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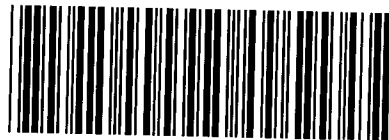
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SAHAPTIN FISH CLASSIFICATION

EUGENE HUNN
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ABSTRACT

The value of fish for the pre-contact subsistence economy of Sahaptin-speaking peoples of the middle Columbia River is reflected in their fish nomenclature and classification. Nomenclatural recognition is extended to nearly every native species known from the region. Twenty-one basic level folk taxa subsume 26 of 32 native species as well as two extralimital forms known through trade. Thus Sahaptin fish classification provides a clear example of the empirical adequacy of native natural history in describing a local fauna. However, the existence of a general term inclusive of all fish is questionable. A general class of anadromous fish is found in all dialects. This contrasts in many dialects with a "residual small fish" category. Collectively this pair of taxa subsumes all but two extraordinary fish, the lampray and the sturgeon. In the Umatilla and John Day dialects the contrast between "anadromous fish," typified by the Chinook salmon, and "residual small fish," typified by the suckers (*Catostomus* spp.), is shown to reflect the key economic roles of these two kinds of fish in the traditional subsistence economy of that section of the Columbia Plateau.

Introduction

Unusual nomenclatural elaboration is often cited as evidence of the variability of cultural perspectives on the phenomenal world. Such elaboration is also taken as indicative of areas of particular cultural significance. In one frequently cited example, Eskimos are said to see not "snow" but rather "falling snow" or "drifting snow" or "melting snow," etc. The fact that Eskimos hyperdifferentiate what to us is a unitary phenomenon is explained by the ubiquity of "snow" in their lives, its importance for cultural persistence in the arctic. However, such examples remain merely suggestive in the absence of any more explicit method for evaluating degrees of nomenclatural elaboration or of cultural significance. Why not simply count the number of distinct terminologically recognized categories which pertain to a realm of experience as an index of the cultural significance of that realm? The Eskimo group with the largest number of terms for snow would be judged the most snow-conscious. Alternatively, if the Eskimo recognized eleven kinds of snow but only six of them, we might judge wind of lesser cultural significance. Clearly it is not so simple. A key fault is the lack of a comparative standard. Is snow inherently more diverse than wind? Do certain Eskimo experience an absolutely

greater diversity of snow than do others? Such questions may border on the absurd in ethnoclimatology, but they are quite reasonable for ethnobiology. Scientific biosystematics defines an ethnobiological standard for flora and fauna.

The relevance of Linnaean classification for cross-cultural comparisons may not be immediately apparent. Though biosystematists consciously seek to label every *significant* distinction they perceive among plants and animals, the significance of a distinction is justified by evolutionary theory, which is a cultural phenomenon peculiar to our Western intellectual tradition. Why then should we expect Linnaean distinctions to have universal validity? That they nevertheless do have a measure of universal validity is demonstrated by recent empirical studies on several continents which document a striking degree of correspondence of basic folk taxa (the "folk generic taxa" of Berlin, Breedlove, and Raven [1973] and the "speciemes" of Bulmer [1970]) to scientific species (Hunn 1975). If the Linnaean standard be accepted, we may proceed to *measure* degrees of cultural focality within ethnobiological domains.

For example, the Sahaptin-speaking people native to the basin of the middle Columbia River name some 60 kinds of birds (Hunn n.d.). They name about 20 kinds of fish (Table 1). However, birds are by no means of greater cultural significance for Sahaptin-speakers than fish. Their 60 birds are selected from a potential inventory of more than 250 Linnaean species known to frequent the Sahaptin home range, while their 20 fishes correspond to about 30 of the ichthyologist. Thus, they formally recognize over 60% of the diversity of fish named by full-timed specialists, compared to only 25% of the avian diversity by reference to the common standard. So fish may be judged as having nearly three times the significance of birds in Sahaptin culture. It would be unwise to treat these numbers as more than rough indices of cultural significance, since they will vary with the relative size and abundance of the organisms involved. Nevertheless, the index supports the ethnographic record in according fish a high value in Sahaptin culture and birds a lesser role.

The Sahaptin-speaking People

Sahaptin is a complex of some 15 dialects (Rigsby 1965) once spoken by nearly 15,000 people (Gibbs 1855; Mooney 1928:13-18). It is still spoken by nearly a thousand individuals, mostly on the Yakima, Warm Springs, and Umatilla reservations. Sahaptin speakers once occupied 60,000 square km exclusively and utilized another 30,000 jointly with their Nez Perce, Salishan, Chinookan, Waiilatpuan, and Northern Paiute neighbors (Fig. 1). Their average density was thus approximately 20 per 100 square km (or 2 mi.² per person), relatively high for a land-locked foraging society. Such density was made possible by a displaced "piece of the Pacific Ocean," the Columbia River anadromous fishery. Hewes has estimated that on average every Sahaptin man, woman, and child pre-contact consumed some 520 gm of fresh salmon (*Oncorhynchus* spp.) each day (1973:131), or some 300,000 fish per year for the entire Sahaptin-speaking population. At this rate, salmon alone could have provided the estimated average human protein requirement of 60 gm per day with a 28% surplus. Lacking salmon, the Columbia Plateau could have supported but a fraction of the human population we have cited, with consequent reduction in the scale and complexity of social organization.

