The River of Life in the Land of the Sun: concepts and colors of space, time, and motion in Kumeyaay cosmology

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Introduction

The identification of colors with the cardinal points is a relatively common phenomenon in the cosmological systems of diverse indigenous groups in Asia and the Americas, as was first observed by the anthropologist Roland Dixon (1899) in his seminal article "The color-symbolism of the cardinal points". Given the wide distribution of this cultural trait in East Asia and North America, it is tempting to suggest that this may possibly represent one of the features that the ancestors of contemporary Native Americans brought with them across the Bering Straits in their ancient migration to this continent from Asia.

Be that as it may, in many of these symbolic systems one notes that each cardinal point is further associated not only with a color but also with additional material or conceptual phenomena, such as with an element, season of the year, stage in the life cycle, special gift, and other characteristics. For example, in the Chinese system north is black, its element is water, its season is winter, and its gift is luck in one's career, while the south is conceptualized as red, its element is fire, its season is summer, and it brings one a good name and fame (Tuan 1977). In North America, many indigenous groups – such as the Pueblo peoples of Arizona and New Mexico – add to this system specific places, animals, plants, gods, and distinct types of maize, beans, butterflies, flowers, etc. (Ortiz 1975; Waters 1977) - these are often associated with the intercardinal points as well as adding to the four-fold pattern the directions of up, down and center. Today, indigenous groups sometimes use color-direction symbolism in their national emblems – effectively combining cosmology, sacred geography, and politics in a single image – as evidenced on both the flag and seal of the Navajo Nation. Occasionally, diverse groups that are separated by thousands of miles even use the same colors and link them with the same cardinal directions, as I have observed among the K'iché of Guatemala and the Lakota of the northern United States. In both cases the groups associate white with north, black with west, yellow with south, red with the east, and blue/green with the center (although the yellow = south and red = east associations are sometimes switched among the Lakota). Furthermore, these cosmological models exist not only at the level of theory, as mental maps of the world, but also are manifested at the level of practice, especially in curing ceremonies and rites of passage.

So far so good – yet while these symbolic systems may be interesting to consider in cross-cultural perspective, one may perhaps be wondering at this point what any of this has to do with the anthropology and history of Baja California. The answer is simple: the Kumeyaay of San Diego County, California and northern Baja California, Mexico, also possess a system of symbolic geography in which the four cardinal directions are identified with as many colors – although their system may not be as elaborate as some of the ones previously mentioned, since according to the

data we have, the directions are not further linked explicitly with different elements, animals, plants, seasons, etc. Nevertheless, Kumeyaay color-directional symbolism exists not only in mythology but is also manifested in action, that is, in ritual and political contexts.

In the Kumeyaay system, east is identified with the color white (nemeshap), west with black (nyilly), north with red ('ehwatt), and south with blue or green, the two colors being designated by the same term (hepeshiw). Although color symbolism is evidenced elsewhere in Kumeyaay and Luiseño worldviews (Applegate 1979; Levi 1978:46-47, 1980; Waterman 1910), and although many other groups have or had cosmological systems in which colors are identified with the cardinal points, as I have demonstrated above, the Kumeyaay are exceptional, according to Kroeber, in that they alone "are the only tribe in California as yet known to possess a system of color-direction symbolism" (Kroeber 1925:717). However, since Kroeber wrote these words other evidence has come to light suggesting that at least three other California groups may also have color-direction symbolism; namely the Cahuilla, where east = white, west = blue, north = yellow, and south = red (Patencio and Boynton 1943:xi-xii); the Kiliwa of Baja California, where east = white, west = black, north = red, and south = yellow (Ochoa Zazueta 1978:24); and the Quechan, where east = yellow, west = blue, north = red, and south = black, as I recently learned from a lead Quechan singer (who wishes to remain anonymous). Nevertheless, the general thrust of Kroeber's point still holds true, i.e., that color-direction symbolism, despite being well developed among indigenous peoples of the southwest United States, is rare in California. Moreover, where it does occur, as in this region of northern Baja California and southern Alta California, one also finds other traits – such as pottery and ground paintings – further linking these cultures to those of the southwest United States.

Today, the Kumeyaay's color-direction symbolism is publicly displayed in at least two forms of collective self-representation. In the flag of the Kumeyaay-Diegueño nation, containing the tribal emblems of all 12 Kumeyaay reservations in San Diego County, the four colors are represented along the borders and two lines that cross-cut the flag diagonally. Nevertheless, it will be noted that all of the colors do not line up with the directions as outlined in the schema presented above; that is, if the colors are here meant to represent the cardinal points. On the other hand, while both Waterman (1910:332) and Hohenthal (2001:285-286) reported the existence of color-direction symbolism among the Kumeyaay in the manner I described above, they also observed that it was not uncommon for individuals to occasionally be confused about the patterning of each cardinal point with its corresponding color. However, the color-direction symbolism depicted in the flag and seal of the Viejas Band of the Kumeyaay nation does conform to the pattern mentioned previously, as first described by Waterman (1908, 1910), and that will be the focus of this paper. Thus, in the Viejas flag, as specified above, white = east, black = west, red = north, and blue/green = south (Figure 1).

Early accounts

The first documented source on the Kumeyaay that records an association between color and direction is to be found in Constance DuBois' 1904 publication of the Chaup myth, named for the last portion of the Sinyuhaw epic, also known as the "Flute Lure Myth" which, as Laylander (2001) has shown, is widely distributed among diverse groups in southern California and western Arizona. Sinyuhaw, also known as First Woman or Old Lady (Halpern and Miller 2014), and sometimes identified with Mother Earth, is the grandmother of Chawp, the so-called "Wonder



Figure 1. Color-direction symbolism in the emblem of the Sovereign Nation of the Viejas Band of Kumeyaay Indians. (Source: http://viejasbandofkumeyaay.org/).

