

THE KAMCHADAL: A SYNTHETIC SKETCH

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INTRODUCTORY NOTE

Undescribed in ethnographic literature, the Kamchadal nevertheless merit the attention of anyone interested in the culture history of the North Pacific region or in problems of New World cultural origins, owing to their strategic geographical location and alleged "Americanoid" status. Since the days of the Josup Expedition there has been a tendency to view them as closely related to the Indians of northwestern North America—culturally, linguistically, and physically.

We owe almost our entire knowledge of the aboriginal Kamchadal to two scientific members of Bering's Second Expedition—Georg Wilhelm Steller, and S. P. Krasheninnikov. Both men spent several years in Kamchatka circa 1740, and left descriptions of the country, its natural history, and inhabitants which are remarkably objective and comprehensive for the period. However, these works are relatively inaccessible, physically and linguistically, and demand careful study and great caution, since they are frequently confusing and open to misinterpretation. Having made an extensive critical examination of these and other existing sources, the present writer has therefore felt it would be worthwhile to make this material more readily available, even though in summary form.

The following paper constitutes one chapter of the writer's larger work, "Kamchadal Culture and Its Relationships in the Old and New World," submitted to the Graduate Division of the University of California as a dissertation in partial satisfaction of the requirements for the degree of Doctor of Philosophy in Anthropology. It has had the benefit of much helpful criticism from Professors T. D. McCown and R. F. Heizer, whose interest is gratefully acknowledged (1).

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The first Russians to explore Kamchatka (1697) found the peninsula occupied by three nations; the northern half by the Koryak, the southern extremity by the Kuriles, and the territory in between, the bulk of the southern half, by a people calling themselves Itelmen, but referred to by the Russians as Kamchadal, apparently a corruption of the name applied to them by the Koryak.

There is every reason to believe that the Kamchadal had occupied this territory for a considerable length of time. Their culture was very well adapted to its environment. Moreover, archaeological remains all point

to a prehistoric culture not appreciably different from that found by the Russians. Except for their neighbors to the north and south, with whom a limited trade was evidently carried on, and possibly occasional Japanese castaways, the tribe had no knowledge of or contact with the world outside of Kamchatka prior to the date cited above. Their culture contained a number of unique or peculiar features, had no obvious outside affinities as a whole, and its origin or origins are obscure (2).

Neither the people nor their culture survived the impact of conquest by more than a few decades. A series of unsuccessful revolts in the early years was put down with such wholesale bloodshed that a substantial portion of the nation was exterminated. The conditions of life resulting from Russian rule, with its dislocations and burdens, brought on an impoverishment of the shattered natives and a consequent rapid decline, climaxed about 1768 by a smallpox epidemic that wiped out three fourths of the surviving population. The remnants became almost completely Russianized, and Kamchadal culture, except in some of its economic aspects, ceased to exist (3).

When we compare this brief history with that of other Siberian peoples who also lay in the path of Russian expansion, the culture seems completely lacking in vitality. On the other hand, it must be admitted that probably no other tribe suffered such a rapid succession of shattering blows.

The ensuing sketch endeavors to picture Kamchadal culture as it existed at the time of the first Russian contact.

The southern half of the Kamchatka Peninsula is a land of magnificent volcanic scenery and wretched climate, heavy precipitation the year around, rigorous gale-swept winters, and brief foggy summers when vegetation shoots up with tropical rankness seemingly overnight. The numerous rivers are rapid and shallow, the only major waterway being the Kamchatka which flows through the heart of the Kamchadal territory. The eastern coast of the peninsula is steep and rugged, the western low and bordered by a belt of tundra. The flora, a blend of that encountered in surrounding regions, is abundant and, except for trees, varied. Thick forests of birch and poplar grow in the upper parts of the river valleys, with larch and fir as well in the central part of our area. Scrub forest, numerous stretches of swamp and tundra, and the barren volcanic peaks make up the rest of the country. During spawning seasons the rivers are literally overflowing with salmon and similar fish; the oceans abound with sea mammals, at least on the Pacific side; and the waters and swamps teem with wildfowl. The land fauna is also plentiful; bear, wild sheep, wild reindeer are common, as well as many valuable fur-bearers. All in all, it is a land richly endowed by nature despite the difficult terrain, the unpleasant climate, and the undependable weather (4).

It is virtually impossible to reconstruct the physical type of the aboriginal Kamchadal, owing to the absence of any cranial material, the near-extinction of the native stock, and the heavy interbreeding of the

survivors with the Russians long before the days of modern scientific investigation. However, early writers clearly differentiate them from the Ainu-like Kurile Islanders, and the available information suggests a general resemblance to the Maritime Koryak, a type whose affinities appear to be with the Eskimo rather than with the American Indians (5).

The Kamchadal language is customarily grouped with Chukchi and Koryak into a single closely-related linguistic stock, formerly believed to exhibit structural similarities with the Indian languages of the Northwest Coast of America. The inclusion of Kamchadal in this group has apparently never been conclusively demonstrated, although repeatedly asserted by such authorities as Bogoras and Jochelson. However, the likelihood is strong that the relationship is a valid one, and seems to be accepted by modern students of Siberian linguistics such as Jakobson (6).

Excluding the mixed-Ainu tongue spoken by the Kurile Islanders of extreme southern Kamchatka, there appear to have been three main dialects of the Kamchadal language: one on the west coast, one on the east (including the valley of the Kamchatka River), and one in the Tigil River area to the north. The latter contained many Koryak words (7).

In southern Kamchatka, as on the Northwest Coast of America and in the Amur-Sakhalin area, a seasonally prodigal environment enabled a provident people to lead a sedentary life of comparative luxury and leisure during half of the year. The busy summer and fall were devoted to exploiting the tremendous salmon run and the ample resources of the local flora. The products of both were prepared and stored in quantities deemed sufficient for the requirements of the long winter. This done, the people were free to devote themselves to a season of social and ceremonial activity, of visiting and general merry-making, until the appearance of the first fish and plant growth in late spring (plus the emptiness of their larders) heralded the resumption of economic activity.

