard in 1901, *č'ixolč"e'-diŋ* 'At creation place' *?e·na·ŋ?* 'it was' *na?tehłdič"e·n* 'he grew (back) up' (Goddard 1904:96). Reconstruction mine.

willed this transformation onto the world, the rivers flowed both ways, making conveyance on the water very easy until Coyote, with characteristic mischief, upset this former state of affairs.

The Hupa and Yurok, on the other hand, most often employ verbs of iteration, marking events that are *repeated*, in stops and starts, for an indefinite and essentially unlimited interval. For the Hupa this is realized in the form of CUSTOMARY verbs, suggesting repetition as a matter of habit. In some cases, customary forms merely marks an activity that is carried out repeatedly during some well-circumscribed time-period, one that would later come to pass. Thus, in his youth, a certain young man who later learned to throw himself with an arrow, used to watch very intently as his father did the same, at least until he, one day, mastered this trick for himself. When the narrator announces that this character watched his father, this act is specifically marked for a customary reoccurrence, with the words, *na?xode?il?e?n* 'this one always watched him'; otherwise, the basic, imperfective form of this verb would be *na?xodile?n* 'this one watches him'. Yet, once this character matured, and perfected the routine himself, watching his father would no longer be necessary. Or, again, the central myth figure of the region, Across-the-Ocean-Widower, was known to have traveled around this world, incessantly, instituting various dances and medicines in his journeys, before eventually fleeing for the heavens. Thus, when speaking of these former travels, the narrator generally refers to the activities of this period with customary forms, saying, for example, *ninis?a·n* 'the world' *me·q'* 'inside' *č'ite?ina·W* 'he always went along', a phrase featuring the customary variant of the basic imperfective form *č'itina·W* 'one goes along'. Yet the validity of this form would only apply to the period preceding the transformation, as this figure would no longer regularly appear in world following the arrival of humans. Yet, in other cases, a customary act, first established in era of creation, would thereafter retain a timeless validity, where it would continue to recur, according to a regular cycle, for all time to follow. Thus, the lunar eclipse, which would only recur at irregular intervals, is considered to be the result of the moon's pets rebelling against him and devouring his flesh, whereupon one of his wives, specifically Frog, would rise to the occasion and fend off these varmints. This entire episode, repeating itself only occasionally from the most ancient times forward, is rendered entirely with customary forms. When the moon ventures out, on this special night, from beneath the horizon, this act is portrayed as happening not just once, but regularly, with the form *č'ite?ina·W* 'he always goes', itself the customary variant of the basic imperfective form *č'itina·W* 'one goes along'. Similarly, when his pets rise to eat him, this act, too, is portrayed with a customary form, the narrator saying, *yixo?iya?n* 'they always devour him'; in this case, the basic imperfective form would otherwise be *yixo?iya·n* 'they eat him'.

For the Yurok, a similar effect is achieved with the use of INTENSIVE verb forms, suggesting an intrinsic repetition reaching outward into infinity. Thus, when Dove pledges to mourn the death of his grandfather, whose funeral he missed on account of his excessive gambling, this act is reported, in Dove's words, with the form *megeyk^{w}ele?weyk'* 'I (will) mourn repeatedly' (Robins 1958:157), the intensive variant, marked with the infix *-eg-*, of the otherwise timeless construction *mey-k^{w}ele?weyek'* 'I mourn (generally)'. Or, again, when Salmon is released from its captors at the mythical head of the river, it is said they would remain, thereafter, eternally homesick for the place of their birth, returning to this destination, each year, after swimming back downriver to the sea. Thus, salmon's annual return, as well as its constant homesick state, are each, in turn, reported with intensive forms, as reflected in the expressions *k^{w}egomłe?m* 'they return repeatedly' and *kegesomewteł* 'they are always becoming homesick' (Robins 1958:162), each suggesting an intrinsic cycle, in the fabric of the universe, that has been continuously reenacted since the very beginning of time. Finally, Fox once charged Raccoon with always stealing fish along the log where he was known to scamper. This accusation, on the part of Fox, was, in turn, stated with an intensive form, specifically, *kegemole?m* 'you are always stealing (fish)', again suggesting a characteristic act carried forward from the most ancient times, only to remain equally true of this little one's behavior today.

3.4. THE DISTANT FUTURE. Finally, where the future is forecast from the mythic past, each language marks the parallel concept of continuous futurity in a distinctive fashion.

The Karuk combine the GENERAL FUTURE with a special DURATIVE MARKER, suggesting a continuous stream of action stretching from the ancient past into the indefinite future. Thus, when water ouzel's wife finds that he has been hiding food from his family, keeping only it to himself, she condemns him to an eternity of eating nothing but the mud from the floors of creeks, saying *ʔaratváraf* 'mud' *kich* 'only' *ʔiʔáamtiheesh* 'you will be continuously eating' (Bright 1957:216). Representing a continuous stream of action that would begin with this curse and carry forth, thereafter, across all time, she casts his fate with a form containing both the durative marker *-tih* and the future suffix *-eesh*; otherwise, this form is based on the root *ʔaa(m)* 'to eat', here occurring in the second person with the subject marker *ʔi-*. Similarly, when the spirit deities first set the World Renewal Ceremonies into place, during the ancient myth times, they announce that humans will one day carry these rites forward into the future, saying *pakunkupítiheesh* 'they (also) will be doing like that' (Bright 1957:248). In the hopes that these rites would be repeated each year until the end of time, to keep the world pure and free of illness, the spirit deities state their prediction in a form, again, indicating both the futurity of the action (*-eesh*) and the continuous nature of its performance (*-tih*).

The Yurok, on the other hand, combine the INTENTIONAL FUTURE with special marker of INTENSIFICATION, suggesting an event that reaches, in stops and starts, from the mythic past onward into the indefinite future, often as premeditated by a specific figure. Thus, when Dove pledges to mourn his grandfather's loss, he states this future intention with an intensive form, secondarily marked for the future, with the words, *ki* 'future wish' *noʻł* 'then' *megeykʷelaʔweyk'* 'I shall mourn repeatedly' (Robins 1958:157). Or, again, when Salmon's captors state that their former victims shall always return to their home, this pronouncement is again stated with an intensive form marked for a continuous recurrence onward into the future, with the words, *ki* 'the' *nepuy* 'salmon' *ki* 'future hope' *kʷegomłeʔm* 'return continuously' (Robins 1958:162). Finally, when Owl's wife condemns him to an eternity of 'hooting' without the mercy of either song or melody, she casts her curse, again, in an intensive form also placed in the intentional future, with the words, *ki* 'future (wish)' *cpi* 'only' *ni* 'there (in the canyons)' *ʔeʔgoloyew* 'hoot repeatedly' (Robins 1958:162).