Boy" (known as Shawiw in the Kumeyaay dialect spoken at Campo and in some other Tipai or southern Kumeyaay communities) who in many respects functions as a culture hero. The myth was recounted to DuBois by Matewir, the famous ceremonial chief of Mesa Grande known to the Mexicans as Cinon Duro. His name in Kumeyaay means "Hard Earth," referring to the ceremonial dance ground where the earth had been compacted by years of dancing there (James Quisquis, personal communication 2017). In the myth he told DuBois, Matewir alludes to the north-south symbolism by stating that the great mythic shaman, Elder Sister, "stood up and held her hand to the north and brought down a red stone.... Then she held her hand to the south and got a blue stone of the same sort" (DuBois 1904:218). These stones she chipped into knives in order to deliver Sinyuhaw's boys, Para-ak and Para-han, the Hero Twins of Kumeyaay mythology, father and uncle of Chawp, the Wonder-Boy.

Significantly, this lithic tradition of flaked "blue stone knives" used by midwives extended into the twentieth century. Kumeyaay elder Rosalie Pinto Robertson informed me in the late 1970s that she recalled that when she was young her grandmother, a respected midwife, used a "blue stone knife" (wii-hepeshiw) to deliver babies. Mrs. Robertson said that the implement was made of chipped stone, was round, and rather flat. Possibly these artifacts were made of felsite, a blue-gray metavolcanic rock that is common around Otay (Ken Hedges, personal communication 1987). In the 2014 PBS documentary "First People – Kumeyaay", archaeologist Marc Becker corroborates this information, stating that flaked tools of "greenish-gray stone" are very common in archaeological assemblages throughout San Diego County; in the same documentary Kumeyaay cultural expert Stan Rodriguez stated that the "hard bluish-gray stone" was procured near Jacumba. Not only do archaeology and ethnography nicely reflect each other here, but the information also jibes with the directional symbolism in the myth told by Matewir at Mesa Grande, since the character held her hands to the south – that is, in the direction of Otay and Jacumba relative to Mesa Grande – to retrieve the blue stone.

In a later episode of this same "Chaup" myth, Matewir mentioned the color symbolism of the east-west concept: "The boys stood and held their hands to the east and got some white clay, and with it they painted their cheeks. Then they held their hands to the west and got some black clay" (DuBois 1904:226). While DuBois was the first to record that specific colors were associated with each of the cardinal directions, she evidently saw them only as individual instances and did not recognize that in reality the colors associated with the directions were coordinated into a whole system composing a four-fold pattern manifested elsewhere in Kumeyaay mythology and ritual.

It was T. T. Waterman, however, who first observed that there existed an actual

quadrilateral system of color-direction symbolism. In a brief but significant article titled "Diegueño identification of color with the cardinal points" (Waterman 1908), which he later elaborated upon in "The religious practices of the Diegueño Indians" (Waterman 1910), he went beyond DuBois in specifically commenting on this symbolism as it obtains in various places in Kumeyaay cosmology and ceremony. He was led to the conclusion that the Kumeyaay possess this implicit symbolic system by integrating several independent pieces of data. First, he noted that in the songs accompanying the eagle dance it was said that the "white eagle puts his nest on the cliffs," by which was meant the eastern escarpment towards the desert (Waterman 1908:40). By contrast, "the eagle from the west puts his nest on the sycamore trees along the edge of the creeks." According to Waterman, "the eagle from the west is set over in intentional contrast to the eastern white eagle, showing that he occurs to the native mind as black" (Waterman 1908:40-41). Furthermore, in the course of the great ceremony that called for the sacrifice of an eagle, when the shamans (*kuseyaay*) would magically kill a white eagle, it was said that they would "send him east" and when they sacrificed a black eagle, they would "send him west" (Waterman 1908:41). He went on to say:

This distinction of color in "east" and "west" is carried out in the ancient world-painting made on the ground by the Diegueño [i.e., Kumeyaay] at the time of the boys' initiation into the number of dancers. In one type of picture a prominent feature is the representation of two rattlesnakes, bisecting the painting from the east and west, their heads meeting at the center. The eastern snake is made of light colored oxide of iron, precipitated by the mineral springs of the region, the western in black straw-charcoal [Waterman 1908:41].

The east = white, west = black association receives further elaboration in the *keruk*, the largest and most complex of Kumeyaay commemorative mourning rituals. While participating in a *tokay keruk*, a three-day version of the full week-long ceremony abbreviated to accommodate modern work schedules, hosted by the Hellmeup clan at the Ewiiyaapaayp Reservation in 1980, I noted that the placement of the four feathered staffs representing stabbing pikes (*akwil*) that were once carried into battle by lead warriors also conformed to the east-west principle in color direction symbolism. Within the brush-and-willow cry house that had been especially constructed for the ceremony – the back of which was closed to the north and the entrance to which was open to the south in accordance with Kumeyaay theories of the afterlife – the two black feathered staffs were stuck in the ground on the western side of the central altar, while the two white staffs were positioned on the eastern side.

Waterman documented the entire four-fold color symbolism in one of the oral recitations of the commemorative mortuary ceremony:

The complete color system is given in a certain medicine or formula of the "clothes burning" or wukeruk ceremony, one of the mourning rites for the dead, where all four directions are accounted for. The medicine is as follows.

Recited by the man who makes the medicine: "From the north he (the first man making the ceremony) brought a red rock, from the east a gleaming white rock, from the south a green rock, from the west a black rock, because the sun sets there" [Waterman 1908:41].

In the last paragraph of his article Waterman speculates why each of the directions was associated with the color that it was:

The feeling concerning black for west comes plainly from the setting of the sun. The east, in similar terms, may quite likely be "gleaming white," because the sun rises there. Why north is red and south green, however, the present writer is unable to guess, since no Indian could be found who would attempt an explanation [Waterman 1908:42].