Fish was the staff of life for the Kamchadal, and it was around fishing, naturally, that their life revolved. Their activities of necessity were geared to the habits of the local salmon species, and motivated by the need of exploiting them successively to the fullest extent during the relatively brief period in which they were available to each community. At these times everyone able to bear a hand worked frantically from dawn till dusk—the men bringing in the fish, the women cleaning them and hanging them up to dry. The greatest quantities were secured by means of weirs fitted with basket traps, but nets of several types, made of nettle fiber, also played a major role. In addition, fish were speared on the occasions unsuited to those mass-production methods. With all types of fishing the dugout canoe was an important factor. The species of salmon which bulked largest in the Kamchadal economy were Oncorhynchus keta, O. nerka, and O. kisutch. Such an abundance of riches made the people choosy, and a number of other available and edible fish were utilized primarily or solely for dog food (8).

Except for the tiny fraction which could be consumed fresh, this huge catch was destined for winter provisions, and was prepared in one of two ways: split and hung up to air-dry, becoming yukola, the staple of the country; or buried in pits to sour and decompose into a foul-smelling gruel beloved of man and dog. Owing to the damp climate of Kamchatka, air-drying was always more or less of a gamble; much of the catch inevitably rotted before it was properly cured, and not infrequently the entire winter's supply would be thus lost, posing a grave threat of starvation unless the loss could in some measure be recouped from late-running fish. When cured, the yukola was stored in the balagans (pile structures) at the permanent settlement, safe from animals and relatively dry. (Whenever necessary, the entire population moved in summer to more advantageous fishing stations) (9).

An important post-conquest economic activity was rendering fish fat by stone boiling in dugout canoes filled with water and cut-up fish—the fat being scooped off the surface. However, Steller asserts that this was never done in aboriginal times, only oil from sea mammals being used (10).

Next in importance to fishing in the Kamchadal economy was the gathering of wild vegetable products. This was the exclusive business of the women. Group gathering expeditions were apparently in some cases an occasion for a sort of ceremonial license, male trespassers, for example, being roughly handled (11).

The Kamchadal exploited the possibilities of the local flora to the fullest extent. Steller, a botanist among other things, remarked in amazement that there was not a single plant whose properties—good or bad—they did not know. Everything edible was sought out and utilized, and much of the rest was put to household or medicinal use. This included sea plants cast up on shore (12).

The nettle (Urtica platyphylla) was the principal utility plant, being the sole source of fibers for cordage and thread, and hence the essential raw material for the manufacture of fish nets. It was gathered in late summer, left to dry, and processed at leisure during the winter. The grass called eheu (Carex laevirostris?) was combed into a soft substance of many uses (e.g., diapers, boot linings or stockings, many ceremonial functions). A tall grass (Elymus mollis) was woven into mats, raincoats, baskets, and containers of all sorts. "Sweet Herb" (Heracleum dulce) took the place of sweetening, and was also important ceremonially. The Cossacks discovered in short order that vodka could be made from it also. The stalks of kiprei (Epilobium angustifolium) contain a pith extensively used for food (13).

But the chief vegetable food of the Kamchadal, and their substitute for flour or cereals, was called sarana. These were the bulbs of certain members of the lily family (especially Fritillaria kamschatcensis and Lilium avenaceum) (14), which were put to a variety of culinary uses. The women dug up as many of these as possible, but the

greatest source of supply came from the nests of field mice (Microtus kamtschaticus), each of which contained a winter store of about two-thirds of a bushel of sarana and other edible roots, all cleaned, dried, and sorted out by kinds. Since this mouse is subject to periodic migrations and population fluctuations reminiscent of the lemming, it could not be depended on every year as a regular source of supply; but a year when this mouse was abundant was a good sarana year in consequence, and cause for great rejoicing. In plundering these mouse hordes the Kamchadal women took great pains never to remove all the contents, believing that the mice would commit suicide in despair, and that their services would thus be lost (15).

Among the other important vegetable foods should be mentioned the anti-scurbutic wild garlic (Allium ursinum), whose leaves are the first edible greens in spring—by which time many Kamchadals had suffered a touch of scurvy from the winter diet. The bulbs of these were stored as well. A wide variety of berries—Lonicera, Rubus, Prunus, and Vaccinium species for the most part—were extensively gathered (16).

Mention should be made of the alder (Alnus incana), whose bark was widely used to dye leather red; and of the birch, whose bark, as in all other boreal regions, served a variety of purposes. It was never used, however, in the construction of boats (17).

The Kamchadal pharmacopeia was impressive in its size and range, though in many cases of dubious efficacy (e.g., infusion of rhododendron for venereal disease). These people were well aware of the deadly properties of aconite (Aconitum Fischeri is the commonest local species) (18), and employed it effectively as an arrow poison (19).

Hunting of land animals played only a minor role in the native economy, and the rather abundant faunal resources were very little utilized, in contrast to the thorough exploitation of plants and fish. The average Kamchadal does not seem to have been interested in hunting until pressed by necessity, which is understandable in view of the relative ease with which the bulk of his livelihood was obtained.

Bears yielded a great variety of useful products, were abundant, and brought great honor to the hunter. Only a small number seem to have been slain, however, They were either shot with arrows, or killed in their den by blocking it up with logs until the bear no longer had room to move, then despatching it with a spear through a hole made in the roof. Mountain sheep were esteemed for their flesh and fur, and their horns made into cups and spoons. They were hunted on occasion with the help of dogs. Though wild reindeer were available, it was apparently less effort to obtain reindeer skins from the Koryak by trade. The abundant furbearers—even those whose pelts were prized—seem to have been little hunted in pre-Russian times. Although sable hunting is described by all writers as a major industry of Kamchatka, the methods described are identical with those of Siberia and were evidently introduced by the Russians. There does not seem to have been much interest in sables in aboriginal

times—certainly not sufficient to justify such laborious techniques of hunting as those described (20).

Fowling, by wholesale methods, was more to the Kamchadal taste. Quantities of waterfowl were clubbed from boats while moulting, or rounded up by dogs. Flocks of ducks were caught in autumn by cutting artificial flyways through the woods linking bodies of water, and rigging nets in these that could be raised in an instant when the quarry was within reach. Visits were also made to offshore seabird rookeries, both for eggs, which were gathered in great numbers, and to secure the birds themselves by means of nets or nooses (21).