TABLE 1

Native Fish of the Sahaptin Life Range

Scientific/English Names	Sahaptin Name/s	Cultural Role
--------------------------	-----------------	---------------

PETROMYZONITIDAE/Lampreys
Lampetra richardsoni
Entosphenus tridentatus

asm [NW, rc],
 asm [tt]
 k'suyas [CR]

avored food;
 myth character

ACIPENSERIDAE/sturgeon
Acipenser transmontanus

wilaps [NW, CR]
 x'ilax [NE],
 x'ilax [PI],
 q'ilax [w]

usually avoided;
 called "swallow-
 ing monster's
 pet;" myth char-
 acter

SALMONIDAE

Oncorhynchus gorbuscha/pink
 salmon

x'ik'ay [uc]
 mac'ya [KI],
 wac'ya [KI]

little
 known, range re-
 stricted to west-
 ern fringe of
 area

O. keta/chum salmon

m't'ia [NW, CR],
 ay' [NE]
 c'ii [PI]

also refers to
 spawned-out
 salmon generally

O. kisutch/coho salmon

s'nux [NW, CR],
 s'nux [NW],
 s'nux [ws],
 s'nux [NW],
 s'nux [CR],
 s'nux [ce],
 s'nux [ws]

eaten; myth
 character

O. nerka/sockeye salmon

k'aiux [NW, CR],
 k'aiux [ce, rc]

eaten; myth char-
 acter; jacks may
 be known as
 /k'aiuxk'aiux [tt]

TABLE 1 continued

Scientific/English Names	Sahaptin Name/s	Cultural Role
SALMONIDAE (continued)		
<i>O. tschawytscha</i> /Chinook salmon	tk ^w ínat [NW, CR]	avored food; myth character; first foods ritual
jack Chinook salmon	tk ^w iláttk ^w ilat [NW, CR] k ^w 'lii? [uc]	eaten
<i>Salmo gairdneri</i> <i>S. clarkii</i> sea-run/steelhead resident/trout	šušaynš [NW, CR], šušáyš [NE] ayáy [NW] aytmfn [CR], aytmí [rc] píckatyu [um] xúlɣul [tt] ayáy [yk?] t'ałát'ała [Ws] wawálam [pl]	eaten; available in winter; myth character eaten; some informants distinguish two or more kinds of trout (see below and Note 2 for more detail)
<i>S. gairdneri</i> /rainbow trout, in particular		
<i>S. clarkii</i> /cutthroat trout, in particular	aytmfn [yk?]	
<i>Salvelinus malma</i> /Dolly Varden	číwa [NW] áščínš [CR], áščns [tt] híšlam [um, pl?]	sometimes eaten, sometimes avoided; myth character
<i>Prosopium williamsoni</i> /mountain whitefish	símay [NW, CR], símay [Ws] sɣawní [uc]	eaten, available in winter

TABLE 1 continued

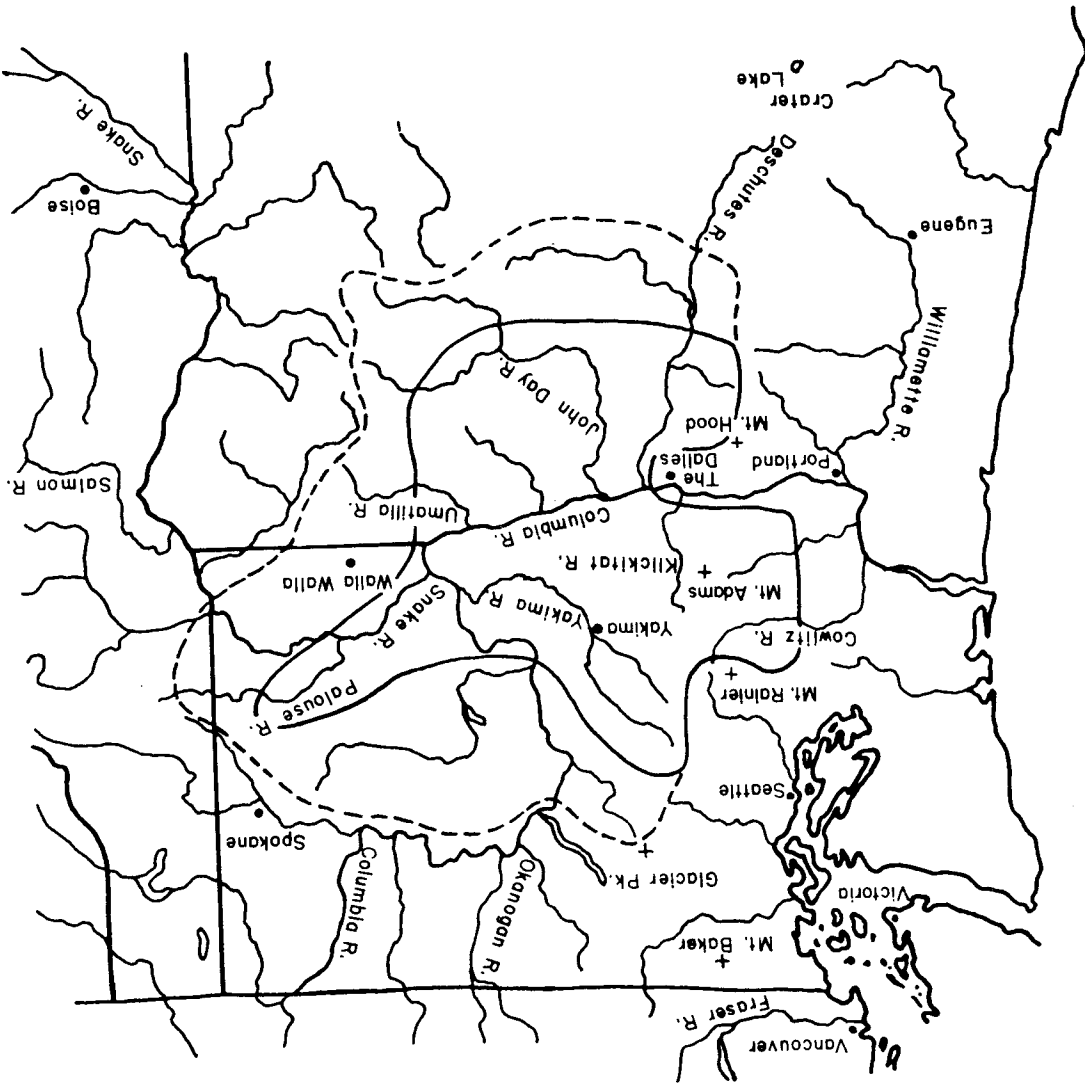
Scientific/English Names	Sahaptin Name/s	Cultural Role
OSMERIDAE/smelt		
<i>Thaleichthys pacificus</i> / eulachon	witx̄ina [NW]	eaten, extralim- ital, obtained from the west by trade
CATOSTOMIDAE/suckers		
<i>Catostomus columbianus</i> / bridge-lip sucker	yáyk [NW, CR]	eaten, available in late winter; myth character; first foods rit- ual (both species)
<i>C. macrocheilus</i> /large-scale sucker	x̄un [NW, CR], x̄un [ws], x̄n̄ [yk], x̄un [NW, CR]	present but un- recognized
<i>C. platyrhynchus</i> /mountain sucker	none recorded	
<i>C. luxatus</i> /lost River sucker	c̄'wám [ws], c̄'wám [k1?]	eastern, extra- limital, obtained from Klamath Basin by trade
CYPRINIDAE		
<i>Ptychocheilus oregonensis</i> / northern squawfish	luq̄'áya [NW], luq̄'á [yk], luq̄'á [CR]	eaten, available in winter
<i>Achrocheilus aleuticus</i> / chiselmouth	lálapti [CR]	eaten
<i>Mylocheilus caurinus</i> / peamouth	cúks [jd]	eaten; little known; name means "obsidian"
<i>Richardsonius balteatus</i> red-sided shiner	t̄'á [s]a [l] [NW, CR], p̄'á [s]a [l] [NW, CR], patani [um]	eaten
<i>Rhinichthys cataractae</i>	none recorded	present, appar- ently unrecognized