Finally, for the Hupa, the usual practice is to combine the GENERAL FUTURE with forms specifically marked for an ongoing enactment, suggesting, as in Karuk, a continuous stream of action reaching from the mythic past into eternity. Thus, when a Hupa Indian is transformed into a spirit deity, by virtue of his great merit at the dances, he states all of his plans in the progressive future, indicating the deeds he will, thereafter, carry out, each year, for all time. He announces, for example, that every year, at the time of the Jump Dance, fog will always be descending on the valley, saying, *noywiłkʸilił-teʻ* 'fog will (always) be reaching down'. This construction, in turn, represents the progressive variant of basic imperfective form *noyniłkʸid* 'fog or smoke descends downward'. Later, the same character informs all those living in the valley that he always will be looking on, each year, into all eternity, as they perform their annual rites, a sentiment he, again, expresses in the progressive future, saying, *naʻtehWʔiŋʔił-teʻ* 'I will be looking back (upon the dance)'. Finally, he announces that there will always be a dance at this site of his birth, one that will always be associated with him into perpetuity, saying *čʼidiwilyeʻlił -teʻ* 'people will always be dancing'. Again, the verb in this construction is the progressive variant of the form *čʼidilyeʻ* 'people dance', while the marker *-teʻ* suggests that this ongoing activity will be carried out continuously and indefinitely, into the distant future.

Yet, in the context of prognosticating the ultimate fate of the universe, the Hupa alone make ample use of the NEAR FUTURE, suggesting both the imminence of future times and, by implication, the relative proximity of the ancient past in relation to the living present. Thus, when the spirit deities speak of inevitable arrival of humanity, they often announce this anticipated event as if it were all very close at hand, saying, *kʸiwinyaʔnyaʻn* 'people' *naʻnaʻndeʔx̌-tehł* 'are about to come into existence'. Here the tense marker *-tehł* indicates the immediacy of this situation, whose onset the myth figures predict will arrive very soon. Or, again, when a myth figure pledges to leave behind some medicine attesting to its former beneficence, this intention is often stated in the near future, the character saying, *noʻnaʻkʸinaʻʔan-tehł* 'I'm going to leave something

(medicine)'. Here, again, the marker *-tehl* indicates that the myth figure regards the human world, and, thus, the need for the medicine, as being very close at hand.

4. CLASSIFYING EXPERIENCE THROUGH LANGUAGE. Though the native peoples of northwestern California attached similar cultural significance to many objects and events within their collective social universe, each linguistic tradition would nonetheless impose a separate classification onto the world of everyday experience. Obligatory systems of classification, expressed in the regular grammatical paradigm, reach their highpoint among the Hupa and Yurok. Yet neighboring groups—such as the Karuk, Wiyot, Tolowa, or Shasta—also share in this general orientation toward refinement of classificatory expression within the grammatical sphere.

4.1. GRAMMATICAL EXPRESSION. Though commonplace within the region, classificatory elements achieve expression within a range of grammatical systems among the area's languages. Each scheme of classification is, in turn, applied to a separate series of communicative events, with variation in the extent to which the categories are obligatory in everyday life.

The Hupa classificatory system is composed of roughly fourteen verb-stems that categorize bodies in various phases of motion according to features of shape and number, alongside a host of more specific criteria. Where motion is basically self-propelled, the body is placed in the semantic role of SUBJECT. Where motion is either controlled by an external agency or suspended indefinitely, the body is placed in the semantic role of THEME. As diagrammed in figure 3 below, a separate series of taxonomic categories applies to each basic situation-type (subject vs. theme).

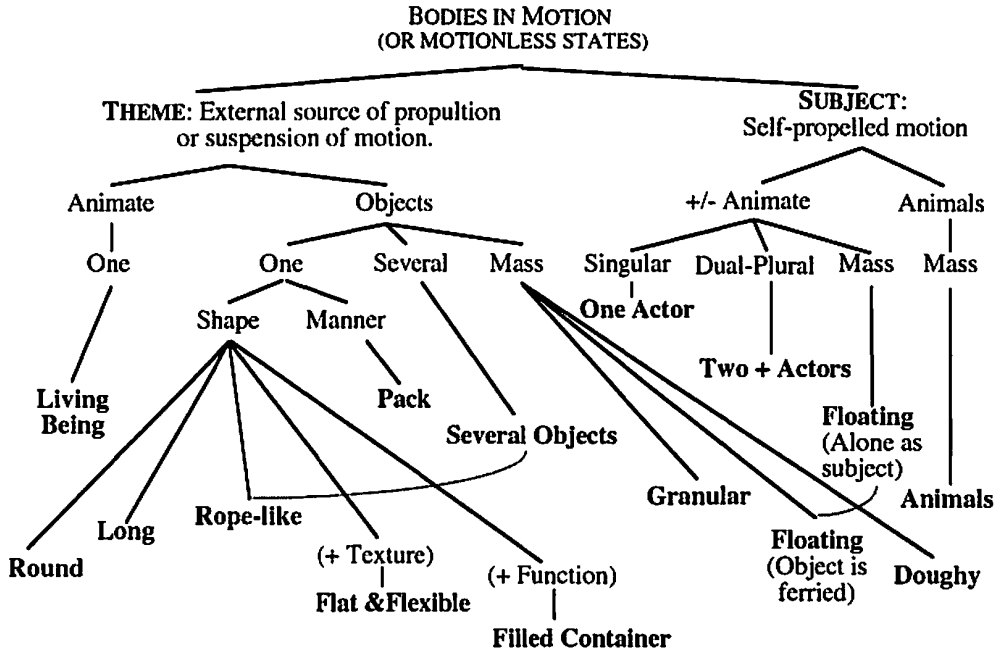

FIGURE 3: BASIC CATEGORIES OF THE HUPA CLASSIFICATORY SYSTEM.