While it is customary to assign to sea mammals a very unimportant place in Kamchadal economy, and to hold up the Kamchadal, in scornful contrast to their seafaring neighbors, as landlubbers without the sense or ability to utilize the rich marine fauna available to them, it is possible that this picture has been overdrawn and deserves re-examination. There is no evidence, it must be admitted, that the Kamchadal proper ever hunted whales; stranded specimens were eagerly and fully utilized, but were not numerous enough to fill all the needs. Most of the latter had to be met by hunting the smaller sea mammals, primarily seals, which supplied essential illuminating oil, skins for many important uses, and the prized blubber which may have been a dietary necessity. Such hunting was a major seasonal activity, and in my opinion played a more important part in the Kamchadal economy than the other forms of hunting—at least for that part of the population that lived within reach of the coasts. And there are even indications that inland dwellers made annual trips to the sea for this purpose. The elaborateness of the ceremony to insure an abundant future catch of seals, described by Krasheninnikov, is a clear indication of the importance of this hunt in the Kamchadal mind.

The preferred methods of taking seals were to club them when asleep on shore or on islets, and to close off river mouths with nets when a number of the creatures had entered. They were then driven back into the nets, entangled, and killed from boats. But they were also stalked in sealskin disguises and harpooned—possibly on the ice. Sea lions were hunted to some extent as well—always on land—by parties using several harpoons and arrows. On the east coast, there is evidence that fur seals were hunted at sea in baidars and harpooned. Sea otters were being taken on the ice floes soon after the conquest, but this may have been in response to Russian demand, though it utilized indubitably native techniques (22).

Kamchadal cookery—the end result of all these varied food-gathering activities—was apparently a highly-developed art, and comprised a large variety of dishes, including some very complicated mixtures of pounded roots, berries and fat. Ordinary meals, however, usually consisted of fish—fresh, dried, or rotted—stone-boiled in a wooden trough, or meat similarly prepared when available, sometimes with roots or herbs. The Kamchadal disliked roasted food and nothing was eaten warm; cooked food had to get cold before it was regarded as fit to serve (23).

Whale and seal blubber was greatly esteemed. The cooked blubber would be served in strips, which were crammed into the mouth until it would hold no more, then cut off at the lips and swallowed whole. To store blubber for future use, it was prepared by baking in an earth oven to remove excess oil, after which, we are told, it would keep for a year without spoiling (24).

For more casual snacks, yukola (dried salmon) was eaten plain. Another common standby was dried fish roe, usually eaten with the inner bark of birch or willow (25).

Except at a feast, the Kamchadals never ate together at definite hours. Instead, individuals ate whenever they had time and inclination. Cooking was usually done once a day, in the afternoon (26).

The Kamchadal knew no alcoholic beverages before the conquest, though liquor rapidly became their favorite vice as soon as they had made its acquaintance (27).

Information on the use of the narcotic agaric mushroom (Amanita), an infusion of which was drunk as an intoxicant, is very vague and conflicting. We know that the Koryak are, and have always been, enthusiastic addicts. They obtained it by trade from the northern Kamchadal, who gather it for this purpose; but whether the latter also used it, to what extent, and whether the habit existed over the whole Kamchadal territory or was localized and the result of Koryak influence, is very difficult to establish on the basis of the existing evidence. There are definite instances of its use by the northern-most Kamchadal, and inferences that it was employed by the nation as a whole. It seems likely that it was never used on the scale observed among the Koryak (28).

Like many neighboring peoples, the Kamchadal lived during the winter in large semi-subterranean dwellings capable of holding several families. The roof—of poles covered with turf—was supported on posts, and formed a low mound above the surface of the ground. Entrance was via a notched log ladder through the smoke hole. There was also a ventilation passage running from behind the hearth to the surface at one side which women and children used as an additional entrance. A wide low platform ran around the interior on which the inmates slept, lounged, or sat. The walls were often covered with straw mats. Illumination was supplied by stone lamps burning sea mammal oil (29).

In the spring, when these dwellings got full of water, the Kamchadal moved into pile structures called balagans by the Russians. Several balagans belonged to a winter house, each being occupied by a single family. Those not needed for residence served as storehouses for winter provisions. The balagans were conical structures of poles and thatch set on a log platform which was supported by posts and raised about fifteen feet above the ground. There were apparently two opposing doors, a smoke-hole at the peak, and a hearth. Access to the platform was by a notched log ladder. Fish and plants were hung to dry in the space between the piles, sheltered from rain by the platform, and out of reach of dogs and other animals. The balagans were far enough above the damp ground to be

relatively dry, cool, and airy, and probably also afforded some respite from the relentless insect pests that plague Kamchatka. As storehouses they were, in addition, safe from predators (30).

Balagans were also constructed at permanent summer fishing stations. For more temporary camps, or overnight stops when traveling, the Kamchadals erected huts of grass and thatch placed directly on the ground, which the Russians called barabararas (31).

Settlements varied in size, consisting of one or several (rarely more) winter dwellings with their attendant balagans, though the earliest reports suggest that larger settlements existed in the past. Buildings were placed very close together, and the entire settlement surrounded in many cases with a palisade or earth rampart. Settlements were always located on rivers or, among the eastern groups, on the shore. There is every indication that the Kamchadal territory was relatively thickly populated in pre-Russian times (32).

Technologically, the Kamchadal were still in the stone age. Such bits or objects of metal as had reached them were prized curios. Stone was chipped into knives, scrapers, arrow and spear points; pecked into pestles and sinkers; polished into adzes and axes. A peculiarity of the culture, however, was the absence of polished slate implements, so typical of the general area. Equal or greater use was made of bone for everything from needles, spoons and combs to sickles and harpoons. Whale vertebrae were made into mortars. Woodworking occupied a leading place in the technology; wooden troughs being the most important household utensils. This fact, plus the extensive use of birch-bark and animal-gut containers, and of stone boiling and earth ovens for cookery, may explain the apparent absence of pottery in Kamchadal culture. Although known from prehistoric archaeological sites, it is relatively scarce and seems limited to border areas subject to outside influences. All the pottery found has obvious alien affinities. If pottery was in use, as reported by Atlasov, the first Russian explorer, then even the memory of it had died out forty years later—a circumstance which strains the credulity. Hides from sea and land animals were another major raw material, supplying all clothing and footgear, thongs, straps, etc. Skins were dressed with fish roe, which was then allowed to ferment, in addition to the usual scrapings and rubbings. Tanning was effected by smoking, plus the foregoing procedures. Much leather was dyed red with a decoction of alder bark. Fish skin was used to make certain types of shoes, and yielded glue as well. Woven products of dried grasses and cordage from nettle have already been mentioned (33).

