

Exploring Karuk morphology in a parsed text corpus

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- ▶ These slides: linguistics.berkeley.edu/~karuk/resources/ssila-2015.pdf

Karuk text corpus

- ▶ Database as of January 2015
 - ▶ 150 texts containing 23,511 words in 6,167 clauses
 - ▶ texts recorded in work with numerous elders by A. L. Kroeber, J. P. Harrington, Jaime de Angulo & Lucy Freeland, William Bright, Monica Macaulay, and the present authors
- ▶ Genres
 - ▶ traditional narratives, medicine texts
 - ▶ anecdotes, personal history
 - ▶ procedural texts, descriptions
 - ▶ conversation
 - ▶ documentation sessions: responses to visual prompts (avoiding English), responses to translation tasks (elicitation)
- ▶ For eventual incorporation
 - ▶ >50 other legacy (transcribed) texts
 - ▶ >160 hours of untranscribed Karuk recordings

Vina Smith in 2013



Photo: Florraine Super

Karuk lexicon database

- ▶ History
 - ▶ 138-page lexicon in Bright's *The Karok language* (1957)
 - ▶ converted to Shoebox by Susan Gehr & William Bright
 - ▶ William Bright & Susan Gehr, *Karuk dictionary* (2005)
 - ▶ converted to XML format in 2000s; now a mySQL database
- ▶ Scope
 - ▶ 7,302 entries
 - ▶ every entry has a unique ID
- ▶ Linked to text corpus
 - ▶ words in texts are parsed morphologically
 - ▶ morphological elements are tagged with lexicon ID numbers
- ▶ All lexicon and text resources are for (and are actively used by) academic and community researchers, learners, and teachers.

Florraine Super in 2013

fâat ivíshtaanti?

pa'áama nivíshtaanti.

pay hum ivíshtaanti?

“Karuk Dictionary and Texts” online: Home page

Karuk Dictionary and Texts



A collaboration between the Karuk Tribe and the University of California, Berkeley

[Dictionary](#)

[Sentences & Texts](#)

[Our Project](#)

[Links](#)

[Abbreviations](#)

Search the Dictionary, Sentences, and Texts

Karuk: (exact matches only)

Accent is ignored. To find é, type é or e.

English:

Meaning: (dictionary searches only)

Grammatical category: (dictionary searches only)

- Dictionary search
- Sentence and text search

Audio only (only shows results with audio)

(<http://linguistics.berkeley.edu/~karuk>)

“Karuk Dictionary and Texts”: Dictionary search

[Dictionary](#)[Sentences & Texts](#)[Our Project](#)[Links](#)[Abbreviations](#)

Karuk Dictionary

by William Bright and Susan Gehr (© Karuk Tribe)

Your search: English **salmon** | [New search](#)

Index order: alphabetical | [text frequency](#)

Search Index

1-50 of 81 result(s)

Previous 50 | [Next 50](#)

áama / **amva-** (king) salmon, "spring salmon"

áat King Salmon, "Spring Salmon"

áchip'óorayva a certain cut of salmon

áchpuus 1 part of salmon identified as 'white stuff under the throat'

áchvuun coho salmon, "hookbill salmon"

amváathxiik salmon scale

amvámaan salmon skin

amvapáramvuram boiling basket for cooking salmon

amvaváakay salmon worm, larval stage of salmon beetle

ámveenishaparar whole salmon, before being cut up

amveeshvítvit pieces of salmon

amveeváxrah dried salmon

asúf'iish salmon backbone meat

átay roe, salmon eggs

atáyxuun salmon roe baked with powdered manzanita berries

Dictionary Entry

lexicon ID #30 | revised Oct 31 2014

áama / **amva-** • N • (king) salmon, "spring salmon" *Oncorhynchus tshawytscha* (ITIS).

Literally: 'what is eaten'

Derivation: [av-va-a](#)
eat-PL.ACT-DEVERB

Derivatives (12)

Source: WB 86, p.317; JPH mat ?;715, 06:595

Note: Note that final -a can be elided: áam u'ikuváara (KS). Locative is aamáhak.

Grammatical note: G751, G761; with irreg. morphophonemics.