As illustrated in figure 4, time perspective and directional orientation are intrinsic to the semantics of the categories; the paradigm given here illustrates the spatial and temporal possibilities surrounding the movement of a single ROUND object, such as a stone or arrow point.

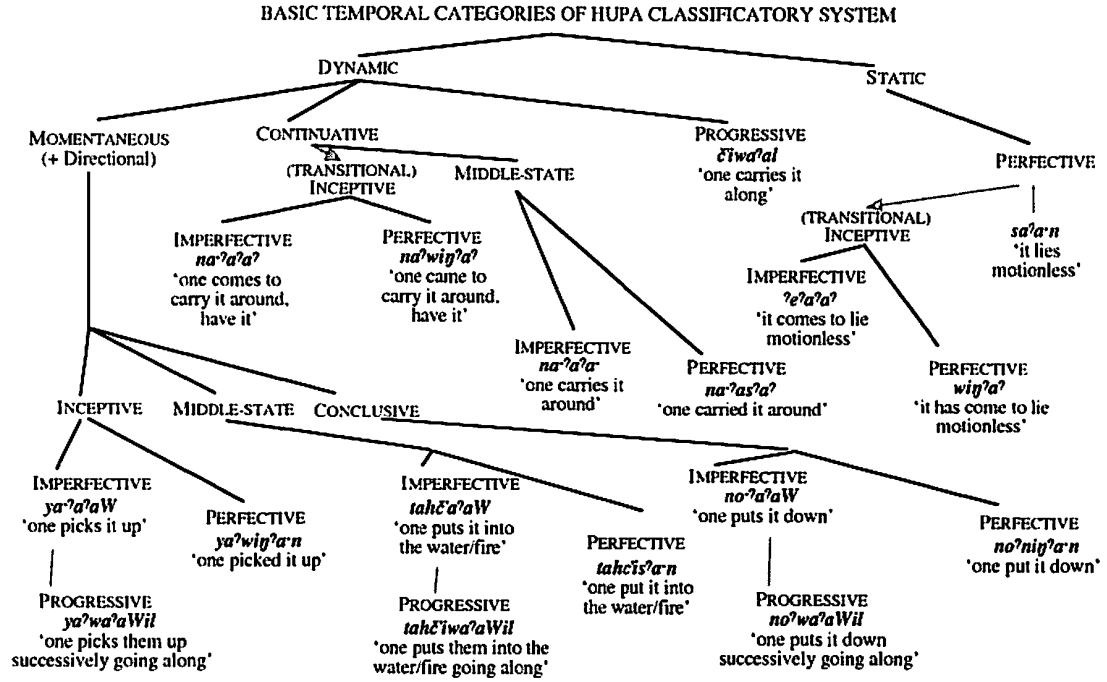

FIGURE 4: SPATIAL & TEMPORAL CATEGORIES OF THE HUPA CLASSIFICATORY SYSTEM (ROUND OBJECT).

Thus, when handling an object or referring to an object at rest, the Hupa speaker must also indicate the general spatial configuration and temporal standing of the surrounding scene.

The Yurok classifier system, on the other hand, is composed of a dozen or so regular semantic elements capable of entering into the spheres of both numerical classification and general adjectival description. The basic system of categories is illustrated in figure 5 below.

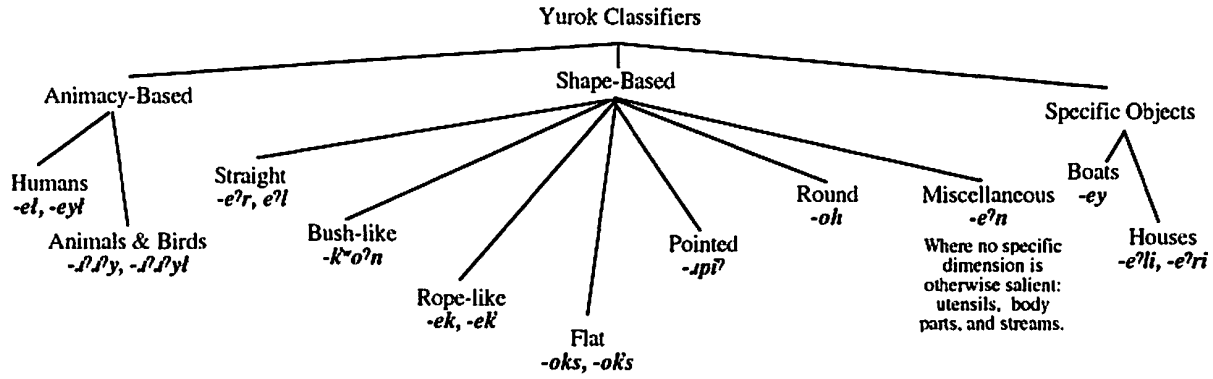

FIGURE 5: SEMANTIC STRUCTURE OF YUROK CLASSIFIER SYSTEM.

Upon entering the numerical system, classifiers categorize nouns of similar shape or animacy for the purpose of counting. Upon entering the verbal system, the same classifiers categorize nouns, of parallel shape or animacy, for purpose of attributing inherent characteristics, such as size, texture, or color. The basic inventory of descriptive verb bases is given in figure 6 below.

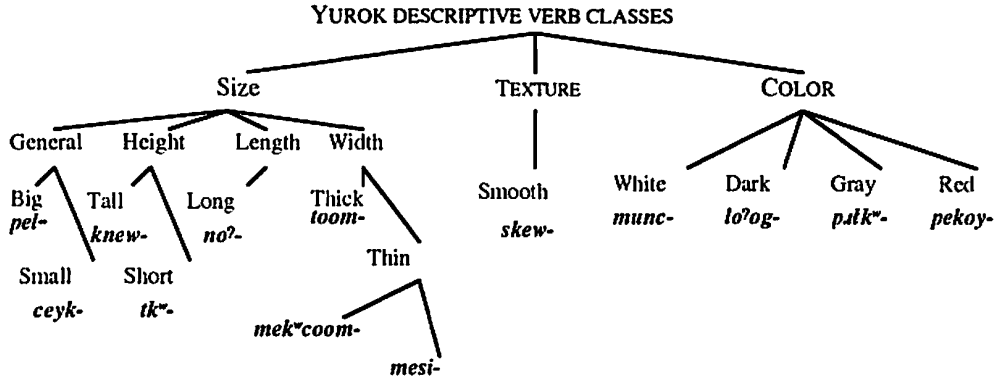

FIGURE 6: YUROK DESCRIPTIVE VERB BASES.