Fire was apparently produced with a simple hand drill, although the bow drill is almost universal in the general area (34).

The Kamchadal costume, in Steller's opinion, was very well adapted to the local climate and activities. Men's and women's dress was essentially the same, though distinguished by minor details. Children had a flap at the rear for sanitary purposes. The under garments consisted of

a long shirt and trousers—leather in summer, fur in winter. Men wore only a breech clout when engaged in household tasks, and in summer, apparently, frequently outdoors as well. The outer garment, when needed, was the kuklianka, a long loose fur "night shirt" with a hood. For greater warmth additional kuklianka could be donned, the inner one with fur side in, the outer with fur side out. Reindeer and seal skins were the commonest materials, with dog skins reserved for gala attire. Garments were embellished with borders of other furs, strips of red seal leather, bunches of red-tinted seal hair or long dog hairs, etc. The fur-less side was generally dyed with alder bark (35).

Boots for summer were of seal skin. In winter, several types of footgear were in use. One was made of dried fish skin, another of the hide from reindeer legs was soled with seal skin or bear paws, which provided secure footing on ice. Women constantly wore fingerless gloves when working; men had regular gloves. Women went bare-headed, while men had caps of various sorts—including a band from which dangled flaps to protect ears, neck, etc. for winter wear, and for summer use wooden or quill "lampshade" hats like those of the Aleut. A sort of birch-bark net was worn over the eyes to protect them from the spring glare, though this may have been introduced from Siberia with the Russians. During this season women covered their faces with bear's guts to safeguard their complexions. To look their best, women customarily reddened their faces with various substances, but no tattooing or other bodily adornment was practiced. (36).

Women of fashion sought to braid their hair into an elaborate mass, supplemented by other hair to make it even more "thick and stately." Fish fat or seal oil was applied to make it shine. Men apparently wore the hair in two braids (37).

The Kamchadal were a dog-breeding people par excellence, although dog-driving actually played little if any role in their economic life, merely facilitating their social activities and, probably, their warfare. Sled dogs could have been subtracted from their culture in all likelihood without impairing their chances of survival. The Kamchadal could afford this virtual luxury by reason of the abundant winter food supply. One gets the impression that dogs probably constituted about the only form of wealth among them.

The Kamchadal dog sledge with its saddle-like superstructure was a unique product with no obvious parallels elsewhere, and appropriately reflects the superfluous nature of their dog traction. This sled was about as utilitarian as a racing sulky. It could carry the driver, riding side-saddle in a sportingly precarious position, but no load of any sort (38).

Driving this odd conveyance—a feat requiring considerable skill to avoid tipping over—was done with the aid of a pointed bent staff (oshtol), which served both as a brake and as an instrument for urging

on the dogs, mostly by the sound of the jangling objects affixed to it. Directing was by voice, and a good leader was an absolute necessity. The average team apparently consisted of a leader and four dogs in pairs on a central trace, although the evidence is conflicting, and there are grounds for suspecting that originally the dogs may have been hitched fan-wise. The harness was of cervico-scapular type, with the collar around the neck and one foreleg. Under spring snow conditions, traction was improved by fastening on extra runners of whale bone (39).

There is no evidence to indicate the existence of another type of sled for freight transport. The Russians lost no time in introducing the standard east Siberian nart to fill this lacuna, and it became an integral part of post-conquest Kamchadal culture in short order (40).

Dogs were turned loose to fend for themselves in summer, and in winter were kept tied up and fed an exclusively fish diet, dried or rotten, usually cooked into a sort of soup. A curious method of training sled dogs involved keeping them in pits out of human sight (except, presumably, for their trainer) until broken to harness. Male sled dogs were always castrated. Dogs not suitable for harness were trained for hunting. Long-haired dogs were valued for their fur. Dog fur was preferred above all others, and the fanciest clothing was made from it (41).

Reflecting their riverine life, the typical Kamchadal boat was a poplar dugout about 12 to 14 feet long, handled by two men who stood in bow and stern, respectively, paddling downstream and poling up close to shore. Two slightly different types existed; one in which the bow was made slightly higher than the gunwales, which were spread apart, presumably by cross-pieces; the other in which bow and stern were of the same height as the gunwales or even slightly lower, and the gunwales were not spread apart but curved inward following the natural shape of the log. The use of the latter was apparently restricted to the Kamchatka River, the former being employed everywhere else—even on sheltered bays and on the sea itself close to shore in calm weather. These round-bottomed craft had low stability and a very limited cargo capacity. For transporting bulky but light-weight loads, two dugouts would be joined by a log platform to form a sort of raft; this was feasible only on the calmer rivers and usually confined to downstream travel. On portions of the east coast, the inhabitants seem to have had more nautical propensities, and were led to create a more seaworthy craft by sewing planks on to the gunwales of the dugout with baleen. Steadied apparently by rock ballast, they were thus emboldened to pursue sea mammals on the open ocean like their neighbors to the north and south. This boat was the only Kamchadal craft to earn the designation baidar from the Russians, the term applied to sea-going plank boats or to the umiak (42).

On land, summer travel was on foot and transport on the human back—mostly with a forehead tump line. For foot travel in winter, and also for breaking trail for dog teams, the Kamchadal had both skis and netted snowshoes. The former were of common Siberian type and equipped with fur

underneath to facilitate up-hill progress. The latter, like the similar snowshoes of the Chuckchi and Koryak, were obviously a diffusion from the other side of Bering Strait (43).

The Kamchadal, like most primitives, were a completely self-sufficient people, and trade was not necessary for their survival or the proper functioning of their economy. It was apparently a convenience to import reindeer skins or clothing made from them from the Koryak in return for agaric and furs, but much of this commerce may well be a post-conquest development. Luxury items of Japanese origin diffused northward from the Kuriles. Steller mentions the export of nettle cordage to the Kurile territory, where the plant does not grow, in exchange for sea otter furs, but this commerce also may have grown up after the conquest. By and large trade seems to have been casual and of little consequence (44).

Very little is known about the social organization of the Kamchadal. In general, the inhabitants of each of the smaller river systems seem to have regarded themselves as descended from a single ancestor, and as owning the territory in common as far as hunting and fishing rights were concerned. There would seem to have been one major settlement in each such area, any others being offshoots resulting from overcrowding. Families breaking away in search of greener pastures would merely move a short way along the same stream, always remaining within the ancestral domain. Settlements seem to have been composed of members of one extended family. This is further substantiated by the solidarity displayed by each settlement in case of trouble with outside groups. Marriage apparently was extra-local; it may have been matrilineal, but here the evidence is conflicting. Property inheritance was to the eldest son. But women seem to have enjoyed a high position in Kamchadal society, and participated freely in religious ceremonies (45).