The Cocopah connection

Waterman's idea about the color symbolism of white and black being linked to the chromatic aspects of sunrise or sunset is a sound explanation for east and west. But the closing line of his article, regarding the colors associated with north and south, shows that he remained baffled in reference to the red and blue/green symbolism. Even this, however, ceases to a be a puzzle if we broaden our view of the Kumeyaay color-direction symbolism to include a wider sphere of cultural interaction, understanding Kumeyaay cosmology in relation to the mythology of their Yuman-speaking neighbors, on the one hand, and taking into account Kumeyaay beliefs concerning eschatology, or theories of the afterlife, on the other.

To a large extent, the answer is to be found in a Cocopah myth. At this point it needs to be recalled that the Cocopah, who border the Kumeyaay on the east, are more closely related to the Kumeyaay linguistically than any other group, both belonging to the Delta-California branch of the Yuman language family (Kendall 1983). Kumeyaay and Cocopah also share many aspects of culture, including mythology, song cycles, and ritual (Densmore 1932; Kelly 1949; Laylander 2001). The relevant myth here was recorded in February 1979 by Mexican anthropologist Jesús Angel Ochoa Zazueta, as recounted to him by the Cocopah (or Cucapá as the tribe is called in Mexico) storyteller Pascuala Saiz Domínguez. Tilted "Origins of the sea, the river, the mountain, and the valley" ("Origenes del mar, del río, del cerro, y del valle"), the myth relates an epic narrative concerning the creation of local Cocopah geography. The episode of interest to the present study is about a "clever boy" who goes off to kill a "monster," probably a gray whale, with his harpoon. Ochoa Zazueta presents three versions of the myth: the text in the Cocopah language as well as both a linear and free translation into Spanish. Below is my translation into English from Spanish of the portion germane to our discussion:

There was the animal; it was a monster, very ugly, very big, black, full of froth. The monster was sleeping face-up.

The clever boy gazed at the monster that was reclining face-up with its two testicles outside; a red testicle on this side, a blue testicle on that side. The animal was breathing audibly as if it were snoring. The whole region shook with the breaths.

The clever boy was not frightened; he seized his harpoon and cautiously approached the huge place where the animal slept. When he got close, he quickly punctured the huge blue testicle; then from the pierced scrotum spurted a gush of salty water, blue, that rushed out on that side flooding all of it. The beast roared in pain. The clever boy was not frightened; again he seized his harpoon and warily approached the enormous spot where the animal slept. When he was again near, he quickly pierced the red testicle; then from the punctured scrotum gushed a jet of red water that flowed on this side flooding all of it; then the boy saw that it was blue water on that side and red water on this side. Over there it remained a sea, over here, it stayed a river.

There a blue sea; here a red river [Ochoa Zazueta 1982:190-191].

Equipped with this Cocopah myth, we can now understand why north is red and south is blue/green. The "blue sea" to which the myth refers is the Sea of Cortez (also known as the Gulf of California), while the "red river" is none other than the Colorado River. Therefore, geographically speaking, red is north and south is blue/green, since the river flows southward into the gulf. To anyone who has ever flown over the delta region – specifically where the mouth of the once-mighty Colorado feeds its tributaries into the Sea of Cortez – it is apparent that a muddy red river from the north empties into a turquoise sea to the south.

Likewise the Quechan, the Cocopah's northern neighbors along the banks of the Colorado River, also felt a need to comment on the river's redness. According to Quechan beliefs, the Colorado River is said to be the blood (or sweat) of the creator god Kumastamxo (Forde 1933:110). Finally, it seems as though the Spaniards, along with the Indians, also noted that this was a distinctly "red river" since the word *colorado* itself is one of the terms for red in Spanish.

Still, one may wonder why the Cocopah myth elaborates the motif of the red and blue waters springing from the monster's testicles, as opposed to some other body part. The Cocopa text uses the word 'ur which means both "egg" and "testicle," as it also does in Kumeyaay, just as huevo does in Spanish slang. The connotation therefore is one of fertility. The symbolism signals that the fluids emanating from the testicles are "fertile waters." The waters of the southern blue gulf are fertile with the bountiful harvests of the sea: fish, clams, salt, etc. Concerning the red river to the north, in addition to being fertile or life giving because of the fish caught there, a more blatantly sexual or seminal metaphor is also implied insofar as the crops were conceptualized as being brought to life with a magical fluid, seemingly blood or semen, that flowed from the monster's punctured scrotum. The traditional method of farming among the lower Colorado River Yumans was floodplain agriculture, which means that without irrigation the Yuman farmers relied on the annual overflowing of the Colorado River. It therefore can be seen that in symbolic terms the crops were being fertilized, according to the Cocopah myth, by the seasonal inundation with a red fluid flowing from the monster's northern testicle, while according Quechan beliefs, the fields received their seminal waters in the form of the yearly spilling of one of the creator gods' "blood" (or sweat). In both cases, there is a symbolism associated with fertile waters that derive life from death in terms of the river's portrayal as a kind of magical blood, semen, or sweat.

If it be objected that this symbolism reflects the ethnography and geography of the lower Colorado River Yumans more than that of the Kumeyaay proper, a careful reading of the sources, both published and unpublished, reveals that there was always a great deal of cultural interchange back and forth between these groups, and as a consequence of this constant flow of information there was good knowledge of their respective regions. Besides, it is now understood that prior to the Spanish landing in 1769, Kumeyaay territory stretched from the Pacific Ocean on the west to the Colorado River on the east (Miskwish 2007:44); as such their lands constituted the most ecologically diverse territory of any native people in the continental United States. Moreover, 40 years ago Kumeyaay elders in the San Diego County informed me that there had long been a band of their people who had taken up permanent residence along the banks of the lower Colorado River in an area between the Quechan and the Cocopah.