As illustrated in 9a-f, when counting, or merely indicating the size or color of an object, the Yurok speaker must also state the general shape or animacy of the item question.

(9) YUROK CLASSIFIER SYSTEM Haas Ms.

a.	*kʌhtʌʔʌ(t)*	*pusi*	'one cat'
	k(o)ht-ʌʔʌ(t)	*pusi*	
	one-non.human.animal	cat	
b.	*kohtoh*	*woːmeł*	'one acorn'
	koht-oh	*woːmeł*	
	one-round.thing	acorn	
c.	*kʌhtɹpiʔ*	*niːgaːm*	'one obsidian blade'
	k(o)ht-ɹpiʔ	*niːgaːm*	
	one-pointed.thing	obsidian blade	
d.	*plʌʔɹy*	*harpuhc*	'big ant'
	p(e)l-ʌʔɹy	*harpuhc*	
	big-non.human.animal	ant	
e.	*ceyhko(h)*	*haʔaːg*	'small rock'
	ceyk-oh	*haʔaːg*	
	small-round.thing	rock	
f.	*pekoyo(h)*	*čiːšäp*	'red flower'
	pekoy-oh	*čiːšäp*	
	red-round.thing	flower	

Though a scattered series of classificatory elements are present in Karuk, classification is not systematic in any single area of the grammar. As illustrated in figure 5 below, a small series of numerical classifiers regularly differentiate several basic units of measurement, including length, intervals of time, and containers of various capacities. This aspect of the Karuk language loosely parallels the Yurok counting system in basic function.

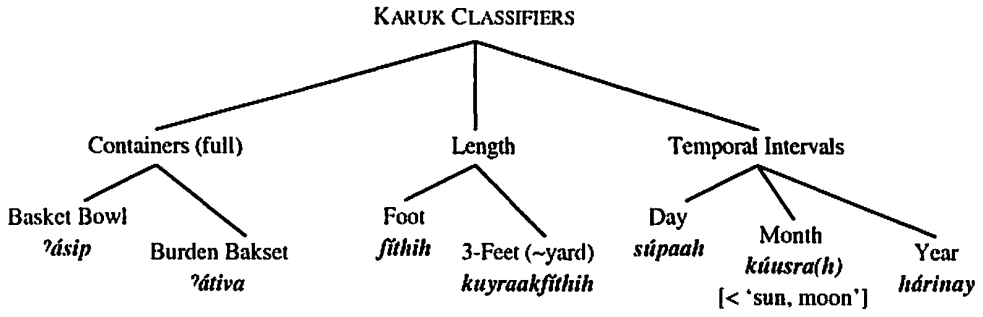

FIGURE 7: KARUK NUMERICAL CLASSIFIERS.

As illustrated in figure 8, still another series of verbal categories classify objects engaged in various types of activity, distinguishing animate bodies from those occurring in a variety of shapes and numerical configurations. This second aspect of the Karuk language loosely resembles the Hupa classificatory system in general function, if not in the overall distribution of categories.

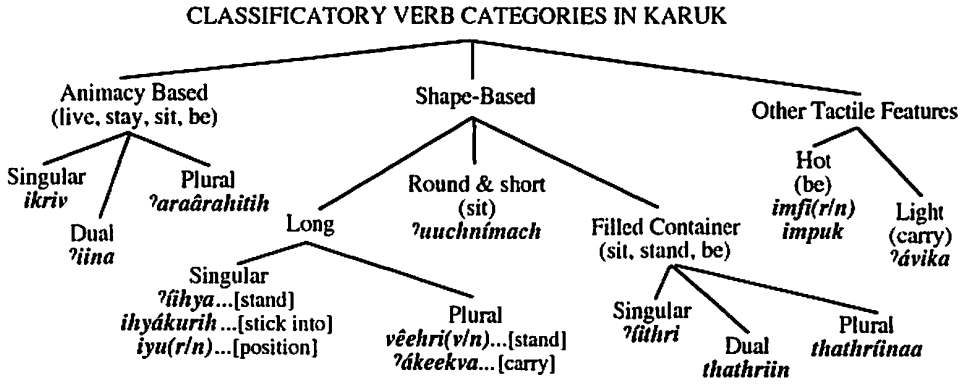

FIGURE 8: KARUK CLASSIFICATORY VERB SYSTEM.

4.2. COMPARATIVE SEMANTICS. Even where a parallel semantic category spreads across languages, the resulting conceptual divisions tend to vary widely among neighboring tongues.

4.2.1. ANIMACY. Each language, for example, holds a category for separating the animate from the inanimate. Yet each tradition holds separate criteria for membership within this otherwise parallel conceptual category.

For the Hupa, all living creatures are classified as animate by default, a category that encompasses both animals and humans (10a-b). Secondarily the category is also extended to many bodies that once held life, such as fresh-kill (10c) and cultural objects fashioned form the flesh, such as the fisher-skin quiver (10d). Sickness, conceptualized as a living spirit that invades the body of the afflicted, is also classified as a living being, as reflected in 10e. Finally, even the earth itself is often classified as animate, as illustrated in the name for the mythical being thought to dwell in the ground (10f) and in the popular religious idiom for spoiling the world (10g).