Slavery of war captives existed, and the capture of slaves was apparently a major motive for war. Such slaves had to do the unpleasant and menial work, but might be released after a few years. It is hard to tell how important a factor slavery was in the culture (46).

Political structure was non-existent. War parties, however, were apparently organized by a leader of proven ability and the participants accepted his orders for the duration of the expedition. Each settlement had some leading man or men who were feared or respected, and who exercised influence in proportion to this. But they had no inherent authority to enforce their decisions or compel agreement. Law and order was on a purely personal basis—with whatever support one's relatives might be willing to give. Homicide was avenged by killing the murderer in the same fashion as the victim had died—if the relatives could lay hands on him. Thieves were beaten by the victim; a chronic thief might have his hands burned, maiming him permanently to render him incapable of further theft. Thieves were, in addition, universally despised and treated as outcasts by the entire group (47).

Warfare between settlements was apparently all too frequent in the old days—motivated by desire for women, slaves and dogs (the only valuable booty), to avenge wrongs and insults, or in cases of refusal to surrender a wrong-doer. The accumulated internecine hostility greatly facilitated the Russian conquest, the invaders receiving enthusiastic assistance, or at least approval, in many instances as means of settling old grudges (48).

As might be expected, the Kamchadal avoided open combat and preferred treachery, ruses or sneak attacks, especially on a sleeping enemy. The design of the winter houses made it a simple matter to render large numbers of warriors helpless by guarding the exits. They were capable of fighting bravely in a defensive position, however, as was illustrated frequently in the early revolts against the Russians, when the Kamchadal, meeting opposition, customarily withdrew to natural strongholds. Wives and children were often killed to prevent their falling to the victor, while the men threw themselves from cliffs or rushed into the midst of the attackers to sell their lives dearly (49).

Prisoners, especially the most valiant, were tortured. Harmless individuals were apparently enslaved, and captured women became wives or concubines (50).

The weapons employed were bows with aconite-poisoned arrows, spears and clubs. The bow was small, apparently simple in type, of larch wood covered with birch bark; arrows had bone or stone points, and were fletched with eagle feathers. Armor made of matting, or seal hide supplemented by boards, is also reported (51).

In their more peaceful moments, hospitality was a point of honor among the Kamchadal. Visitors were extravagantly entertained over long periods, and presented with valuable gifts at departure—regardless of the extent of the host's resources. To refuse a guest anything he might desire would be a great disgrace (52).

A curious practice was connected with entering into a formalized contractual friendship relationship with another man. The prospective "friend" was invited to a special "ordeal feast" set by his host, who prepared his choicest dishes (in quantity sufficient for ten men) and heated the underground dwelling to a stifling temperature. While the guest did his best to consume the spread, the host plied him with more, and at intervals poured water on red-hot stones to make the atmosphere unbearable. The host could go outdoors at any time for a breath of fresh air, and ate nothing himself, but the guest could neither stop eating nor leave the house without admitting defeat. When he finally gave up, he had to purchase his liberty by surrendering to the host the most valuable possessions he had with him (dogs, clothing, etc.). Later on the host must be similarly entertained, or the guest might return and expect to receive presents of comparable value (53).

The aesthetic side of Kamchadal life seems to have been little developed despite the abundant leisure. Decorative art was at best confined to some painted ornament on wooden or bark utensils, to which might be added the adornment applied to clothing (54).

A reed flute of rather negative capabilities was their sole musical instrument; even drums seem to have been absent. Singing, though a popular diversion, appears to have been confined to the female sex. Songs were improvised with alacrity on almost any topic (55).

The dance was probably the best developed field. All the principal dances indigenous beyond doubt to the Kamchadal seem to have been pantomimic representations of the actions and habits of various familiar animals and birds, and, sometimes, of hunters in relation to these—all very cleverly and faithfully portrayed. The favorite dance depicted realistically the courtship of a pair of bears. These performances seem to have been executed by men, while the onlookers sang an incessantly-repeated refrain. More ordinary sorts of group dances in which all participated are described, but with the implication that some or most were borrowed from the Kurile Islanders (56).

Mimicry of others was a Kamchadal talent and a favorite diversion along with story-telling. Clowns, "whose buffoonery is extremely obscene," played a part in the festivities (57).

Their folklore consisted primarily of a body of satirical and "indecent" tales about the misadventures of their creator, Kutka, and as such shows great resemblance to Koryak folklore and its Raven cycle. Some of the examples known to us have considerable literary merit (58).

Turning now to the life cycle of the Kamchadal, we find that women who wished to enhance their fecundity, insure a successful pregnancy, and facilitate delivery, ate spiders during this period. Many others with the opposite objective resorted to alleged herbal contraceptive concoctions and to various types of abortion, including crushing the foetus within the womb (often with fatal consequences to the mother), an art at which certain old women were regarded as especially proficient (59).

Childbirth took place with no effort at seclusion and without any attendant fuss, ritual, or restriction. Mothers generally assisted their daughters. The afterbirth was thrown to the dogs. Women resumed their usual duties within a few days. The neighbors all came to see and rejoice over the newborn, but no occasion was made of it. Unwanted children might, apparently, be killed at birth, as was generally the case with one of a pair of twins or children born during a storm. It was believed that the latter would subsequently cause bad weather, although there were ritual means of removing this disability (60).

Children were named after deceased relatives by the father when they were a month or two old; no ceremony was involved, and the name was

retained throughout life, unless the child's restlessness at night indicated that it had probably received the wrong name and was being disturbed by some offended relative. In such cases the shaman was consulted and the name changed. Most names were common gender (61).

Infants were generally carried about on mothers' backs inside the kuklianka, supported by a strap, being transferred at night to the breast. Children were suckled for three or four years, or until the birth of the next child (62).

We are told that parents indulged their children, and that the latter were disobedient, disrespectful, indifferent to affection, and in general did as they pleased. Their attitudes did not improve with age, and elderly parents were treated with contempt (63).