TABLE 1 continued

Scientific/English Names	Sahaptin Name/s	Cultural Role
CYPRINIDAE (continued)		
<i>R. falcatus</i>	none recorded	present, apparently unrecognized
<i>R. osculus</i> /speckled dace	muk ^w 'iyá [jd, um]	no use cited; little known though common
GADIDAE		
<i>Lota lota</i> /burbot	none recorded	present in some lakes but apparently unknown; a large, distinctive fish
PERCOPSIDAE/sand roller		
<i>Percopsis transmontanus</i>	none recorded	uncommon and local; apparently not known
GASTEROSTEIDAE/stickleback		
<i>Gasterosteus aculeatus</i>	none recorded	rare; apparently not known
COTTIDAE/sculpins		
<i>Cottus</i> spp.	k ^w 'ašlá [CR], k ^w 'ašláy [yk]	not eaten; an "Indian doctor fish," feared and respected; seven species occur

The dialect provenience of Sahaptin name variants cited here are indicated as follows: Northwest dialect cluster [NW]: Kittitas [kt], Yakima [yk], Upper Cowlitz [uc], Klickitat [kl]; Columbia River dialect cluster [CR]: Celilo [ce], Tenino-Tygh [tt], Rock Creek [rc], John Day [jd], Umatilla [um]; Northeast dialect cluster [NE]: Wallawalla [ww], Snake River [sr], Palus [pl], Priest Rapids [pr]. Indeterminate Warm Springs Reservation dialects (either [tt], [ce], or [jd]) are cited as [Ws]. The dialect boundaries follow Rigsby (1965: 35-65). A few terms of indeterminate provenience or meaning have not been cited. Primary sources consulted include Jacobs (1929, 1931, 1934, 1937), Rigsby (n.d.a), Hymes (1975), David and Kathrine French (personal communication), and my own field notes. The phonemic orthography is based on Rigsby (n.d.b). Major stress accent is indicated unless freely variant. Phoneme symbols joined by brackets are free variants.

Fig. 1. Map of the Pacific Northwest showing territory utilized by Sahaptin speaking peoples. The central area indicates territory used primarily by Sahaptin speaking peoples and under their control. The peripheral area indicates territory used annually by Sahaptin speaking peoples but in common with neighboring groups of other linguistic affiliations. Both areas are approximate.