An extensive network of trails and vigorous trading system linked the Kumeyaay of the mountains, valleys, coasts, and deserts in San Diego County and Baja California with their Yuman congeners along the lower Colorado River and beyond, the exchange being accomplished via barter as well as a currency based on lengths of strings of clam shell disk beads (Gamble and Zepeda 2002; Johnston 1980; Moriarty 1968; Shaul and Andresen 1989). Kumeyaay traded

tobacco, acorns, baked agave hearts, baskets, eagle feathers, yucca fiber sandals, and carrying nets to the Yuman tribes along the river, while the latter supplied the Kumeyaay with gourd seeds and rattles, cultivated plant products, and elaborate glass bead collars worn by women, among other items (Levi, Yuman fieldnotes; Moriarty 1968:17-18). Some items in this interregional trading system continued to be exchanged as late as the latter third of the twentieth century. In the 1970s senior members of the Hellmeup clan at the Kumeyaay reservations of Campo and Ewiiaapaayp still procured the strong wild tobacco (*Nicotiana attenuata* and/or *Nicotiana obtusifolia*) known as 'up hattepaa (literally "coyote tobacco") for Cocopah elders who specifically requested it. Moreover, the gift of tobacco was considered a traditional and especially appropriate gesture when Kumeyaay leaders formally invited Cocopah and Quechan singers to attend and participate in their ceremonies.

Cross-cultural interaction also transpired in the context of relations and amity and enmity. Given the historic warlike proclivities of the lower Colorado River Yumans, an elaborate system of intertribal alliances, to which the Kumeyaay were also bound, tied together groups both east and west of the river (White 1974). The communication system depended on an interlocking network of runners who conveyed messages from the California coast to the lower Colorado River and vice-versa. Nor was warfare a phenomenon perpetuated only among indigenous groups living up and down the fertile strip defined by the river. Richard Carrico writes that when Kumeyaay incinerated the Spaniards' mission at San Diego shortly after midnight on November 5, 1775, "the Colorado River tribes were aware of the brewing revolt and had been invited by the Kumeyaay to join – an offer they refused" (Carrico 2008:33), although six years later the Quechan seemingly were inspired by the Kumeyaay's initiative, as they too now became embroiled in their own rebellion against the Spaniards, burning down the mission at Yuma in 1781. Similarly, according to David Toler (2017:75) "sometime in the decade between 1835 and 1846, a group of warriors from the east, probably Quechan from the Yuma region, attacked families at San Pasqual," a Kumeyaay pueblo in northern San Diego County, requiring approximately 175 mi. of hard travel one way. Thus, a long-standing pattern of both conflict and communication structured Kumeyaay contacts with their Yuman neighbors along the lower Colorado River.

So too, certain elements of Kumeyaay myth and ritual diffused westward from the River Yumans, specifically the Mohave, Quechan, and Cocopah (DuBois 1907; Kroeber 1925:714-115), just as the latter also took up beliefs and practices that originated among the Kumeyaay. The final episodes of the Kumeyaay creation myth are said to take place at Wii'kami mountain, and although accounts vary as to the precise identification of this peak (Field 2017:52-53), the sacred mountain is always located to the east near the Colorado River, suggesting that it may be the "spirit mountain" known to the Mohave as Avikwame or Newberry Peak. In like fashion, based on her work with Matewir, the ceremonial leader at Mesa Grande, DuBois reported that the whole cycle of Sinyuhaw narratives, i.e., the Flute Lure myth (Laylander 2001), came to the Kumeyaay "originally from the east" (DuBois 1906:146). Furthermore, in the Kumeyaay ceremonial groundpainting, the "Mountain of Creation" is located on the eastern circumference at the horizon (Kroeber 1925:663) – seemingly an indication that the people, the myth, or the ritual originated from this direction. This in itself is significant in that it confirms an easterly orientation for certain aspects of Kumeyaay culture that harmonizes with a regional ethnographic record. With the exception of the Luiseño, the Kumeyaay are the only California group known to have employed sand paintings, yet farther to the east beyond the Colorado River the practice is well developed among the Navajo and Pueblo peoples of Arizona and New Mexico.

There is little doubt that the Kumeyaay maintained close contacts with their Yuman

neighbors along the river. There is certainly ample evidence to indicate a centuries-long pattern of linguistic, cultural, and genetic exchange between the Cocopah, Quechan and Kumeyaay. Though some Kumeyaay clans (*shimull*) have segments that dispersed as far away as the Colorado River, members remained proud that certain clan-based songs and traditions "were been kept right in the family," thereby linking together ostensibly different peoples through ties of kinship. For example, the famous Cocopa singer Tom Hart often identified himself as a Hellmeup, a Kumeyaay clan based in the mountains of eastern San Diego County, since this is the *shimull* and region where part of his family originated. Similarly, the noted Quechan singer Preston J. Arrow-Weed grew up with his people at Yuma,

but he was raised principally by his grandmother, a Kumaai from Imperial Valley. From the age of eleven he was raised by his aunt, the daughter of Narpai who had been one of E. W. Gifford's principal informants for the University of California's publication *The Kamia of the Imperial Valley* (1931) [von Werlhof 1998:v].

Thus, many Kumeyaay have relatives among the Quechan and Cocopah, and vice versa. Elders explained to me in the 1970s that this was sometimes the result of women and children being captured in earlier times by warriors during their reciprocal raiding expeditions and/or intermarriage with the Kumeyaay, especially with the band that lived at the Colorado River in the territory between the Quechan and Cocopah. At least since the end of the nineteenth century, Kumeyaay, Cocopa, and Quechan have intermarried, visited or resided among each other, and frequently cooperated for fiestas and ceremonial undertakings that were and are associated with a fair amount of mutual cultural borrowing.