The Kamchadal usually selected wives from another settlement. A suitor went to live with his prospective parents-in-law and worked for them. When he felt that he had sufficiently ingratiated himself and proved his worth, he would ask their permission to attempt to "touch" the girl, i.e., insert his finger in her vagina. If the parents and the girl were satisfied with him, they told him to try his luck; if not, they sent him packing with nothing to show for his pains. The girl, regardless of her acquiescence, had to put up a great show of resistance, in which she was aided and abetted by all the women of the settlement. In addition to being securely bundled up in many layers of clothing, she was never left alone. Any attempt by the suitor brought a crowd of women to her assistance, at whose hands he could expect rough treatment. Sometimes a year or more would elapse before the objective was attained at a cost of many scars. However, the moment he succeeded the girl surrendered immediately and made no further resistance. They were now regarded as man and wife without more ado. Steller says the couple lived in the wife's settlement, while according to Krasheninnikov they went to the husband's, although returning later for a marriage feast with the bride's family (64).

Virginity was apparently neither expected nor particularly esteemed, although we have no specific data on pre-marital sexual activities (65).

Polygyny was general, though there were rarely more than three wives. The husband had to follow the same procedure in the case of each subsequent wife. If the wives did not get along well they were housed separately, and the husband lived with each in turn. When a wife died, her parents would often supply another daughter without requiring servitude. Widows were free to remarry, but first had to "purify" themselves by intercourse with some other man, an act fraught with magical danger and hence not too easy to arrange until the arrival of the Cossacks, who gladly assumed this burden. The levirate was also practiced (66).

Women seem to have "worn the pants" in the Kamchadal family. Husbands are pictured as devoted and willing slaves in all matters. Women were very jealous of rivals as well as of their husbands, but also rather promiscuous. Men are described as not particularly jealous (although the paramour of a

beloved wife was apt to suffer injury), and as indulging in numerous extra-marital amours. Wife exchange between friends is reported also. Divorce consisted merely in separation, both parties usually remarrying (67).

Homosexuality was widespread. Confirmed male homosexuals had to dress, act and live as women. They were commonly kept as concubines by married men in addition to their wives, and this arrangement seems to have been an established and accepted institution (68).

The Kamchadal division of labor seems equitable. Men constructed the houses, although women thatched and furnished them; supplied the firewood; did all hunting, fishing, and skinning; prepared the rotten fish in pits; manufactured all household utensils, sleds, boats, fishing and hunting equipment; prepared all food; fed the dogs; and entertained guests (69).

Women—in addition to bringing up the children—prepared the entire fish supply (except the rotten portion), which then remained in their charge; collected about 100 different kinds of roots, herbs, berries, etc. for medicine and food, as well as grasses for weaving and other uses, and nettles for cordage, and prepared all of these for use as necessary; manufactured all cordage and woven products; did all skin dressing; made all clothing and footgear of every sort; and were the sole repositories of medical and surgical knowledge (70).

Although sickness was considered due to the actions of offended spirits, or to the consequence of transgressing some tabu, and a shaman was consulted to determine the specific cause and to counteract it by magical means, this did not prevent the Kamchadal from developing a very extensive practical medical repertoire, even if it was largely of imaginary efficacy. The women practitioners had at their disposal a pharmacopoeia impressive in size and variety if not in quality. How much of this was motivated by magical considerations, and how much based on a knowledge of actual beneficial results, is impossible to determine. The latter might have been an accidental adjunct of the former, or it might represent a body of practical lore mixed together with the magical (71).

However, when Kamchadals became seriously ill it was the usual practice to abandon them in the woods, or (according to Steller) to throw their living bodies to the dogs—either with or without the patient's acquiescence. Indeed, suicide was part of the cultural pattern. Whenever anyone decided life was no longer attractive, or felt themselves old, decrepit and useless, they would go off into the forest and starve themselves to death. This urge was possibly reinforced by the hope of sooner attaining the underworld, where the sorrows of this life did not exist (72).

If a Kamchadal fell into the water accidentally (they apparently did not know how to swim), no one would try to save him, and the bystanders might even forcibly insure his drowning, reasoning that since the man

was obviously supposed to drown it would be wrong for him not to. Should he survive anyway, he was considered dead and treated as such. No one would speak to him or allow him to come into the house (73).

When a person died in a house the corpse was immediately hauled outside by a strap around the neck, and left nearby for the dogs to devour. All clothing of the deceased was thrown out also, lest it contaminate someone. Everyone involved immediately underwent a purification ceremony, involving crawling through hoops of branches which were then cast into the woods. The man who pulled the corpse had, in addition, to catch two birds, burning one and, joined by his entire family, eating the other. The house was abandoned and a new one erected at some distance. No doubt their eagerness to abandon the dying out in the woods was motivated to a great extent by this consideration. Corpses of young children, we are told, were placed in hollow trees (74).

The souls of all living creatures were believed to be immortal, and their bodies will be revived in the underworld, where they will engage in all the usual activities and carry on as in this life, except that want and suffering will be unknown and life will be always perfect, as it used to be in Kamchatka back in the days of Kutka the Creator. The poor on earth will be well off in the underworld and vice versa, we are told. The Kamchadal knew all this because the lord of the underworld, a son of Kutka, and the first man ever to die, returned to the earth to enlighten his descendants on this and kindred matters; which knowledge had been handed down ever since (75).

It is, however, particularly difficult to obtain a coherent picture of Kamchadal supernaturalism from the type of source material available to us. One gets the impression that the Kamchadal were not too clear about such matters in their own minds. They had a Creator—Kutka, the ancestor and culture-bringer of their nation—but they regarded him with derision for his follies and with resentment for not having created a better world. For such a theoretically powerful and central figure they felt neither respect nor fear. Various sons of Kutka seem to be deities controlling natural phenomena such as rain, wind, thunder, and earthquakes. But again, they are regarded primarily as causal explanations, and not as objects of fear or reverence (76).

On the other hand, the Kamchadal believed that spirits inhabited all parts of the landscape, and it was these that they really feared and respected—especially those dwelling in dangerous places such as volcanoes, hot springs, and high mountains, which were regarded as being particularly malignant. They were the main objects of the Kamchadals' efforts at treating with the supernatural, since they were the ones who actually affected men's lives (77).