- **pásay uum vúra aamáhak u'uruhikóoti.** The salmon beetle lays its eggs on salmon. [*Reference:* TK 143.5]
- **iifuti ta'itam kunimnishkírihvaheen pa'áama.** So after a while they had broiled the salmon. [*Reference:* DeA&F 1 Salmon 018]

See [av](#) 'eat'

“Karuk Dictionary and Texts”: Search with examples

[amveeváxrah](#) dried salmon
[asúfiish](#) salmon backbone meat
[átay](#) roe, salmon eggs
[atáyxuun](#) salmon roe baked with powdered manzanita berries
[atay'ifápvaanich](#) type of salmon, similar to nūurit.

[átish 1](#) back meat of salmon
[atishuuf](#) back meat of salmon
[átvaaf](#) salmon liver

[avatákan](#) salmon glue, used for bows, made by chewing salmon skin
[axvahiklikvapuh](#) broiled salmon head
[axváh'iish](#) cartilage inside salmon's head
[chiiipich](#) a type of salmon, redfish, a stunted variety of *Oncorhynchus nerka* (H), or possibly jack salmon (chk)
[chuskáakach](#) chub salmon
[fihihikpak](#) generative organs of the male salmon

[ihmar / ihmára-](#) (plural) to run (used of salmon, as well as of creatures with legs)
[ihmárakurih](#) (salmon) to run into a creek
[ihvithkir / ihvithkiri-](#) to clean salmon on (something)
[iinayáarihva](#) salmon
[ikilikva](#) rack for salmon (for drying or for broiling)

[ikikváram](#) rack for broiling salmon
[ikikveevaxrah](#) dried broiled salmon
[iknakarav'athkúrit](#) juice from joints of salmon backbone
[ikóor](#) to stick something through something, as a stick through a piece of salmon for cooking
[ikúkurih](#) to set up (salmon) to broil

- **iifuti ta'ítam kunimnishkirihaheen pa'áama**. So after a while they had broiled the salmon.
 [Reference: DeA&F 1 Salmon 018]

See [av 'eat'](#)

Short recordings (3) | Sentence examples (55)

Display mode: sentence | [word](#) | [word components](#)

1. **pa'áama tóo kpuuhsip.**
 The salmon swam away.
 | Source: Vina Smith, Sentences about spatial relations (VS-13) | [read full text](#)
 | Spoken by Vina Smith | [Download](#) | [Play](#)
2. **áama ni'áveesh.**
 I am going to eat salmon.
 | Source: Vina Smith, Sentences: questions (VS-16) | [read full text](#)
 | Spoken by Vina Smith | [Download](#) | [Play](#)
3. **pa'áama húut imniisht'i?**
 How do you cook your salmon?
 | Source: Vina Smith, Sentences: questions (VS-16) | [read full text](#)
 | Spoken by Vina Smith | [Download](#) | [Play](#)
4. **áama húm i'áveesh?**
 Are you going to eat salmon?
 | Source: Vina Smith, Sentences: questions and answers, verb tenses (VS-17) | [read full text](#)
 | Spoken by Vina Smith | [Download](#) | [Play](#)
5. **háá áama ni'áveesh.**
 Yes, I am going to eat salmon.
 | Source: Vina Smith, Sentences: questions and answers, verb tenses (VS-17) | [read full text](#)
 | Spoken by Vina Smith | [Download](#) | [Play](#)

(continued)

"Karuk Dictionary and Texts": Text list

[Dictionary](#)[Sentences & Texts](#)[Our Project](#)[Links](#)[Abbreviations](#)

Karuk Sentences and Texts

🔊 The audio icon indicates available audio recordings. To sort, click on a column header. For example, click on "Year" to sort by year.