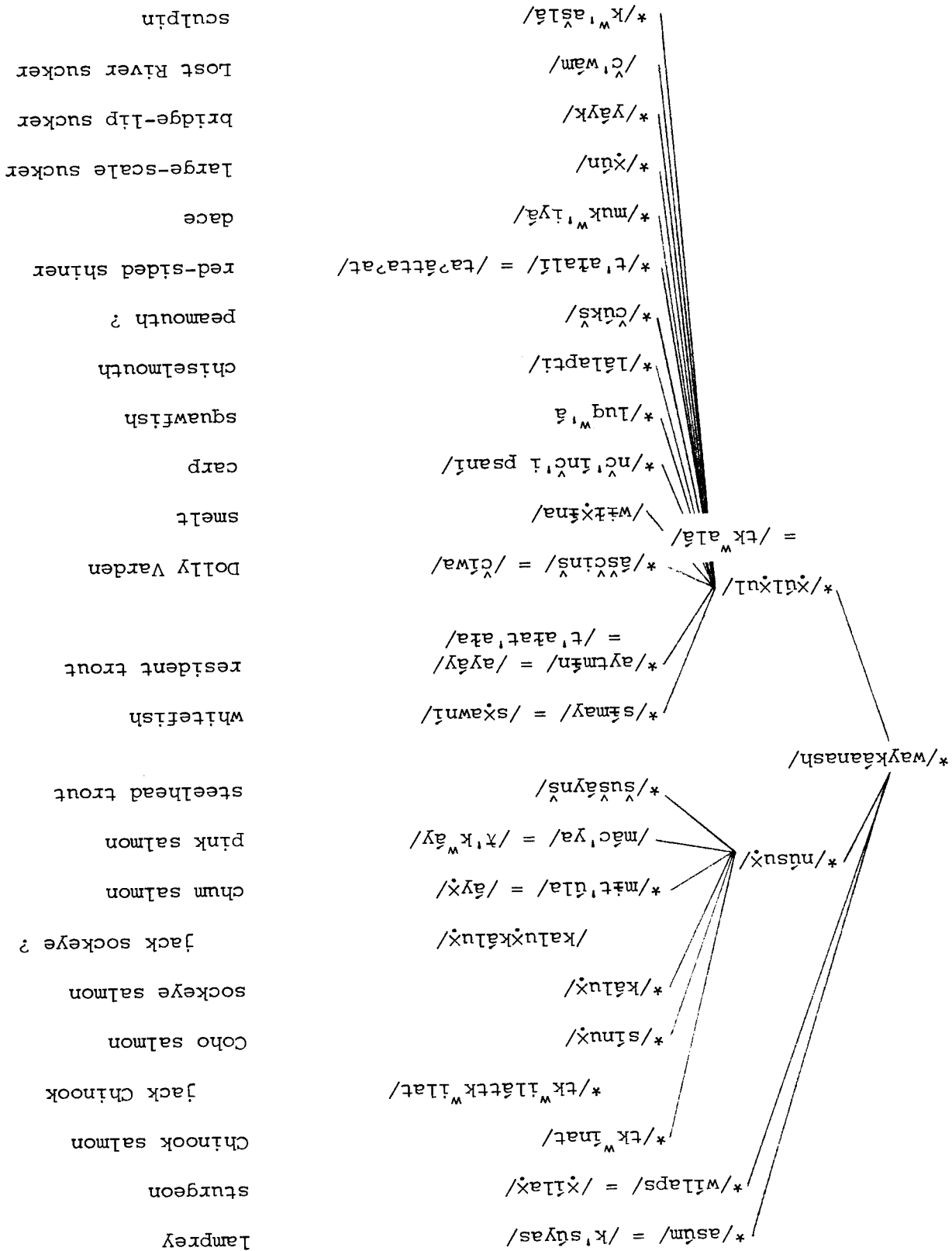
Though salmon was a critical resource, its role in Plateau subsistence has been exaggerated. Hewes is wrong to state that "other natural foods available in the area [referring to the entire Pacific salmon area] in quantity are notoriously low in fuel value" (1973:134). In the Columbia Plateau, at least, the bulk of the calories was no doubt provided by the abundant and varied edible roots (Hunn 1980; Hunn and French 1981). Nor were salmon the only fish of value to the Sahaptins. As we will see, Sahaptin-speaking people were well acquainted with nearly all native fish and most were sought as food, including the 10 cm long red-sided shiner (*Richardsonius balteatus*), considered a delicacy. Though salmon are honored in ritual, so are the suckers, lamprey ("eel," especially *Entosphenus tridentatus*), sturgeon (*Acipenser transmontanus*), Dolly Varden (*Salvelinus malma*), and trout (*Salmo* spp., in part) (Jacobs 1929, 1934, 1937); while the sculpin (*Cottus* spp.), a little gnome of a fish, is accorded deep respect. To fully appreciate the Sahaptin-speaking people's interest in and knowledge of fish will require a survey of the entire native fish fauna with regard to the role of each species in Sahaptin folk taxonomy. The following account reflects, in particular, those versions reported to me by John Day, Umatilla, and Yakima consultants.¹

Sahaptin Fish Taxonomy

Sahaptin fish taxonomy corresponds to the scientific in numerous elements of both content and structure. Both taxonomies are sets of organisms hierarchically arranged (Fig. 2). The superclass Pisces of the scientist may be equated with the Sahaptin life-form /waykáanaš/ with certain qualifications. The term /waykáanaš/ is sometimes used to refer to fish in general, inclusive of the jawless, boneless lampreys--known in the local vernacular as "eels"--but excluding such so-called "fish" as crayfish and shellfish. In this, Sahaptin nomenclatural usage better reflects the scientific point of view than does lay English. Yet /waykáanaš/ may also mean either "edible fish" or "salmon" (D. H. French:personal communication), particularly in the religious context of the thanksgiving feast (/káʔuwit/); at least the term strongly connotes fish as a sacred food; /waykáanaš/ is often described by informants as a "religious word." This type of *double entendre* appears elsewhere in Sahaptin folk zoological terminology. The term /wínat/ refers either to "native ungulates" or to the "meat of game as sacred food." The term /kákya/ may mean "bird in general," "animal" in the sense of the Animal Kingdom (Rigsby:personal communication), or "animal pet." In each case, a category defined morphologically and a largely overlapping category defined in terms of the cultural context of use are polysemously labeled. Though it is difficult to tease apart these senses in Sahaptin usage, the fact that, in certain contexts, /waykáanaš/ may be used to refer to a category inclusive of all and only fish suggests that "fish" is a legitimate domain for ethnoscientific analysis in Sahaptin. We will now examine the internal structure of that domain.