This treatment took the form of leaving offerings when passing by spots inhabited by dangerous spirits; making offerings to the hearth fire; adorning the household "god" (probably a tutelary spirit, represented by a wooden stake) with sacred herbs and "feeding" (smearing) it

with blood and fat so that it would secure them luck on the hunt; ascertaining whether a spirit has been offended when sickness occurs, and so forth. Nothing useful or desirable was ever offered to the spirits—generally the inedible portions of fish and such like (78).

Much of their dealings appear to have been purely magical in nature, however. There were a number of prohibitions handed down from the ancestors which if violated would automatically cause misfortune, illness, or unsuccessful hunting. One who believed himself in trouble of this sort consulted a shaman to ascertain the precise cause, then expiated the transgression by carving a little man of wood and placing it in the forest. Spirits do not seem to have been involved, although it is difficult to judge the matter on the basis of the sources. Or again, "purification" was achieved in several ceremonies by passing through a hoop of branches which was then burned or thrown away in the woods (79).

In marked contrast to the surrounding Siberian tribes, shamanism was very little developed among the Kamchadal. There were no professional shamans, no special costume, no drum. Anyone of either sex could try their hand at it, but women (especially old ones) and homosexuals were regarded as most successful, though no particular prestige attached to the role. They seem to have been resorted to largely for divination: to locate stolen goods, interpret a difficult dream inexplicable by the standard rules, ascertain what "tabu" had been violated to cause misfortune or what was the cause of an illness, to predict the future, and so forth. One principal technique employed by shamans was lifting the foot by means of a nettle thread; if it felt heavy it was a bad omen or negative sign. But they could also summon spirits into their presence to inquire the answer. There is no evidence that they exerted any control over supernatural beings beyond this fact-finding function. They played no major role in the important ceremonies, nor were they endowed with any supernatural powers or abilities. Since spirit possession does not seem to have been a cause of illness, there was no opportunity to fulfill this familiar function. Nor was sorcery apparently practiced by the Kamchadal. Shamans did deal in magic to the extent of supplying persons with amulets to be worn around the neck (80).

The Kamchadal had only one fixed annual ceremony, a very elaborate and important affair lasting many days, which was held in November after the winter supplies were all in and the festive season ready to begin. The details varied in different parts of the country, but the central idea seemed to be one of "purification". Krasheninnikov witnessed several of these affairs and has left us detailed descriptions. Everyone took part, of both sexes and all ages. The total picture is a somewhat incoherent hodge-podge, which seems to consist partly in offerings to spirits to gain their good will, and partly in purely magical procedures for one purpose or another. One gets the impression that the ceremony was a sort of catch-all to take care of the year's needs in relation to the supernatural, and that many birds, so to speak, were thus killed with one stone. Among items that stand out from the general confusion; a tug-of-war between the sexes over a birch tree brought in

from the forest; purification by passing through hoops; installation of a new household "idol"; making of many wooden effigies which are fed and adorned, then burned; effigies of whale and wolf (made of food stuffs), subsequently eaten; a human figure of woven grass about a foot high with a 14-foot priapus, which was burned (81).

While animal ceremonialism was apparently a well-developed feature of Kamchadal culture, it should be regarded rather as "hunting magic" than cult or ritual. There was nothing at all comparable to the "bear festival" of the Ainu or Gilyak. Although bears were held in esteem, they were not markedly singled out for special treatment. Indeed, the ceremonialism observed seems more proportional to the economic importance of the particular animal, and was aimed solely at insuring a good bag of them in the future.

In general they apparently asked forgiveness before killing any major land or sea mammal lest it take offense, and subsequently endeavored to make it believe it was an honored guest by offering sacred herbs and various delicacies to the meat, skull or fur, so that others of the species might not become shy of people. A proper observance involved special treatment of the skull after the animal had been devoured; adorning it with sacred herbs, and making speeches to it pointing out how well it had been treated and urging it to inform its relatives so that they also may enjoy similar hospitality. (A more elaborate ceremony, although developing the same theme, was described by Krasheninikov in connection with seals). The skulls do not appear to have been preserved after the completion of these observances, except those of bears, which seem to have been hung up on or near the dwelling (82).

The wolf and bear in particular were believed to understand human speech, and circumlocutions were always employed in their presence (83).

In connection with these supernatural attitudes towards animals should be mentioned the prohibition on cooking meat of land and sea animals—or meat and fish—together in the same pot. Also the belief that the only proper position for sexual intercourse was on the side, since fish were said to do it in this fashion (84).

We are left with the impression that we are dealing here with a culture of mixed origins showing the results of outside influence from many directions, but also shaped to some extent by environment and ecology. Absence of features expectable in the area, plus peculiar local developments, give to it an individual stamp.

The history of the Kamchadal and the building of their culture are complex problems which defy solution in the light of our present knowledge. The writer has attempted to approach these questions, in the longer work to which reference has previously been made, by an analysis of the culture and a study of the distributions of its component traits.

ENDNOTES

- (1) References to sources, where practicable, will be given at the end of paragraphs. Much, however, is based on the general impressions conveyed by the descriptions of Steller and Krasheninnikov.
- (2) Rudenko, 1948.
- (3) Okun', 1935, pp. 102-104.
- (4) Extensive descriptions of the environment are given by many writers. Among the best are those by Erman, 1848; Ditmar, 1890-1900; Komarov, 1912; and Bergman, 1926. For a succinct survey of the vegetation, see Komarov, 1927-1930, vol. I, pp. 328-336.
- (5) Debets, 1949, pp. 6-8.
- (6) Jochelson, 1930; Jakobson, 1942; but see also Debets, 1949, p. 17.
- (7) Jochelson, 1928, p. 16.
- (8) Steller, 1774, pp. 154-166; Krasheninnikov, 1949, pp. 298-310.
- (9) Steller, 1774, pp. 168-170.
- (10) Steller, 1774, pp. 174-175.
- (11) De Lesseps, 1790, pp. 87-88.
- (12) Steller, 1774, pp. 78-79, 95; Krasheninnikov, 1949, pp. 236-237.
- (13) Krasheninnikov, 1949, pp. 230-233; 237-238; Steller, 1774, pp. 80-88.
- (14) Illustrations of these two plants appear in Komarov, 1927-1930, vol. I, plates IX, XI.
- (15) Steller, 1774, pp. 90-92; Krasheninnikov, 1949, pp. 228-230, 251-253; Erman, 1848, pp. 256-259.
- (16) Steller, 1774, pp. 77-78, 88-89; Krasheninnikov, 1949, pp. 227, 233.
- (17) Steller, 1774, p. 75; Krasheninnikov, 1949, pp. 224-225; Erman, 1848, p. 286.
- (18) Komarov, 1927-1930, vol. II, plate XII illustrates this plant.
- (19) Steller, 1774, pp. 93-96, 236, 362-366; Krasheninnikov, 1949, pp. 239-241.