Year ▾	Speaker(s)	Title	Text ID
1903	Mrs. Bennett	"Screech Owl and Coyote"	ALK_14-35
1927	Benonie Harrie	"How I Found Gold"	DAF_KT-05b
1929	Phoebe Maddux	"Bluejay Myth"	JPH_PHM-24-343a
1930	Yâas	"How Buzzard Became Bald"	JPH_KT-01b
1930	Afrîch	"Coyote Falls through the Living-House Roof Hole"	JPH_KT-12
1932	Phoebe Maddux	Of All Karuk plants the Black Nightshade is Most Like Tobacco, the Whites Tell Us	JPH_TKIC-III.3
1932	Phoebe Maddux	The Name of Tobacco	JPH_TKIC-III.2
1932	Phoebe Maddux	Phases of Flowering	JPH_TKIC-III.5.A.j.a1'
1932	Phoebe Maddux	Downslope and Upslope Tobacco	JPH_TKIC-III.4
1932	Phoebe Maddux	Morphology of the Tobacco Plant: The Plant	JPH_TKIC-III.5.A
1932	Phoebe Maddux	Sense Characteristics	JPH_TKIC-III.5.A.a
1932	Phoebe Maddux	Parts of the Tobacco Plant	JPH_TKIC-III.5.A.b-g
1932	Phoebe Maddux	"Leaf" English text followed by Karuk/English text in two parts regarding tobacco leaves	JPH_TKIC-III.5.A.h
1932	Phoebe Maddux	Gum	JPH_TKIC-III.5.A.i
🔊 1949	Julia Starritt	"How Coyote Stole Fire"	WB_LA78.1-019_1
🔊 1949	Nettie Reuben	"How Coyote Traded Songs"	WB_LA78.1-020_1
🔊 1949	Nettie Reuben	"The Story of Evening Star"	WB_LA78.1-018_1
🔊 1949	Chester Pepper	"Coyote as Priest"	WB_LA78.1-016_1c
🔊 1949	Chester Pepper	"Coyote and the Sun"	WB_LA78.1-016b
🔊 1949	Chester Pepper	"Deer-hunting Medicine"	WB_LA78.1-016_1a

(continued)

Maggie Charley in 1948

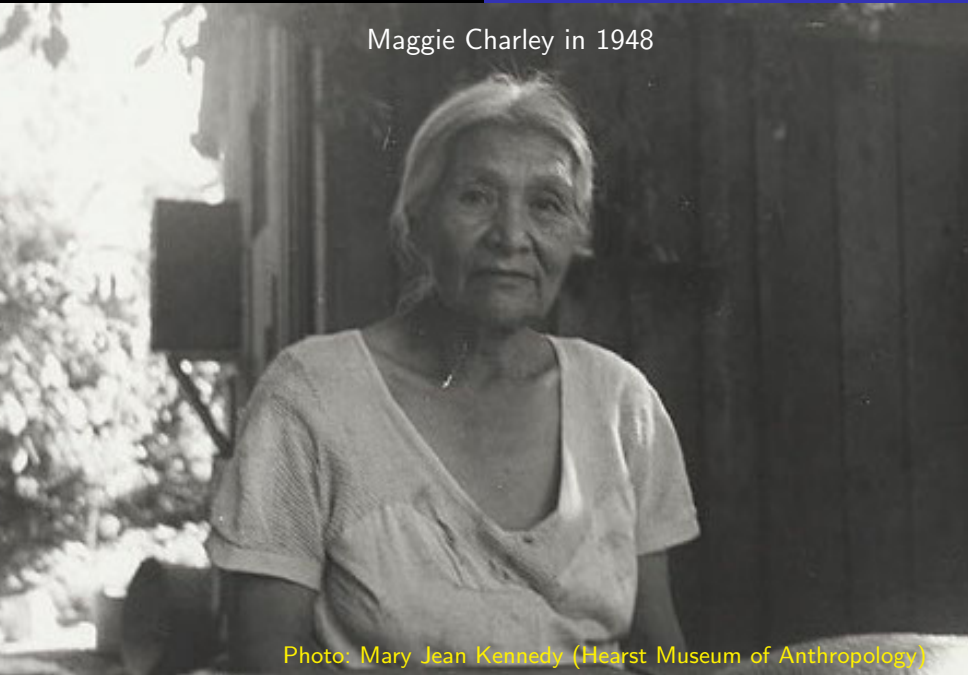


Photo: Mary Jean Kennedy (Hearst Museum of Anthropology)

Text display: Paragraph mode

[Dictionary](#)[Sentences & Texts](#)[Our Project](#)[Links](#)[Abbreviations](#)**Maggie Charley, "Indian Food" (1957)**Publication details: William Bright, *The Karok Language* (1957), pp. 282-283, Text 68