(10) ANIMACY IN HUPA

a. *q'an-ʔisla·n* *q'ayʔ-te·l* *yehč'eʔiɬtiW*
newly-born basket plaque one customarily puts (a living being) into.
'One puts a newborn baby in the basket'.

b. *ƛ'ił̓ixan* *č'iwił̓te·l*
deer one carries (a living being) along
'One packs a deer along.'

c. *way?iłtiW* *hay* *diyWo?* *yise?iłwe?*
one gives (a living being) to (her) that something he killed
'He gives the (once-living) things that he has killed (to his grandmother).'

d. *c'idaɢ-na?we·* *č'e?nił̓te·n*
Fisher-skin quiver he pulled it (a living being) out.
'He pulled out fisher-skin quiver out.'

e. *ƛ'iłw-* *č'e·l̓te·n*
Sickness (a living being) is taken out.
'Sickness is taken out.'

f. *nin?-* *miwina·-* *č'is̓te·n*
Ground- around- (a living being) lies motionless.
'The one who lies motionless in the ground,' name of mythical being.

g. *ninis?a·n* *č"in?da·?ał̓tiW*
World he brought (a living being) to ruin
'He spoiled, defiled the world'.

The Yurok, on the other hand, decisively split the realm of the animate into respective classes referring either to human or non-human actors, echoing the mythic division between the realms of animals and humans said, according to local myth, to have emerged during the ancient past.

	HUMANS	NON-HUMAN ANIMALS
ONE	*ko·ra*	*kʌhtʌ?ʌył, kʌhtʌ?ʌ?y, kʌhtʌ?y*
TWO	*ni?iyeł, ni?iyen, ni?i·n*	*nʌ?ʌ?ʌył, nʌ?ʌ?ʌy*
THREE	*nahkseył*	*nʌhksʌ?ʌył, nʌhksʌ?ʌ?y*
FOUR	*co?oneył*	*cʌ?ʌnʌ?ʌył, cʌ?ʌnʌ?ʌy*

TABLE 3: YUROK NUMERALS DISTINGUISHING ANIMAL AND HUMAN CLASSSES (ROBINS 1958:87-96).

Finally, the Karuk place animals and humans together in a single class (11a-b), alongside baskets and even stars in some cases (11c-d), both of which were thought to resemble humans during the ancient myth times.

(11) ANIMACY IN KARUK Bright 1957

a. *káan* *?avansáxxiich* *?áxxak* *kun?ii̓nanik* (T8.1)
There boy(s) two they lived (AN.) there anciently.
'Two boys once lived there.'

b. *pathufkírik* *muhrôoha* *xákkaan* *kun?ii̓nanik* (T24.1)
The Great Horned Owl his wife together they lived (AN.) anciently.
'Owl and his wife lived together.'

c. *?ikxunanáhaanich* *kun?ii̓n* *mukeechíkyav* *xákkaan* (T49.1)
Little evening star they lived (AN.) his sweetheart with (one another).
'Evening star lived there with his sweetheart'.

d. *yánava* *káan* *kích* *sípnuuk* *?úkrii(v)* *?upakurîihvutih* (T6.39)
Visible there only storage basket it (AN.) sits, (it) singing along.
'So they saw it was just a storage basket sitting there, singing.'

4.2.2. ROPE-LIKE OBJECTS. In a similar fashion, the Hupa and Yurok share a category for referring to objects with rope-like characteristics. Ropes and strings are prototypes for both groups.

Among the Yurok, snakes and worms hold their primary membership within this class, as demonstrated, for snakes, in 12b. Metaphorically, the category is extended roads (12c) and even streams, which appear to flow or curve along in sinuous fashion.

(12) YUROK ROPE-LIKE CATEGORY — Haas Ms.

a. *knewolek'* *?o·wrɬ* 'long tail'
knewol-ek' *?u-wrɬ*
long-rope.like.thing 3.POSS-tail

b. *knewolekin* *leyolekʷš* 'long snake'
knewol-ek-in *leyolekʷš*
long-rope.like.thing-3.SG.ATTRIBUTIVE snake

c. *knewolekin* *la·yekʷš* 'long road'
knewol-ek-in *la·yekʷš*
long-rope.like.thing-3.SG.ATTRIBUTIVE road

For the Hupa, on the other hand, the reference is still further extended to any series of objects joined together in a string-like fashion, including hair, waves, and even the hands (13a-d). Yet snakes and worms, among the Hupa, are generally classified as living-beings, not as rope-like objects, except in a metaphorical sense.

(13) HUPA ROPE-LIKE CATEGORY

a. *yaliW* 'pick up either a single rope or several objects of any shape'
ya·=n-liW
up=2SG- rope.or.several.things.MOMENTANEOUS.IMPRF

b. *ǯe·na?kʸilay* 'she parted her hair'
ǯe·=na·=č'i-kʸi-la·-i
split=ITERATIVE-AN.3.SG-INDEF.OBJ-rope.or.several.things.MOMENTANEOUS.PRF-REL

c. *minila·-ye·y* 'waves came to the shore'
m-e·=nin-la·-ye·y
INAN.OBJ-to=CONCLUSIVE-move.rope.or.several.things.MOMENTANEOUS.PRF-VIS

d. *ya·kʸiliW* 'raise your hand'
ya·=kʸi-n-liW
up=INDEF.OBJ-2.SG-rope.or.several.things.MOMENTANEOUS.IMPRF-REL

4.2.3. FILLED-CONTAINERS. Finally, the Hupa and Karuk share a category that separates filled-containers from all other potential vessels. Baskets, in both traditions, act as prototypes for the category. Yet the metaphorical extensions otherwise vary widely among traditions.

For the Karuk, the reference may be extended to a steam of salmon, a neck brimming over with necklaces, or the earth itself filling over with water during a flood, as illustrated in 14b-d.

(14) KARUK FILLED CONTAINER — Bright 1957 (T32.10)

a. *xás pamu?áttimnam ?uum vúra ?axyár ?atahári*
Then her burden basket EMPH EMPH a container fills always.
'And her burden basket was always full.'

b. *vúra ʔuum taay patóoppiikívship thíin ʔaxyár vúra* (T42.8)
EMPH EMPH many he puts on necklaces throat glands a container fills EMPH.
'He had lots of necklaces on, (his neck was) full up to his throat-glands.'

c. *paʔáama káan vúra kunpaxyaníppaneesh peeshkêesh poossaamvárak* (T47.15)
The salmon then EMPH they will fill up the river it flows down form upriver.
'The salmon will overflow the river there as it flows down from upstream.'

d. *peethívthaaneen ʔaas ʔupiithránik* (T56.1)
The earth water it (container) filled up anciently.
'Water collected on the earth.'