- (20) Steller, 1774, pp. 113-128; Krasheninnikov, 1949, pp. 243-250.
- (21) Steller, 1774, pp. 180-183, 187, 190-191; Krasheninnikov, 1949, pp. 315-316, 321-322; Erman, 1848, pp. 325, 330.
- (22) Steller, 1774, pp. 98-112; Krasheninnikov, 1949, pp. 271-284.
- (23) Steller, 1774, pp. 322-323.
- (24) Steller, 1774, pp. 99-100, 112; Krasheninnikov, 1949, p. 395.
- (25) Steller, 1774, p. 322.
- (26) Steller, 1774, p. 322.
- (27) Steller, 1774, p. 325.
- (28) Steller, 1774, p. 92; Krasheninnikov, 1949, pp. 428-429; Erman, 1848, pp. 223, 304-306, 312, 324.
- (29) Steller, 1774, pp. 212-215; De Lesseps, 1790, pp. 224-228; Krasheninnikov, 1949, pp. 374-376.
- (30) Steller, 1774, pp. 216-217; De Lesseps, 1790, pp. 26-29; Krasheninnikov, 1949, p. 377.
- (31) Steller, 1774, pp. 217-218; Krasheninnikov, 1949, p. 377; Dobell, 1830, vol. I, p. 37.
- (32) Antropova, 1949b.
- (33) Rudenko, 1948; Krasheninnikov, 1949, pp. 378-381, 386; Steller, 1774, pp. 71-72, 81, 104, 127-128, 249, 304, 308, 318-319, 321.
- (34) Krasheninnikov, 1949, p. 380.
- (35) Krasheninnikov, 1949, pp. 387-393; Steller, 1774, pp. 304-309, 313.
- (36) Steller, 1774, pp. 62, 69, 300, 308-310, 312-313; Krasheninnikov, 1949, p. 390.
- (37) Steller, 1774, pp. 311-312.
- (38) Antropova, 1949a.
- (39) Antropova, 1949a; Levin, 1946, pp. 94-96; Langsdorff, 1814, vol. II, pp. 283-286; Krasheninnikov, 1949, p. 398.
- (40) Steller, 1774, p. 374.

- (41) Steller, 1774, pp. 133-134, 137-139; Krasheninnikov, 1949, pp. 253-254, 396.
- (42) Krasheninnikov, 1949, pp. 382-383, 710; Erman, 1848, pp. 167-168, 318-319.
- (43) Krasheninnikov, 1949, pp. 368, 400, 710; Steller, 1774, p. 369; Antropova, 1949a, p. 69.
- (44) Steller, 1774, pp. 83-84, 375; Krasheninnikov, 1949, pp. 167, 171, 369, 514.
- (45) Steller, 1774, p. 354; Krasheninnikov, 1949, pp. 366, 368, 378, 435.
- (46) Steller, 1774, p. 235.
- (47) Steller, 1774, pp. 234, 355-356.
- (48) Steller, 1774, pp. 234, 236, 356.
- (49) Steller, 1774, pp. 236, 238; Krasheninnikov, 1949, pp. 402-403.
- (50) Krasheninnikov, 1949, p. 402.
- (51) Krasheninnikov, 1949, p. 404.
- (52) Krasheninnikov, 1949, p. 433; Erman, 1848, p. 215; Dobell, 1830, vol. I, p. 83.
- (53) Krasheninnikov, 1949, pp. 432-433.
- (54) Kittlitz, 1858, vol. II, pp. 317, 338; Guillemard, 1889, p. 75.
- (55) Krasheninnikov, 1949, pp. 430-431; Steller, 1774, pp. 333-337.
- (56) Steller, 1774, pp. 338-340; Krasheninnikov, 1949, pp. 429-430; Golovnin, 1861, pp. 27-28.
- (57) Steller, 1774, pp. 341-342; Krasheninnikov, 1949, p. 432.
- (58) Joehelson, 1905-1908, p. 341; Kittlitz, 1858, vol. I, pp. 326-327. Some of the tales are given by Steller, 1774, p. 255 ff.
- (59) Steller, 1774, pp. 198, 294, 349.
- (60) Steller, 1774, pp. 350-352; Krasheninnikov, 1949, pp. 437-438.
- (61) Steller, 1774, p. 353; Krasheninnikov, 1949, p. 438.
- (62) Steller, 1774, p. 352.

- (63) Steller, 1774, pp. 353-354.
- (64) Steller, 1774, pp. 343-346; Krasheninnikov, 1949, pp. 434-436.
- (65) Steller, 1774, pp. 345-346.
- (66) Steller, 1774, pp. 346-347.
- (67) Steller, 1774, pp. 287-288, 345, 347; Krasheninnikov, 1949, p. 436.
- (68) Steller, 1774, pp. 289, 350-351.
- (69) Steller, 1774, pp. 316-317.
- (70) Steller, 1774, PP. 317-321.
- (71) Steller, 1774, pp. 276, 362-366; Krasheninnikov, 1949, pp. 412, 440.
- (72) Steller, 1774, pp. 294, 354; Bering in Golder, 1922, vol. I, p. 18.
- (73) Steller, 1774, p. 295; Golovnin, 1861, p. 108.
- "(74) Krasheninnikov, 1949, pp. 443-444.
- (75) Steller, 1774, pp. 269-273.
- (76) Steller, 1774, pp. 253-255, 265-269.
- .(77) Steller, 1774, pp. 47, 265-266; Krasheninnikov, 1949, p. 369.
- (78) Steller, 1774, pp. 265-266, 276-277.
- (79) Steller, 1774, pp. 274-276; Krasheninnikov, 1949, p. 444.
- .(80) Steller, 1774, pp. 182, 276, 278-279, 312; Krasheninnikov, 1949, p. 412.
- (81) Krasheninnikov, 1949, pp. 413-427.
- (82) Krasheninnikov, 1949, pp. 249, 272-273; Steller, 1774, pp. 82, 85, 112, 280, 330-331.
- (83) Steller, 1774, p. 276.
- (84) Steller, 1774, pp. 274-275.

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