Project identifier: WB_KL-68

Text display mode: paragraph | [sentence](#) | [word](#) | [word components](#)

- [1] pishiich pakun'araarahiti pa'asiktávaansas ápkaas kun'ishumtih. xás pa'avansa vaa kunparishriihva pa'ápkaas. xás urípi kunvik. xás ishkêeshak imvir kuníkyav. xás vaa káan kuníkriihva, táay kuníykar pa'áama. xás pa'asiktávaansas kunihviithih. xás pimnanihraam vaa káan kuníkyav. xás vaa káan kunsuváxra pa'áama.
- [2] pa'asiktávaansas uum kun'ífikvunaa xuntápan. pa'áama kun'áamti káru vúra pa'éekoons. káakum pa'éekoons táay vúra tá kun'ífik, xás itahara'átimnam kóo tóo píishha. kuyrakhárinay xás amáyav pápiish.
- [3] pufich'aan tóo kyav. vaa púfich kunkupeeykárahiti pa'áaar, kuntáapvutih. axaksúpaa tupmúsan pamutátapva. vaa kunkupeeykárahiti papúfich. xás koovúra vaa kun'áamti, papúfich káru pa'áama káru pa'éekoons káru pápiish. akráa káru kun'áamti.

As they lived at first, the women scraped iris leaves. And the men twined the iris leaves into string. And they wove nets. And they made fisheries in the river. And they fished there, they caught a lot of fish. And the women cleaned (the fish). And they made a summer-camp there. And they dried the salmon there.

The women gathered acorns. They ate the salmon and the acorns. Some people gathered a lot of acorns, and put as many as ten baskets to soak. In three years, then the soaked acorns were good-tasting.

They made twine for deer-traps. The Indians killed deer that way, they trapped them. Every two days they would go look at their traps. They killed the deer that way. And they ate all that, the deer and the salmon and the acorns and the soaked acorns. They ate eels too.

(continued)

XML text database fragment

- ▶ From Maggie Charley's "Indian Food" (WB_KL-68):

```
<txt lang="kyh" >
```

```
  <w>
```

```
    <m lemma="4407" >pa</m>
```

pa-'asiktávaan-sas

```
    <m lemma="656" >'asiktávaan</m>
```

'the women'

```
    <m lemma="5200" >sas</m>
```

```
  </w>
```

```
  <w>
```

```
    <m lemma="416" >ápkaas</m>
```

ápkaas

```
  </w>
```

'iris (leaves)'

```
  <w>
```

```
    <m lemma="3977" >kun</m>
```

kun-'íshum-tih

```
    <m lemma="3130" >'íshum</m>
```

'they scraped (it)'

```
    <m lemma="6035" >tih</m>
```

```
  </w>.
```

```
</txt>
```

- ▶ Each "lemma" tag links to a lexicon ID number.

Text display: "Word components" mode

[Dictionary](#)[Sentences & Texts](#)[Our Project](#)[Links](#)[Abbreviations](#)**Maggie Charley, "Indian Food" (1957)**Publication details: William Bright, **The Karok Language** (1957), pp. 282-283, Text 68

Project identifier: WB_KL-68

Text display mode: [paragraph](#) | [sentence](#) | [word](#) | word components

- [1] [píshiiich](#) [pa-kun-'áaraahi-ti](#) [pa-'asiktávaan-sas](#) [ápkaas](#) [kun-'ishum-tih](#)
 first NOMZ-3pl(>3s)-live.(pl.)-DUR the-woman-PL iris.sp. 3pl(>3s)-scrape.iris-DUR
 As they lived at first, the women scraped iris leaves.
- [2] [xás](#) [pa-'ávansa](#) [vaa](#) [kun-parishriihva](#) [pa-'ápkaas](#)
 then the-man so 3pl(>3s)-twine the-iris.sp.
 And the men twined the iris leaves into string.
- [3] [xás](#) [urípi](#) [kun-vik](#)
 then net 3pl(>3s)-weave
 And they wove nets.
- [4] [xás](#) [ishkêesh-ak](#) [imvir](#) [kun-ikyav](#)
 then river-Locative fishery 3pl(>3s)-make
 And they made fisheries in the river.
- [5] [xás](#) [vaa](#) [káan](#) [kun-ikriihva](#) [táy](#) [kun-iykar](#) [pa-'áama](#)
 then so there 3pl(>3s)-fish.with.set-net much 3pl(>3s)-beat the-salmon
 And they fished there, they caught a lot of fish.