Scientists recognize two classes of fishes locally. So do my Sahaptin consultants. The ichthyologist sets the lampreys apart, since they lack both jaws and bone. The Linnaean class of bony fishes includes the remainder. My Sahaptin consultants also set the "eel" aside as well as the sturgeon, each in a class by itself. Lamprey and sturgeon, the most primitive of native fish, are thus left unaffiliated with either /núsuʔ/ "salmon" or /xúlʔul/ "residual small fish," the basic dichotomy within their version of Sahaptin fish classification.

Fig. 2. Sahaptin fishes: taxonomic structure. Terms in the repertoire of James Selam are marked *. Dialect variant equivalent terms are indicated by =. Minor phonological variants treated in Table 1 are not cited here. A question mark indicates that the term or its gloss is inadequately established. For further discussion of Sahaptin resident trout terminology see note 2.



Following Mary Douglas's lead (1966) we might expect these two kinds of fish, set apart as they are in this Sahaptin classificatory system, to be accorded exceptional ritual potency, perhaps to be tabooed as were swine to the Hebrews. They are certainly anomalous fish with respect to this binary division within Sahaptin classification. They are also extraordinary by our own standards, one an oddity, the other a giant. However, lampreys were much sought after as food; that is, unless they had five rather than the normal seven gill slits, in which case, it is believed, they might turn into snakes. Yet that involves another sort of anomaly, that of the freak individual. Sturgeon are ambiguous as food; they are an important food fish on the lower Columbia and Fraser rivers (Stewart 1978) as well as at Kettle Falls on the upper Columbia in Salishan territory (Bouchard and Kennedy 1975) but were not eaten by most Sahaptin speakers (Thwaites 1904-05 4:290). Some who avoided sturgeon viewed them as a nuisance, interfering with salmon harvesting activities. Others referred to them as the "swallowing-monster's pet" (/naysʔlanmí kákya/), fearing that they might be man-eaters, an unjustified allegation but one suggested by their huge bulk. In any case, sturgeon may be compared in this respect to the Dolly Varden, considered by my consultants as a member in good standing of the class /xúlχul/. Dolly Varden were considered questionable as food, since one might occasionally find a frog or a mouse in their stomachs, yet another kind of anomaly, a confounding of aquatic and terrestrial realms. Since this is not the place to resolve the ambiguities of the structuralists' notion of anomaly, let us return to the basic dichotomy within this version of Sahaptin fish classification, that between /núsuχ/ "salmon" and /xúlχul/, the remainder.

Folk biological domains are frequently divided with respect to polar coordinates of size. For example, some Shoshone divide their birds in this way (Hage and Miller 1976), and the near universal distinction in folk botanical systems between trees and herbs may be interpreted as basically a size distinction (Brown 1977). Yet the division between /núsuχ/ and /xúlχul/ is not with respect to size alone. My consultants consider the northern squawfish (*Ptychocheilus oregonensis*) to be a kind of /xúlχul/, though it may grow to be larger than sockeye (*O. nerka*) and pink salmon (*O. gorbuscha*), both kinds of /núsuχ/. Nor does the distinction precisely reflect a contrast between the scientific genus, *Oncorhynchus*, the true Pacific salmon, with other fish, since trout (*Salmo* spp.) are split between the two, the sea-run forms or steelhead (/šusaynš/) is a kind of /núsuχ/, while the resident trout are /xúlχul/. The etymology of the term /xúlχul/ may provide a clue; it appears to have been derived by diminutive reduplication from /xún/ (Jacobs 1931:133), by which the large-scale sucker (*C. macrocheilus*) is known. Though this association is not explicitly recognized by contemporary Sahaptin speakers, it suggests that all but the two most extraordinary fish were once aligned either as "salmon" or "sucker." Let us examine each of these divisions in more detail before attempting to account for this peculiar contrast.

Salmon present a real challenge to the folk taxonomist. Five species might be encountered; each undergoes radical morphological changes through the life cycle, and several may move upstream to spawn as "jacks," half-sized replicas of typical spawning adults; top this off with the sea-run transformation of trout, distinct spring, summer, and fall runs of Chinook salmon (*O. tshawytscha*), and the subtle but consistent morphological differentiae of each home-stream population, and one can appreciate that the recognition

of species among salmon cannot be taken for granted. Nevertheless, contemporary Sahaptin speakers extend nomenclatural recognition to each and every species, ignoring in the process whether the fish run in spring or fall, whether male or female, whether fresh from the sea or torn and twisted by the rigors of spawning, whether "jack" or full adult. Though special terms for male and female and for post-spawning males may be used, they are applied within the genus irrespective of species. Subspecific distinctions are formally recognized in only one instance; Jack salmon may be distinguished by diminutive reduplication of the appropriate species name. For example, Chinook salmon are /tk'lnat/, their jacks are /tk'lnat'lat/, literally "little Chinooks." Other sub-specific distinctions may be informally noted. For example, one octogenarian Yakima informant claimed that Chinook salmon of the Tieton River were darker than those of the Naches-American drainage. In fact, just such subtle but consistent differences between local populations first suggested the "home stream theory" of salmon migration to fisheries biologists (Rich 1948). This Yakima elder attributed the difference between Tieton and Naches river salmon to contrasting gravel color in each stream, an observation lacking only a notion of natural selection to be Darwinian. Thus knowledge of fish may go beyond distinctions formally named.