For instance, in the keruk ceremony the Kumeyaay use feathered staffs, a practice that originated among the Cocopah and Quechan, while the latter's use of mortuary effigies representing the dead was originally a Kumeyaay custom that diffused eastward. So too, it is well known that Kumeyaay, Cocopah, Quechan, and Mohave all sing some of the same song cycles (Desnmore 1932; Herzog 1928), leading Kroeber to state that "it is clear that some song series have traveled widely and are so definitely international at present that their tribal origin can perhaps never be ascertained" (Kroeber 1925:786-787). And just as Edward Davis describes that the keruk ceremony he witnessed at Ewiiaapaayp in 1908 was attended by a band of Quechan from Yuma (Davis 1919:11), so too Romaldo LaChappa, one of the oldest surviving Kumeyaay in 1980, recalled that as a child in the 1890s he marched eight days across the desert, a distance of nearly 150 mi., with his entire village and several communities at Manzanita, to attend a large keruk ceremony at Yuma to which the Kumeyaay were invited. Likewise, Kumeyaay elder Rosalie Pinto Robertson remembers that she spent a portion of her childhood with her relatives along the lower Colorado River. By the same token, River Yumans are known to have resided among the Kumeyaay in the mountains of San Diego County. Many Kumeyaay elders recalled Yellow Sky ('Emaay Takwas), a renowned Quechan singer, regarded by some as the composer of the Nyemii or Wildcat song cycle, who came and lived around the turn of the twentieth century with his father's people, the Kawaaymii band of the Kumeyaay in the Laguna Mountains.

Attempting to clarify the relation among the Diegueño or Kumeyaay of San Diego County, the Kamia of Imperial Valley (Gifford 1931), and the Kamia along the lower Colorado River, since it evidently seemed puzzling that the same people could be hunter-gathers in the western half of their territory yet function as agriculturalists in the eastern portion of their lands, Kroeber (1925:725) writes: "All this looks as if the Southern Diegueño Kamia and the Colorado River Kamia south of the Yuma might have been a single people that stretched across the greater part of the State at its southern end and in Mexican California". And similarly Hedges (1975:81)

concludes: "As conditions in the [Imperial] valley became unfavorable for continued use in the old pattern, most of the Kumeyaay remained in the mountains to west, while a small group moved to the Colorado River." In any event, one thing is obvious from all these shreds and skeins of data: namely, that the geography of the lower Colorado River Yumans, was not too distant – either spatially, culturally, or linguistically – to influence the color-coded symbolic representations of Kumeyaay cosmology.

Were all this not enough to convince the reader that the Kumeyaay were cognizant that along their eastern frontier a red river to the north flowed into a blue/green sea to the south, this last piece of evidence should certainly suffice to clinch the argument – and the data derive independently from two different sources. Writing of the Kamia of Imperial Valley, Gifford records their term for the Colorado River as "Xatwat" (i.e. 'Ehaa kwa'hwatt), which he rightly translates as "red water" (Gifford 1931:7). Finally, if it be objected that the Imperial Valley Kamia were relatively close to the Colorado River, and therefore could easily know that a "red river" flowed there, it can be shown that the same information was given in 1925 to John Peabody Harrington by an elderly Kumeyaay consultant living in an old adobe where the roads to Santa Ysabel and Lake Henshaw intersect in northern San Diego County, in other words, at a location that is over 100 mi. to the west of the Kamia of Imperial Valley. Thus Harrington, the eminent albeit eccentric linguist, recorded in his unpublished field notes on the Diegueño when he was eliciting a list of place names from this man, Juan La Luz, that the term for the Colorado River, which Harrington wrote in Spanish as Río Colorado, was Aqa kwa'aqwat. When rendered into the orthography used in this paper this place name would be 'Ehaa kwa'hwatt, meaning "red water," although Harrington did not bother to translate the term in his notes (Harrington 1925). As a final observation, it is significant to note that the Kumeyaay term for "red" is also the word for "blood" (Miller and Langdon 2008:522), recalling that the Colorado River according to Quechan beliefs is the blood of the creator god Kumastamxo and according to the Cocopah myth discussed above is the "red fluid" that spurts from the monster's punctured testicle. All of which is to say that in Kumeyaay color-direction symbolism red is associated with north because it references the Colorado River and that south is blue/green because it corresponds to the Sea of Cortez into which the "red river" flows.

Kumeyaay eschatology

The next piece of evidence that helps explain the polarity of red being identified with north and blue/green with south is that it relates to Kumeyaay eschatology, or theories of the afterlife and disposition of the souls of the dead. According to Gifford, after a person died, his soul "went directly through the air to the land of the departed, which lay to the south of Black Butte (Wiespa) [i.e. Wii'eshpaa, "Eagle Mountain," or Mount Signal] in Lower California" (Gifford 1931:71). Working with the Tipai, or the Kumeyaay in Baja California, Hohenthal (2001:285) also affirmed that "the Land of the Dead (Siuwat' niuwa) is to the south." Virtually all the Kumeyaay elders with whom I spoke 40 years ago likewise said that the land of the dead lay to the south. As Rosalie Pinto Robertson explained, whenever people cremate at a funeral or burn for the dead in the keruk and clothes-burning mourning ceremonies, one can always watch and see that is true; the smoke first goes straight up into the sky and then drifts to the south which is where the souls of the dead people live.

This concept also influences ritual matters. Although Davis states that in the *keruk* ceremony he observed the opening for the ceremonial enclosure faced "the rising sun" (Davis

1919:13), in Kumeyaay mourning rituals I have observed, the cry house faces south. I was informed that the door faced this direction so that the soul of the recently departed can easily find the spirits of deceased friends and family members who come to escort him or her on the southward journey to the land of the dead. However, I have also observed there are sometimes two doors. In such cases, one door faces south and the other east, a practice shared with the Cocopah, whose cry houses also have two such doors. The eastern door is used by the family of the deceased and the singers; the southern door being used by all other mourners and attendees, as well as being the door through which the corpse is removed when taken out at 5:00 a.m. to be cremated in the cemetery directly to the south of the cry house. In view of Kumeyaay and Cocopah eschatology, it is easy to explain these ritual practices if one sees how the path of the soul after death was symbolically linked with the southerly flow of the Colorado River, as I further demonstrate below.