(continued)

Non-hierarchical text parsing

- ▶ Text parsing with no internal hierarchical structure:

víri vaa kích kun-kupí-tih-anik

so so just 3S-do-DUR-ANC

pa=kun-par-íshriih-va-naa-tih-anik

NOMZ=3PL-ROOT-down-PLACT-PLUR-DUR-ANC

“They were just doing this: twining.” (KS 41.003)

Even a word with seven internal morphemes and a proclitic lacks internal hierarchical structure.

- ▶ This is typically true of not only the visual display but the underlying data structure, but it is not faithful to linguistic structure . . .

Non-compositional meanings

- ▶ Complex words transmit semantic idiosyncrasies (conventional noncompositional meanings) to their further derivatives.
- ▶ This most often occurs with less semantically predictable word formation — e.g. compounds, denominal verbs, deverbal nouns, diminutives, but not e.g. causatives or productive directionals.

Base	Derivative word	Further derivative
ásiĩ “to sleep”	asím-chak “to close eyes” (“sleep-closing.up”)	asimchák-chak-veen-ach “wren” (“close.eyes-RED-AGT-DIM”)
ih “to dance”	ih-uk “to do a flower dance” (“dance-hither”)	ihuk-a “a flower dance” (“to.flower.dance-DEVRB”)
ishvírip “Jeffrey pine”	ishvínip-ich “place name” (“Jeffrey.pine-DIM”)	peeshvínipich /pa=ishvínipich/ “man’s name” (from ishvínipich) (“DEF- ishvínipich ”)
vítkira “ridge”	vítkír-ik “Bald Hills” (“ridge-LOC”)	vitkírík-thuuf “Redwood Creek” (“Bald.Hills-creek”)

Non-compositional meanings: Compounds

Base	Compound word	Further derivative
áas “water” iktañ “carry”	as-iktáv-aan “female” (“water-carry-AGT”)	musmus-’asiktávaan “cow” (“cattle-female”)
ápxaan “hat”	apxan-tínih-ich “white man” (“hat-wide-DIM”), reduced apxantîich	apxantîich-puufich “sheep” (“white.man-deer”) apxantiich-táyiith “potato” (“white.man-brodiaea”)
asa “rock”	asá-xuus “rubber” (“rock-smooth”)	asaxus-kútrahara “raincoat” (“rubber-coat”)
thúuf “creek”	thuf-károom “place near Rock Creek” (“creek-upriver.above”)	thufkaróom-thuuf “Rock Creek” (“ thufkároom -creek”)
úuh “tobacco” thaam “meadow”	úh-thaam “garden” (“tobacco-meadow”)	uhtháam-hi “to plant” (“garden-DENOM”)
úux “bitter”	úx-’aas “liquor” (“bitter-water”)	ux’as-iyeeshríhv-aan “bartender” (“liquor-sell-AGT”)

Non-compositional meanings: Denominatives, deverbatives

Base	Derivative word	Further derivative
páthak “knee”	páthak-hi “to kneel” (“knee-DENOM”)	pathakhí-ram “place by Katimin” (“to.kneel-place”) pathakhî-ishrih “to kneel down” (“to.kneel-down”)
thúkin “gall, bile”	thúkin-hi “to tattoo” (“tattoo-DENOM”)	thúkinh-a “a tattoo” (“to.tattoo-DEVERB”)
ihruv “to use”	ihrôoha /ihruv-ahi-a/ “wife” (“use-ESS-DEVRB”)	ihnoohá-hiich “common-law wife” (“wife-make.believe”)
ithyuru “to haul”	ithyur-a “automobile” (“haul-DEVRB”)	ithyurá-'aah “headlight” (“automobile-fire”)
matnus “to burst”	matnus-a “cotton” (“burst-DEVRB”)	matnusá-vaasa “quilt” (“cotton-blanket”)

Non-compositional meanings: Problems for searching

Search Index

ihuk to do the flower dance (puberty dance)

Dictionary Entry

lexicon ID #1593 | revised Apr 20 2014

ihuk • v • to do the flower dance (puberty dance)

Derivation: [ih-uk](#)
dance-to.here

Derivatives (5)

[ihuk](#) "flower dance, girl's puberty ceremony"

[ihukar](#) "to go flower-dancing"

[ihukar](#) "flower dance song"

[ihukuum](#) "do the flower dance"

[ihukvunaa](#) "flower-dance"

Source: WB 416.1, p.336

Grammatical note: Cf. ih 'to dance', -uk 'to here' (G754.17).