The inclusion of sea-run trout as "salmon" is, of course, in contradiction to Linnaean principles. Curiously, American English speakers likewise refer to steelhead as salmon, even in at least one authoritative guide to North American fishes (Schrenkeisen 1938). The concept "salmon" in both English and Sahaptin is clearly defined in part with regard to the value of these fish as food--which is a function of their common anadromous behavioral adaptation--and as such is not strictly equivalent to the scientific taxon labeled *Oncorhynchus*.

Turning now to /x'lnul/ "residual small fish," we find 12 folk generic taxa are so classified by my John Day and Umatilla consultants. As with salmon, this category is not comparable with any scientific taxon. However, as with salmon, the folk generic taxa it includes faithfully reflect individual species distinctions with but a few exceptions. Ten of the 12 kinds of /x'lnul/ map in a one-to-one fashion to scientific species. Two involve "jumping" or the ignoring of species distinctions within a genus. For example, my consultants call all species of resident trout either /aya/ or /aytm'n/ depending on dialect.²

Our second case of "jumping" involves the sculpins, the so-called "Indian doctor fish." Though Sahaptin speakers might have encountered as many as seven species of sculpins (*Cottus* spp.), at least two of which are rather abundant, the category is perceived as homogeneous. All sculpins are alike in their grotesque bulging eyes, squat profile, leathery skin, and pouting lips (Fig. 3). And all are alike from the Sahptin perspective in their special power. As "doctor fish" (/tw'at'i/) literally "shaman" they are one of a curious set of animals treated with special care and respect, not harmed and never eaten. Sculpins, horned lizards, rattlesnakes, ravens, and owls are among those so respected and feared for their influence over the weather or for their powers of foresight.

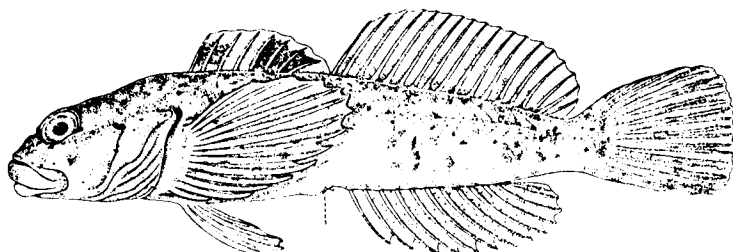


Fig. 3. The sculpin /k^w'ašlá/, or "Indian Doctor fish." Example illustrated is *Cottus confusus* from Bailey and Bond (1963:111).

The lumping of sculpins might simply be explained by reference to the dramatic character shared by all individuals of the genus and the elusiveness of the species distinctions. In fact, this genus has long been a challenge to the evolutionary scientist (Bailey and Dimick 1949:1). However, the lumping of the sculpins may be assessed from a different angle. A minority of Sahaptin basic folk taxa actually differentiate between species of a Linnaean genus. Nine Sahaptin basic folk taxa which perfectly match a scientific species, nevertheless do not subdivide the genus; rather they correspond to species with no close relatives in the region. Geographic limits thus eliminate the opportunity to differentiate congeners. In light of this, the lumping of sculpin species in favor of recognizing the genus is rather according to rule than an exception. The real exceptions involve the "splitting" of a scientific genus between two or more Sahaptin basic folk taxa. There are but two cases in my data, salmon and suckers, the same two fish that I have argued define the contrasting poles of this Sahaptin fish classification.

A final observation is in order; how do we explain the six fish species known to occur in the region for which no Sahaptin name is recorded? Though names may exist or may once have been in general use, the informants I consulted indicated no knowledge of their existence. Considerations of size, range, and abundance of these species seem sufficient to account for most of these Sahaptin "blind spots."³ It is certain that there has been some loss of detail in the Sahaptin classification of fish since European contact. Yet the loss of knowledge is not sufficient to obscure the empirical adequacy and fine detail of traditional Sahaptin folk science.

In sum, Sahaptin fish classification corresponds rather closely to the independently developed scientific scheme, most notably at the level of basic folk taxa. Though not identical, the two perspectives are sufficiently in accord that they must be seen as products of a common logic operating on a common reality. Thus culture here faithfully reflects empirical reality.

The Reflection of Cultural Significance in Sahaptin Folk Classification

I began by suggesting that the elaboration of Sahaptin fish nomenclature reflected the peculiar cultural utility of fish for aboriginal Sahaptin-speaking peoples. Yet I have just concluded that this folk ichthyology rather closely reflects an order given by nature. Is this not paradoxical? In fact, the roles played by nature and culture in Sahaptin folk classification are complementary; there is no opposition. Fish in general are important to these people for their livelihood, thus close attention is directed to that aspect of nature resulting in a classification closely modeled on empirical reality. However, certain fish are of outstanding cultural importance. Salmon were paramount, with the Chinook salmon "king," both the largest, the most abundant, and offering runs in spring, summer, and fall. So the Chinook salmon is singled out on three nomenclatural levels. It is /nʌsux/ "salmon" epitomized and is not infrequently so called. It is /tkʰnat/ or /tkʰnat nʌsux/ (using binomial nomenclature) in contrast to its congeners. Finally jacks are /tkʰlʌtkʰlʌt/, "little chinook salmon." Nomenclatural elaboration is reinforced in myth and ritual. The gift of salmon is explained in myth (Jacobs 1934:86-91, 106-107, 195-197; Johnson-O'Malley 1974:34-35), and thanks are ritually offered to the first spring Chinook by the whole community (Thwaites 1904-05 4:302).