The aforementioned beliefs harmonize with other Kumeyaay ideas regarding the souls of the dead. Michael Connolly Miskwish echoes Robertson's view concerning the skyward and then southerly journey of departed souls. He wrote in his booklet on Kumeyaay cosmology about the meaning of the Milky Way, called Maay hetat kur in Kumeyaay: "Maay hetat kur (backbone of the sky) is the path for the soul into the next life. Tobacco smoke rises into the sky to mark the path" (Miskwish 2016:32). These ideas, in turn, are further related to a second constellation, also associated with the souls of the dead, namely the Northern Cross or Cygnus, known to Kumeyaay as Pehkay meaning "cross." Of the symbolic meaning of Pehkay, Miskwish writes: "upon death, the human spirit must collect its shadows. It therefore travels to the east, west, north and finally south on the long journey to a high mountain that connects with the path to the Maay hetat kur, the spine of the sky (Milky Way) which is the path to the next world" (Miskwish 2016:25). The stars marking the east, west, and north define the head of Pehkay, that is, the cross, while the southern star in this constellation delineates the long axis of the cross, defined as the trail leading south to the afterlife through the Milky Way.

The Yuman peoples of the lower Colorado River likewise held that the land of departed souls lay downriver to the south. Thus, "the Cocopa believed that the deceased traveled to a land of the dead (kerauk hap), which was located in the salt flats bordering the Gulf of California, immediately south of the Cocopa habitat" (Kelly 1949:152). So too the Quechan, formerly known as the Yuma, maintained that upon death the soul first travels up and then departs southward, "after a progress through four different planes it finally reaches the land of the dead ... which lies far to the south of Yuma territory" (Forde 1931:179), the four planes here being reminiscent of the four compass points to which the soul travels to collect its shadows according to Kumeyaay beliefs, as mentioned above by Miskwish (2016:25). In like manner, the correlation between south and death is also expressed in Quechan color-direction symbolism, as I recently learned from a lead Quechan singer (who asked to remain anonymous), who in turn learned of the Quechan identification of colors with the cardinal points from his uncle. In the Quechan system, as it was explained to me, east is yellow, symbolizing sickness; west is blue, symbolizing power or vitality; north is red, symbolizing life; and south is black, symbolizing death. Finally, the Mohave also link together the concepts of south and death. Thus, Kroeber (1925:750) notes that in the cremation pyre, "the body [was] laid on with its head to the south." Or again, according to Stewart (1983:66-67), further echoing ideas expressed above:

The Mohave did not believe in eternal life after death. The ghost was believed to spend four days after the cremation revisiting the scenes of the events of its life, after which it went to ... the land of the dead, which was believed to be located in sand hills downriver from Mohave Valley, near the peaks known as The Needles.

Note here that by saying the souls of the departed went downriver it is synonymous with saying they went to the south.

Returning again to Kumeyaay ethnography, not only does the "soul go to the south" in harmony with the drifting smoke of the incinerated offerings of clothes, blankets, and other personal belongings in the mourning ceremonies (and traditionally the cremation of the body itself), all of which therefore coincides with southern flow of the Colorado River into the Sea of Cortez, but furthermore the linear and unidirectional aspect of the river's flow is replicated in other Kumeyaay concepts regarding the soul. While there exist several sets of ideas concerning this issue, there is a general belief that souls of the deceased live on indefinitely in the land of the dead much as they did in this life, feeling that "the land where we live is a good place" (Gifford 1931:72).

There is also the belief that certain aspects or elements of the soul may reincarnate after death into other nonhuman forms, such as birds, constellations, or insects. For instance, Gifford (1931:72) states that the "heart" may become an owl, while Rosalie Pinto Robertson said she wants "to come back as a star" and heard from her elders that the souls of women who die without being tattooed on their chins disappear down a hole and become insects. However, there is no notion of the eternal recycling of souls. That is, there does not exist a belief that the souls of the dead return as humans, nor that they reenter the bodies of newborn infants (Gifford 1931:71). On the contrary, the soul undergoes several transformations in its irreversible journey through the afterlife. According to Gifford (1931:71):

In the land of the departed in the south an individual lived, died, and was cremated four times. After each death the shape of the "body" changed. After the fourth death, the individual became a black beetle or other insect. Such beetles returned to the Kamia country. No special precaution was taken not to kill them. These incarnations never become people again.

In sum, the gradual diminution and transformation of the soul "over the western shore of the Gulf of California" (Gifford 1931:70) on the one hand, together with the disappearance of the body during cremation and southward trail of the dissipating smoke on the other, seem to take as their natural paradigm the direction of flow – at once southern and unidirectional – of the Colorado River into the Sea of Cortez. I was told that the taboo on mentioning the names of the departed derives from the belief that by calling out their names the dead desire to return to the land of the living, something that is frankly impossible for them to do. Mentioning their names, especially by their relatives, was therefore regarded as a rude and unkind gesture. Likewise, I was informed that the custom of fumigating mourning relatives with the smoke of "white sage" (Salvia apiana), known in Kumeyaay as either *pellytaay* or *kephaaw*, was to make them forget their dead relatives and help them understand it was impossible for their deceased family members ever to return. If the soul is symbolically being carried south, downriver, by the force of the Colorado River, then clearly to return would be to ask the souls of the dead to do something that is either too difficult or physically impossible for them to accomplish; that is, to swim against the current of time or make the river flow in reverse. Taken together, all of these images combine to make a powerful statement; namely, that life and energy is a one-way process flowing from north to south.