As seen in 15a-f, the reference, for the Hupa, may be extended to a standing plant full of sap, a woman resting motionless in sexually suggestive position, or a utensil brimming over with food.

(15) FILLED-CONTAINER IN HUPA

a. *sixa·n* 'a filled container rests motionless (bucket of water, cup of coffee, lake)'
si-xa·n-i
stative-filled.container.STATIVE.PRF-REL

b. *saʔxa·W* 'one eats from a bowl, eats with a spoon'
sa·=č'i-xa·W
into.mouth=AN.3SG-filled.container.(MOMENTANEOUS.IMPRF)-REL

b. *noʔkʸiŋxa·n* 'hold a feast or picnic, in particular the Acorn Feast'
no·=č'i-kʸi-(nin)-xa·n-i
down.to.rest=AN.3SG-3.INDEF.OBJ-(CONCLUSIVE)-filled.container.MOMENTANEOUS.PRF-REL

d. *č'iwiŋxa·n* 'one caught fish (in a net)', lit. 'bring a fish to rest in a filled container'
č'i-win-xa·n-i
AN.3SG-INCEPTIVE-filled.container.(STATIVE).PRF-REL

e. *kʸisxa·n* 'a tree stands (full of sap)'
kʸi-s-xa·n-i
3.INDEF.SUBJ-STATIVE-filled.container.STATIVE.PRF-REL

f. *č'isixaŋ* '(a woman) lies motionless (in a sexually suggestive position)'
č'i-s-xa·n
AN.3SG-STATIVE-filled.container.STATIVE.PRF

5. WORD & MYTH. While the native peoples of northwestern California inhabited similar natural and social worlds, a range of symbolic values were nonetheless assigned, throughout the area's languages, to those common items of perception found within the scope of everyday life.

Among the vocabularies of the area's languages, even the most common items of experience were often named for those roles they played in the mythology, folklore, or cultural practices of the area's people. In this sense, even the most basic word-forms were often constructed somewhat like miniature haikus, or brief, allusion-filled poetic statements, capturing in a minimum of well-chosen images a entire episode or scene of outstanding cultural significance.

5.1. BORROWING. Relatively few of these word-forms spread throughout the area's languages in precisely the same fashion. Thus, the presence of borrowing, or the transfer of words between neighboring languages, is virtually next to nil. Neither the phonological shape nor the stories themselves were very often identical or even particularly parallel. Even loan translations—or the mere exchange of underlying word-meanings—were also fairly rare. Instead, each community tended to maintain its own distinctive version of the common stories, myths, and

folkloric episodes that otherwise circulated throughout the region. In turn, these pervasive differences in interpretation were often secondarily reflected in the content of the area's vocabularies.

The Hupa and Karuk, for instance, ascribe a common myth to a bird known in English as the dipper or water ouzel. According to the shared folkloric episode, this bird was to receive an eternity of punishment for once having been a poor father. In the Hupa tradition, this poor animal is condemned to an eternity of having sex with stones, though never again with its mate, as reflected in the common name *ce·-q'e·t'* 'THE-ONE-WHO-COPULATES-WITH-STONES'. Yet in the Karuk tradition, this bird is condemned—not to having sex with stones—but to sucking moss from the floors of rivers, as reflected in parallel designation *ʔasaxvárishʔámvaanich* 'THE-LITTLE-ONE-WHO-EATS-MOSS'. Both designations reflect an aspect of its natural history, and both stories impart a chilling lesson to prospective fathers. The respective names are given in examples 16a-b.

(16) HUPA AND KARUK NAMES FOR THE WATER OUZEL

a. *ce·-qe·t'* 'THE-ONE-WHO-COPULATES-WITH-STONES'
ce· *Ø-q'e·t'-i*
stone 3.SUBJ-copulate-REL

b. *ʔasaxvanishʔámvaanich* 'THE-LITTLE-ONE-WHO-EATS-MOSS' Bright 1957:322
ʔasaxvárish-ʔa(m)-va-aan-ich
river.moss-eat-plural.action-AGENTIVE-DIM

5.2. ACTION PORTRAITS. Some of the most gripping scenes of action portrayed in the area's vocabularies are those that reflect, in underlying subject matter, an episode or event culled from the local folklore or mythology. Such portraits, particularly common among the names of animals and sacred places, refer, in essence, to eternal events, or unbroken streams of action, reaching across the very fabric of mythic time (17a-c).

(17) ACTION PORTRAITS IN THE LANGUAGES OF NORTHWESTERN CALIFORNIA

a. *tehkʷixolxid* HUPA
teh=kʷi-xo-l-xid-i
into.the.water=INDEF.SUB-3OBJ-CL-swallow.IMPRF-REL
'WHAT-SWALLOWS-ONE-INTO-THE-WATER' [= MYTHICAL WATER-MONSTER]

b. *ʔatmahavníkaanich* KARUK
ʔáat- máhavrik-aan-ach (Bright 1957:324)
spring.salmon-to.see.coming-AGENTIVE-DIM
'LITTLE-ONE-WHO-SEES-SPRING-SALMON-COMING' [= A FLOWER]

c. *(ʔ)wɬkɹʔišneg* YUROK
(ʔ)wɬkɹʔ *(w)iš* *n-eg-(ep-)* (Robins 1958:266)
bone it eat-ITERATIVE
'BONES-IT-EATS' [WOLF]

This tendency is strongest in Hupa, where relatively few basic or monomorphemic nouns survive, most having been replaced with complex verbal expressions, often depicting the mythic deeds associated with particular actors. In the context of Northwestern California, this otherwise characteristic Athabaskan trait has been carried to an unusual extreme, as illustrated by the series of everyday words that have been replaced with descriptive portraits in Hupa (table 4).