- **mi'aramah tuyêeripha, káan xás kun'ihukti.** Your child is having her first menses, they're having a puberty dance there. [*Reference:* KT 129.32]
- **xás payêeripharas kunpiip, nuu chími nu'ihukeesh.** And the pubescent girls said, "Let's do the flower dance!" [*Reference:* KT 145.3]

Sentence examples (9)

Display mode: sentence | [word](#) | [word components](#)

1. **púyava káan xás tá kun'ihukvunaa.**

Then they flower-danced there.

| Source: Nettie Reuben, "Coyote's Homecoming" (WB_KL-02) | [read full text](#)

2. **kunxus, "uknamxánahich chími nu'ihukanveesh."**

They thought, "We'll go flower-dance at uknamxánahich."

| Source: Nettie Reuben, "Coyote's Homecoming" (second telling) (WB_KL-02a) | [read full text](#)

| Spoken by Nettie Reuben | [Download](#) | [Play](#)

Search Index

asiktávaan woman; female

Dictionary Entry

lexicon ID #656 | revised Aug 19 2014

asiktávaan • N • woman; female *Variant:* asiktáan.*Literally:* 'water-carrier'*Derivation:* [áas iktav-aan](#)
water hold.in.hand-Agentive*Derivatives (5)*[asiktávaanha](#) "to marry a woman"[asiktávaan imxaathíhan](#) "plant sp."[asiktavankêem](#) "woman's name, Mary Ike"[asiktavanpírish](#) "love medicine to get a woman"[chimchikara'asiktávaan](#) "leafy species of horsetail"*Source:* WB 145.6, p.3212

Note: Means 'female' in forms like musmus'asiktávaan 'cattle-female, cow'. "Of the flower stalk or of a plant with little foliage they say [ávan](#) 'husband' 'male' [because naked]; of a plant with a well-leaved or skirted appearance, they say asiktávaan 'woman'" (JPH pla 06:513).

Grammatical note: Cf. áas 'water', iktav (v/m) 'to carry in hands', G76.

- **patakunikviit-hinaa hōoy vúra vaa kun'irunaati, tūpichas pa'asiktávaansahanik.** When everybody slept, the mice went anywhere, those small girls that used to be women. [*Reference:* KS38. Mice story 024]
- **áxak asiktáan kun'iinanik kustáaras ameekýáraam.** Two women, sisters, once lived at ameekýáraam. [*Reference:* WB 17: Coyote Gives Salmon 001]

Short recordings (2) | Sentence examples (79)Display mode: sentence | [word](#) | [word components](#)1. **asiktávaan**

woman, female

| Source: Phoebe Maddux, Parts of the Tobacco Plant (JPH_TKIC-III.5.A.b-g) | [read full text](#)2. **víri vaa kunkupíth, pa'asiktávaansa kunxúti " kírí nutururípan pa'áhp."**

They were doing that, the women were trying to hook out the sticks.

| Source: Chester Pepper, "Coyote's Journey" (WB_KL-03) | [read full text](#)

Search Index

ih to dance

Dictionary Entry

lexicon ID #1525 | revised Nov 03 2005

ih • v • to dance

Derivatives (17)

Source: WB 416, p.336

- **uxúti kírí ní'ih.** He wants to dance. [Reference: KV]
- **vúra vaa kun'iíhti.** They kept dancing that way. [Reference: WB 22: Old Man Turtle 016]

Sentence examples (42)

Display mode: sentence | [word](#) | [word components](#)