Yet salmon is not alone in this honor. As suggested above, two poles may be seen to define the basic structure of this fish life-form; with salmon and suckers as coordinates. Only two Linnaean genera are split according to species lines in Sahaptin. Those genera are salmon and suckers. There are myths of origin for both salmon and suckers, and the two kinds of fish honored at first food feasts are, once again, salmon and suckers. The traditional value of salmon was clearly ultimately economic. But what proves the parallel value of suckers? I believe it is equally economic. The first spring-run Chinook salmon arrived at Celilo Falls shortly after mid-April (varying to early May), and their arrival occasioned ritual and feasting, a tradition still honored at Columbia River longhouses. Today a combined spring salmon and root feast held in mid-April marks the ritual high point of the Indian religious calendar. However, some longhouse congregations also hold a feast in February to honor the first "Indian celeries" (*Lomatium grayi* Coult. & Rose) and the spawning runs of suckers. These fish crowd into the small streams adjacent to winter villages such as those at Rock Creek and Alderdale in Klickitat County, Washington, at a critical phase of the seasonal cycle, when winter stores may be nearing exhaustion with the spring salmon still six to eight weeks away. The timely arrival of suckers may have meant the difference between life and death if the previous year's harvest had been meager or the winter especially severe.

Sahaptin people today still love their suckers, nor do they complain about their many bones. In fact, "How the Sucker Got His Bones" is a favorite story widely recounted throughout the Plateau. It exploits a peculiarity of suckers in that their skull bones never fully ossify, so the skull disintegrates in cooking. As the family enjoys its first fresh fish of the season, the old people tell the children the name of each bone, identifying the mythical animal which contributed each piece to the sucker's creation (Figs. 4-5) (Bouchard and Kennedy 1975:14-15).

We have seen that the study of folk classification may reveal hidden complexity in a cultural adaptation. While Sahaptin fish classification accurately reflects natural discontinuities, it also highlights cultural values based in economic necessity but orchestrated in myth and ritual. People are thus seen to be linked to their environment by an intricate web of mutual effect, defined and maintained by careful observation, economic calculation, ritual monitoring, and mythical explanation.