	ATHABASKAN FORM	MODERN HUPA REPLACEMENT
ARM	*Gan*[13]	*xokʷa·ŋʔay* 'what extends away from (a person)' *xo-kʷa·=nin-a·-i* 3SG.OBJ-away.from=conclusive-one.extends-REL
DOG	*łiŋʔ*	*no·kʷine·yo·d* 'what hunts things down' *no·=kʷi-ne·-yo·d* to.a.halt=INDEF.OBJ-chase$_1$-chase$_2$-REL
HEAD	*-ce(ʔ)*	*xʷe·daʔay* 'what extends out from me' *xo-e·-di-a·-i* 3SG.OBJ-out-one.extends-REL
PERSON	**dine*[14]	*kʷiwinyaʔn-ya·n* 'eaters of what is eaten (acorns)' *(č'i)-kʷi-win-yanʔ-i + ya·n-i* (3SG)-INDEF.OBJ-INCEPTIVE-eat.REL + eat-REL
RAIN	**kʷa·n*[15]	*na·nyay* 'what comes down' *na·=(ni)n-ya·-i* down-CONCLUSIVE-one.goes -REL
WATER	*ta·*[16]	*taʔna·n* 'liquid that one slopes (to drink)' *ta·=č'i-(di)-na·n-i* into.water=3SG-CLS-be.sloped-REL

TABLE 4: HUPA VERBAL EXPRESSIONS DISPLACING COMMON ATHABASKAN NOUN FORMS.

5.3. SPATIAL IMAGERY. Less dramatic perhaps, if equally charged with poetic content, are those descriptive portraits created by linking some object in the surrounding universe with a related spatial feature closely connected with its basic existence (18a-c). Such portraits produce, in the collective imagination of any given speech community, a regular connection between this thing and some closely connected property of space.

(18) SPATIAL IMAGERY IN THE LANGUAGES OF NORTHWESTERN CALIFORNIA

a. *yima·n* *tiwʔwinyay*
yima·n *tin=č'i-win-ya·-i*
across.the.water astray.(along.a.trail)=3sg-INCEPTIVE-one.goes.PRF-REL
'THE-ONE-WHO-WENT- ACROSS-THE-OCEAN'

b. *ithyarukpíhriiv*
ithyaruk *píhriiv*
across.the.water widower
'ACROSS-THE-OCEAN-WIDOWER'

c. *wohpekumew*
wohpekʷ *ʔu-mew*
across.the.sea its-widower
'ACROSS-THE-OCEAN-WIDOWER'

As illustrated in 19a-e, this second tendency is strongest in Karuk, where spatial categories are especially elaborate throughout the structure of the language.

[13] The sole attestation in modern Hupa occurs in the form *P-gantaa* 'P's shoulders', etymologically '(the area) between the arms' (< **P-gan* 'P's shoulders' + *-taa* 'between').
[14] The sole surviving attestation of this root in modern Hupa occurs in the form *diniŋ-xine·W*, the ethnonym for the Hupa Indians. Etymologically the form refers to 'those who speak the language of (Athabaskan) people' (< *dinin* '(Athabaskan) people' + **xi-ni-ye·W-i* 'those who speak').
[15] Survives only in the form *kʷaŋ-kyoh* 'thunderstorm' in modern Hupa, referring etymologically to 'a big rain' (< **kʷa·n* 'rain' + *-kʷoh* 'augmentative') (Sapir 1931).
[16] Widely attested in bound forms, where it acts as a directional modifier (*tahč'isyay* 'one being came out of the water') and serves as an element in compounds (*ta·sił* 'steam'). Lost as a free-standing noun form in modern Hupa.

(19) SPATIAL IMAGERY IN KARUK VOCABULARY — Bright 1957:313-403

a. *káruk* *va?áraar*
káruk *va-?áraar*
far.upriver its-person
'UPRIVER PERSON,' traditional ethnonym for a 'Karuk Indian'

b. *káh?iravárak*
káh-?i(r)-a-várak
upriver-perform.renewal.ceremony-NM-down.from.upriver
'WAR DANCE', literally 'upriver world renewal ceremony coming down from upriver'

c. *itkaratihávav*
it-kara-tih-yav
look-into.water-DURATIVE-good
'GOOD-LOOKING-INTO-THE-RIVER', a personal name

d. *?issak* *vaatxarakavûukvutihan*
?(a)sa-k *vaatxárak-ovruk-(v)a-tih-an*
rock-LOC shout-down.over-plural.action-DURATIVE-PARTICIPIAL
'WHAT-SHOUTS-DOWN-FROM-OVER-A-ROCK', California Wood-fern

e. *mahxánthuun*
mah-xanthuun
uphill-crawfish
'SCORPION' (literally, 'MOUNTAIN-CRAWFISH')

6. SUMMARY & CONCLUSIONS. Rather than strictly generating homogeneity, long-term contact has also intensified many of the underlying differences present among the languages of this area, sometimes accentuating proclivities inherent to the original source stocks. Though of diverse origins, the languages of this region have indeed developed many parallel structural traits, as a by-product of their ongoing social contact. Taken together, geographical directional systems, mythic tense categories, classificatory schemes, and descriptive nouns portraying mythical acts are all characteristic of the area's linguistic traditions. Yet, in spite of the constant, daily pressures to assimilate the habits and ways of neighboring peoples, the area's linguistic traditions remain profoundly distinct on a number of fronts.

Though characteristically Athabaskan, action-focus reaches an extreme among the Hupa, where most basic nouns have been eliminated from the language and replaced with elaborate verbal constructions intricately portraying the often-mythic activities associated with particular worldly actors. Though present elsewhere in the region, this tendency reaches its highpoint among the Hupa, where it has been carried to an extreme that is unparalleled even within its own parent stock. At the same time, time-perspective, among the Hupa, becomes an obligatory category of analysis even within the spheres of noun classification and directional marking, representing still another reflex of this pervasive focus on the subtleties of action in the surrounding universe.

Though often elaborate among Hokan tongues, spatial-focus reaches its local extreme among the speakers of the Karuk language, where geographical directional concepts achieve an unusual precedence throughout the structure of the grammar and vocabulary. Though present elsewhere in the region, this tendency reaches its highpoint among the Karuk speakers, where it has been carried to an extreme that is unusual even among the remaining members of the Hokan stock. Within the grammatical system, geographical directional concepts achieve an extraordinary symmetry and precision of reference; similarly, throughout the vocabulary, a preponderance of word-forms carry a definite geographical association, explicitly stated in the very construction of the word. Even within the sphere of noun classification, the Karuk classifiers predominantly reflect the spatial characteristics of related objects.