If south symbolizes death, endings, and decreasing vitality, then in complementary fashion one would expect the north to be associated with life, energy, and increasing power. In fact, it is. The opposition between north and south, which in actuality is the opposition between the Colorado River and the Sea of Cortez, represents the complementarity between a warm red fluid and a cool blue fluid, potable fresh water and undrinkable salt water, and therefore life and death, just as it

does the relationship between river and sea, and hence, beginnings and endings.

Illustrating the affinity among north, strength, and life-giving water, Kwaaymii Kumeyaay elder Tom Lucas reported: "The north wind brings us the rain and storms, the water that we need" (Cline 1979:105). Or again, almost a century earlier, a Flute Lure myth was recorded stating that Sinyuhaw's twin boys, Para-ak and Para-han, brought Thunderstorm from the north (DuBois 1904:227). In ritual and especially shamanic contexts, north was second only to east in being accorded the position of primacy and power. Thus, Hohenthal (2001:285) writes of the Tipai, the Kumeyaay in Baja California among whom he worked in the mid-twentieth century: "The main ceremonial direction is east; however, for toloache (kusi) drinking it is to the north". Due to its hallucinogenic properties, jimsonweed (Datura innoxia), known in Mexico as toloache, was sometimes used by shamans and in the boys' initiation ceremony to produce visions. Significantly, the Kumeyaay "dug only two roots, and only those running north were selected" (DuBois 1905:622). Kumeyaay elder Tony Pinto informed me that when the toloache decoction was drunk, a shaman from each of the four directions was required to be present, each sitting at a cardinal point around a circle. In this configuration the lead shaman (kwaaykuu kuseyaay) sat at the north and was the first to drink the intoxicating liquid from the ceremonial mortar, the others then followed in turn. Leslie Spier's description of the jimsonweed initiation ceremony further emphasizes the dominant symbolic role of north, for instance in placement of the sacred tobacco, in the position of the man who administers the drink, and in the direction they all face in a semicircle around the toloache mortar "for they are afraid of the south" (Spier 1923:318).

These symbolic associations are clearly observable in the Kumeyaay origin story, as well as cognate versions of the myth found among the lower Colorado River Yumans. Thus, if in fact the mountain of creation named Wii'kami among the Kumeyaay is identical to the mountain of creation named Avikwame by the Mohave and Quechan, as some have suggested (see Field 2017:52-53), which is Newberry Peak upriver in Nevada, and from whence the various tribes descended at the close of the creation myth to embark on their migrations to their present locales, it again shows how north represents origins and beginnings while south is associated with terminations.

Space, time, motion, and mortality in the creation myth

The last point I wish to make relating to concepts of space, time, and motion deals with several episodes in the Kumeyaay creation myth that link the creation of time with the creation of death, illustrating a profound existential insight. The myth opens with two creators emerging from primordial waters. One creator emerges first, keeping his eyes shut. He then calls out to his brother, telling him to open his eyes; when the latter follows his brother's instructions the water (in some versions specified as salt water) gets in his eyes and blinds him. In the version recorded by DuBois, the older, sighted creator is called Tuchaipa, while the younger, blind one is named Yokomat or Yokomatis – however the two names are sometimes given as one and fused into a single name, Chaipakomat (DuBois 1901:181, 1906:131; see also Waterman 1910:69-70), perhaps suggesting the apparent binary opposition between them is better conceptualized as a yin and yang form of complementarity or dialectic (Maybury-Lewis and Almagor 1989). One of the first things they do is create the cardinal directions, not as four static compass points but rather as two intersecting lines. Tuchaipa draws a line going from east to west and names the two cardinal points 'enyaak and 'ewik respectively, east literally translating as "sun-from" ('enyaa = "sun," –k = "from").

Yokomatis then draws a line that crosses the first, going from north (ketuull) to south

(kewaak). According to native Kumeyaay speakers whom I have questioned, the word for south, kewaak, also conveys a feeling a being kewaay, in other words an area that is "below, under, or inside" (Miller and Langdon 2008:529). The significance this has is that later in the story the blind creator who draws the line going from north to south, after growing frustrated by his brother's repeated deceptions and several failed attempts of his own at creating things, sinks back into the earth, disappearing underground. His name Yokomatis, itself suggests this, since it seems to derive from the word kumatt, meaning "of earth" (Field 2017:57).

What are these images expressing symbolically? The more dominant, successful, and sighted creator seems more associated solar symbolism, the visible dimension, and repetitive phenomena in the cosmos, as he makes the east-west line tracing the sunrise-sunset, white-to-black trajectory. Conversely, Yokomatis, the impaired, blind creator makes the north-south line, or red-to-blue/green trajectory, which as I have shown is symbolically linked to Colorado River flowing into the Sea of Cortez, marking the unidirectional journey of one's life and in general the irreversible aspect of time. If the north-south line drawn by Yokomatis does not exactly connote life and death in this context, it at least clearly symbolizes a transition from appearance to disappearance, visible to invisible, as Yokomatis is not only robbed of his own sight but disappears from sight when he descends below (*kewaay*), replicating the way that a person's life similarly disappears at death, the invisible soul traveling irreversibly downriver to the south (*kewaak*).

Thus, Tuchaipa's east-west line symbolizes the cyclical, repetitive, or oscillating daily appearance, disappearance, and reappearance of the sun, suggesting an image of eternal return, whereas Yokomatis' north-south line represents the unidirectional, if not always linear, journey of the river to the sea, symbolizing the meandering albeit inexorably one-way course of a person's life and eventual death. Taken together, the images represent an eloquent model for the structure of time, combining both cyclical and linear aspects in what we can envision as a helix (Figure 2), for the pendulum of time goes back and forth, day following day is an endless cycle, yet time also moves ever forward, never in reverse, as surely as the river flows into the sea.