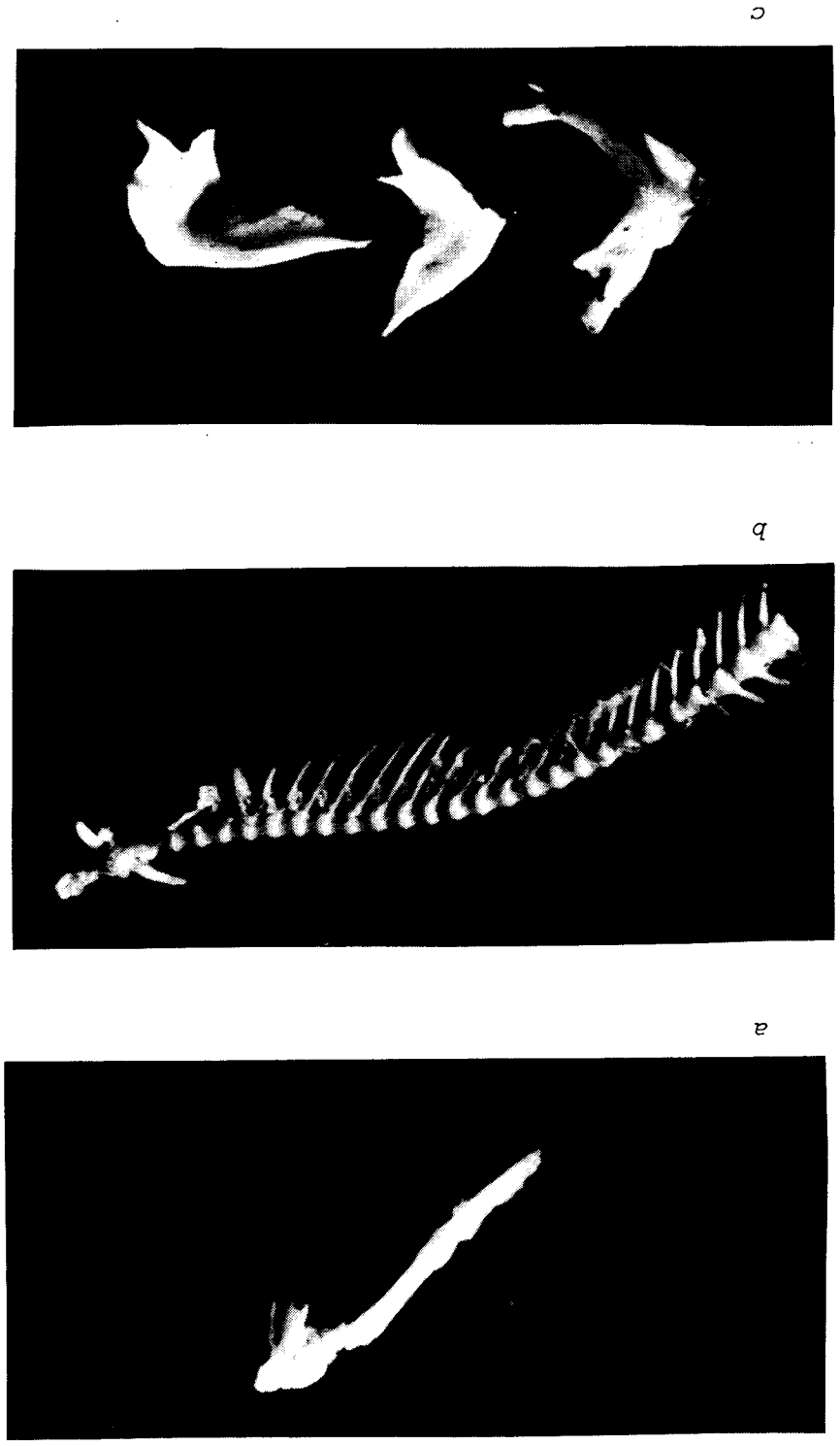
Acknowledgements

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Notes

¹The data reported here are most complete for those Sahaptin speakers native to villages along the Columbia River between present-day Rock Creek, Klickitat County, and Patterson, Benton County, Washington, representing Rigsby's Rock Creek, John Day River, and Umatilla dialects of the Columbia River dialect cluster (Rigsby 1965:35-65). The data are fairly adequate for the Yakima dialect of the Northwest dialect cluster. Samples of the terminology of all current dialects are derived from the following sources: Rigsby n.d.a, Hymes 1975, Melville Jacobs's various publications on Sahaptin language and folklore, David and Kathrine French's notes on Warm Springs Reservation dialects, and my own field notes. The contrast between /núsuʔ/ and /xúlʔul/ emphasized in this paper should hold for Umatilla, John Day, and Rock Creek dialects of the Columbia River dialect cluster and perhaps for the Northeast dialect cluster, but the use of /tk^walá/ in place of /xúlʔul/ in

Fig. 4. Sucker's bones and their mythical identities. a, soft-basket woman monster; b, snake; c, raven's feet. Identification by Sara Quaempts and Elsie Selam; Umattilla dialect. Bones are of a bridge-lip sucker (*Castostomus calumbianus*) from Rock Creek, Washington.

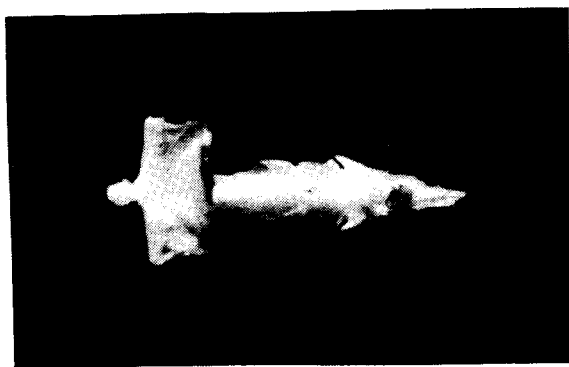




a



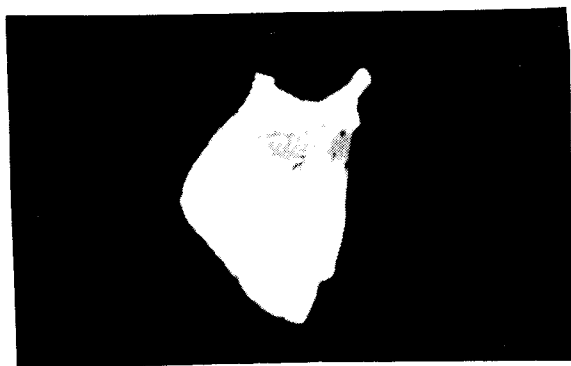
b



c



d



e



f

Fig. 5. Sucker's bones and their mythical identities. a, badger; b, Steller's jay; c, cricket packing her child; d, coyote's knives; e, grizzly's earring; f, bison's skull. Identifications provided by Sara Quaempts and Elsie Selam; Umatilla dialect. Bones are of a bridge-lip sucker (*Catostomus columbianus*) from Rock Creek, Washington.

the Northwest dialect area suggests that the salmon-sucker contrast was not central in the cultures of that portion of the Sahaptin range. For Tenino and Tygh dialect speakers of the Warm Springs Reservation /x̥l̥x̥l̥/ means simply "small trout" (David French:personal communication). In both regions trout may prove to be more important than suckers due to the proximity of the Cascade Mountain streams.

²One Yakima informant has suggested that /ayay/ and /aytm̥n/ are distinct kinds of trout, the former a larger, widespread type, the latter a smaller "mountain trout." It is tempting to speculate that the so-called "mountain trout" is the uncommon and local cutthroat (*Salmo clarkii*) in contrast to the ubiquitous rainbow (*S. gairdneri*). Two trout species are also reported for the Umatilla dialect, /p̥ickat̥y̥n/, "any sort of trout," and /h̥is̥lam/, "a black trout," and the "Palus dialect, /waw̥at̥am/, "rainbow trout," and /h̥is̥lam/, "a little bigger trout than /waw̥at̥am/" (Rigsby n.d.a). Tenino and Tygh speakers of the Warm Springs Reservation call all resident trout, including the introduced brook and brown trout, /x̥l̥x̥l̥/. Larger resident rainbows are set apart as /t̥'at̥at̥'ata/ (David French:personal communication).

³The native fish species known to occur in the region but which are apparently not named in Sahaptin are the mountain sucker (*Catostomus platyrhynchus*), two species of dace (*Rhinichthys catarractae*, *R. falcatus*), the burbot (*Lota lota*), Columbia River trout-perch (*Percopsis transmontanus*), and the three-spined stickleback (*Gasterosteus aculeatus*).

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