Finally, continuing a process probably set into motion many eons ago, long before its arrival in the immediate geographical area, the Yurok language heads still further toward the isolating structural pole. As such, the word-form has been stripped down to its bare essentials, with fewer obligatory grammatical categories than found among its closest neighbors. As a consequence, the Yurok language is innocent of many of the grammatical excesses which characterize the neighboring tongues, distinguishing itself from both the Hupa and Karuk, respectively, by maintaining a relatively even focus on both the activities and directional-bearings linked with events in the surrounding universe. Within the realm of vocabulary, some of the noun forms focus on activities, others on the spatial-status of objects. Yet perhaps the majority of the nouns are semantically opaque, consisting of a single word-root that holds no explicit descriptive significance, whether action-based or spatial in character. Thus the Yurok vocabulary rivals neither the intensive spatial-focus of the Karuk lexicon nor elaborate action-focus of many Hupa word-forms, remaining neutral with respect to both of these areas of semantic specialization. Within the realm of regular grammatical patterning, neither temporal perspective nor spatial status achieve anything close to routine expression, as they do among Hupa and Karuk; though, when marked, one is expressed at the expense of the other, the categories of space and time being mutually exclusive, structurally speaking. Thus the Yurok verb, in sharp contrast with the grammatical traditions of its closest neighbors, expresses neither intricate directional nuances of the Karuk verb, nor the intricately detailed temporal perspectives regularly marked in the Hupa language. Again, the Yurok language remains relatively neutral on both fronts, engaging in spatial and temporal marking to a lesser extent that customary among its neighbors.

Thus, despite a long history of contact, each language maintains its own characteristic signature or stamp, whether grounds of structural composition or general semantic organization.

Further aspects of areal drift are summarized in table 5 below.

	CONVERGENT DRIFT	DIVERGENT DRIFT (OR CONTINUED OPPOSITION)
PHONOLOGY	Development of glottalized stops in YUROK, an areal feature shared by neighboring tongues, such as Hupa and Tolowa.	HUPA: Strong phonological conservatism preserves many core Athabaskan traits, despite long history of intense linguistic contact. (Other tongues in family far less conservative.) KARUK: Complete absence of glottalized stops at any point of articulation, despite otherwise universal presence in region. YUROK: Highly elaborate system of vowel symbolism, a feature otherwise absent in region.
SPACE	Relativistic system of geocentric directional concepts, with shared religious implications.	HUPA: Association of direction with obligatory temporal frames. KARUK: Elaborate system of spatial categories, characterized by great symmetry and precision; pervasive use of double-directional frames (source + goal) in narrative. YUROK: Gradual pairing down of categories productively marked on the verb, including geocentric spatial concepts; sharp contrast to strong spatial proclivities of the Hupa & Karuk verbal systems. Rich expression of geocentric concepts within adverbial system.
TIME	Linguistic devices for referring to parallel moments in oral literature, mostly based on TENSE.	HUPA: Vastly encompassing focus on internal temporal qualities of events, an obligatory category for all verbs in the language, including descriptive nouns derived from verbs. Tense, or the relative temporal standing of events, is of lesser structural importance and is a recent innovation. KARUK: Strong development of tense, or relative temporal standing of events, with a close match to the temporal categories of local myth and cosmology. Lesser emphasis on aspect. (not obligatory). YUROK: Absence temporal marking directly on the verb. Elaborate external tense system, with few purely aspectual categories.

CLASSIFICATION	Development of similar categories with parallel semantic features: ROUND; LONG; ROPE-LIKE; ANIMATE; FILLED-CONTAINER.	HUPA: Retention of core Athabaskan system of classificatory verbs, with obligatory spatial and temporal perspective. KARUK: Minimal presence of taxonomic categories, otherwise a highly elaborate in region; yet, where classification is present, number is especially elaborate. YUROK: Elaborate systems classifiers operating in both adjectival & numerical spheres.
WORD-FORMATION	METONYMICAL SCHEMES (1) ACTION-FOCUS (2) SPATIAL STATUS	HUPA: Tremendous elaboration of characteristic Athabaskan action-focus. Most nouns derived from elaborate verbal constructions, leaving few monomorphemic nouns in language. KARUK: Strong focus on the spatial status of objects throughout nominal vocabulary. YUROK: Though there is some focus on both spatial standing and action-frames, most nouns are nevertheless semantically opaque, or without descriptive meaning.

TABLE 5: DIMENSIONS OF DRIFT IN NORTHWESTERN CALIFORNIA.

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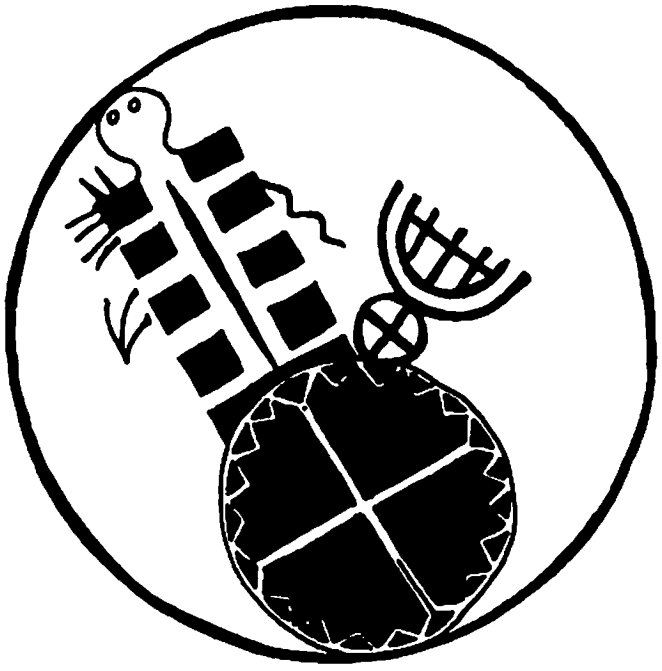
REPORT 12

SURVEY OF CALIFORNIA AND OTHER INDIAN LANGUAGES



PROCEEDINGS OF THE 50TH ANNIVERSARY CONFERENCE

June 8-9, 2002
University of California at Berkeley

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