In the final episode of the creation myth, which represents a version of the Dying God myth found in various parts of the word, an explicit connection is made among the Kumeyaay between the creation of death and the creation of time, illustrating a keen existential insight. After Tucahipa is bewitched by Frog, and grows sicker and weaker day by day, he gradually becomes aware that he is dying, thereby instituting death for all things that live. Before he dies, however, his final creative act was to make and name the months or "moons" (hellya) of the year. As he lays in his deathbed, while being moved to different locales seeking cures, he becomes aware of his inevitable mortality. That is, he becomes conscious of time because he understands that his own time is running out, naming and counting off the lunar months of the year as he goes, thereby creating them. We too become more conscious of time the less we have of it, for it is only in the face of approaching "deadlines" (notice the reference to death in this term) that we usually count the days, hours, and minutes before the due date – finally realizing how precious time actually is as it slowly slips away.

So too is it with Tuchaipa. He only named the months as he lay dying, the creation myth specifying by name the months and places when and where he first became ill and eventually died, as well as the periods and locales in between. He thereby named and created the six months or lunations (Spier 1923:329-330), after which he died, although in Spier's version Tuchaipa's name is given as Tcikumat, seemingly another form of Chaipakomat, where the two names are fused into one. When the six named divisions were repeated a second time, it constituted a year. Kroeber (1925:718) observed that because "the round of six was gone through twice each year" the

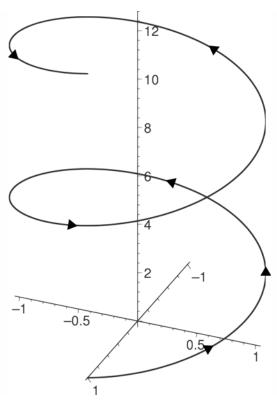


Figure 2. According to Kumeyaay cosmology and worldview the structure of time in the form of a helix. (Source: https://commons.wikimedia.org/wiki/File:Helix.svg)

Kumeyaay "reckoning is an exact duplicate of the Zuñi calendar," the two halves indicating the perception of a year in terms of oscillation, between summer and winter solstices, vernal and autumnal equinoxes, hot months versus cold months, or some other dualism. In fact, Edmund Leach (1979) has argued that whereas many cultures are said to conceptualize time as linear while others see it as cyclical, many peoples may not see it in geometrical terms at all. Instead, he maintains they simply conceive it as a sequence of oscillations between opposite poles – experienced as the to and fro motions of the wave upon the sand or the annual back and forth movement of the sun along the horizon between solstices, a theory I would suggest also holds true for the Kumeyaay.

The Kumeyaay word for year is also deserving of brief mention. The year, termed mattaam or matwam in Kumeyaay (Miller and Langdon 2008:487), literally translates as "earth" (mat) "goes away" (wam). The idea that the earth annually dies or passes away is a concept likewise found among other California peoples, such as the Yokuts (Eliade 1959:73). It also shows something about how the Kumeyaay conceptualized interrelations among space, time, and motion, implicitly realizing the truth of Aristotle's definition of time as motion through space, since the year (matwam), their largest unit of time, is expressed in terms of the passing or going away (wam) of the earth (mat), which is their largest unit of space. Time, therefore, is indexed etymologically as motion through space.

Conclusions

In this paper I have outlined some Kumeyaay concepts of space, time and motion by

attempting to explain the logic involved in their identification of color with the cardinal points, where white = east, black = west, red = north, and blue/green = south, responding to observations made over a century ago by Waterman (1908, 1910). But while Waterman correctly understood that the black-white dyad symbolizes the east-to-west movement of the rising and setting sun, he remained baffled as to the interpretation of the red-blue, north-south polarity. Here I have shown here how the puzzle can be solved by taking into account Kumeyaay theories of the afterlife, where south is believed to be the land of the dead; together with aspects of their mythology and worldview in relation to that of the lower Colorado River Yumans, specifically the Cocopah, to whom the Kumeyaay are closely related linguistically, culturally, and geographically. Put simply, the color symbolism of the north-south polarity represents the flow of the Colorado River (red) into the Sea of Cortez (blue). A reading of the multiple metaphors in Kumeyaay myth, ritual, and symbolism conveys the idea that the direction of our lives is from north to south, red (which in Kumeyaay is the same word for blood) to blue/green; from the strong, living, vitality of a red river to the peace, tranquility, and dissipated energy of a placid blue sea.

Furthermore, according to Kumeyaay cosmology, rather than conceptualizing the four cardinal directions as four static compass points, they are more accurately seen as two dynamic lines of interaction placed perpendicular to each other. One goes from north to south, marking a trajectory from red to blue/green. The other goes from east to west, marking a trajectory from white to black. The first represents a lineal, unidirectional process, the second a repetitive or oscillating pattern. Moreover, the first dyad symbolizes the life cycle, while the second represents the diurnal cycle. One goes in a line (representing the irreversible or unidirectional aspect of time), the other goes in a circle (representing the oscillating or repetitive aspect of time). Put them together and you have a scientifically sophisticated and experientially sound helical model for the structure of time (Figure 2), which combines both linear and cyclical elements (every year we inexorably get older, but every year we also celebrate our birthday on the same date). One aspect of time is linear or irreversible (the river); the other aspect of time is cyclical or repetitive (the daily rising and setting of the sun).

For the Kumeyaay, therefore, the four cardinal points with their associated colors symbolize the endpoints of two dynamic lines of movement, such that the east-west line conforms to the celestial path of the sun (symbolizing the diurnal cycle), while the north-south line conforms to the terrestrial path of the Colorado River (symbolizing the life cycle). In all, Kumeyaay worldview evidences a remarkable color-coded cosmology indexing the river of life in the land of the sun.

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