1. **púyava káan xás tá kun'ihukvunaa.**
Then they flower-danced there.
| Source: Nettie Reuben, "Coyote's Homecoming" (WB_KL-02) | [read full text](#)
2. **tá kun'iharuk.**
They came to dance.
| Source: Nettie Reuben, "Coyote's Homecoming" (WB_KL-02) | [read full text](#)
3. **kunxus, "uknamxánahich chími nu'ihukanveesh."**
They thought, "We'll go flower-dance at uknamxánahich."
| Source: Nettie Reuben, "Coyote's Homecoming" (second telling) (WB_KL-02a) | [read full text](#)
Spoken by Nettie Reuben | [Download](#) | [Play](#)
4. **kun'ihukanveesh uknamxánahich.**
They were going to flower-dance at 'uknamxánahich.
| Source: Nettie Reuben, "Coyote's Homecoming" (second telling) (WB_KL-02a) | [read full text](#)
Spoken by Nettie Reuben | [Download](#) | [Play](#)
5. **ta'itam kun'árihishriihvaheen pa'ihukar.**
So they sang the flower-dance songs.
| Source: Nettie Reuben, "Coyote's Homecoming" (second telling) (WB_KL-02a) | [read full text](#)
Spoken by Nettie Reuben | [Download](#) | [Play](#)

Search Index

áas water; juice

Dictionary Entry

lexicon ID #50 | revised Nov 07 2014

áas • N • water; juice

Derivatives (29)

Source: WB 145, p.321

Note: Equiv. to ishaha. Idiom: áas u'íishti 'he's eating a meal', lit. 'he's drinking water'.

- **táni'ákih, aas tani'ákih.** I'd feed him, I'd give him water. [Reference: WB T93. Violet's dog. 008]

Sentence examples (110)

Display mode: sentence | [word](#) | [word components](#)

1. **xás áas upáathkuri, xás koovúra upiktit pasárip.**
And she threw it in the water, and she unwove all the sticks.
| Source: Violet Super, Grace Davis, and Madeline Davis, Conversation (GD-MD-VSu-01) | [read full text](#)
2. **káan aas uvúunti.**
There was a spring flowing there.
| Source: Violet Super, Grace Davis, and Madeline Davis, Conversation (GD-MD-VSu-01) | [read full text](#)
3. **yaas pá'aas kun'áskooti,**
then they sprinkle water on it,
| Source: Violet Super, Grace Davis, and Madeline Davis, Conversation (GD-MD-VSu-01) | [read full text](#)
4. **peheeraha'íppa uum vúra iváxra kúnish koovúra, pu'ássarhara, sákriiv.**
The tobacco plant is all dryish, it is not juicy, it is tough.
| Source: Phoebe Maddux, Morphology of the Tobacco Plant: The Plant (JPH_TKIC-III.5.A) | [read full text](#)
5. **asiktávaan**
woman, female
| Source: Phoebe Maddux, Parts of the Tobacco Plant (JPH_TKIC-III.5.A.b-g) | [read full text](#)
6. **pa'áas áthiik.**
The water is cold.
| Source: Vina Smith, Sentences about personal states (VS-06) | [read full text](#)
Spoken by Vina Smith | [Download](#) | [Play](#)

XML text database fragment

- ▶ From Mamie Offield's "The Greedy Father" (WB_KL-24):

<w><m lemma="3745">kári</m> </w>	kári "then"
<w><m lemma="6847">xás</m> </w>	xás "then"
<w><m lemma="5506">t</m> <m lemma="6175">u</m> <m lemma="661"> <u>'asimáchishrih</u> </m> <m lemma="6648">vunaa</m> </w>	tu'asimchishrihvunaa "she put (them) to sleep"
<w><m lemma="4407">p</m> <m lemma="920">áaxiich</m> </w>.	p=áaxiich "the child(ren)"

- ▶ Each "lemma" tag links to a lexicon ID number.
- ▶ The underlined verbal stem is morphologically complex: **asiĩ** "sleep" + causative **-math** + **ishrih** "down".

A morphologically complex stem in the lexicon

[Dictionary](#)
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Karuk Dictionary

by William Bright and Susan Gehr (© Karuk Tribe)

[New search](#)

Index order: alphabetical | [text frequency](#)

Search Index

asimáchish / asimáchishrih- put to sleep

Dictionary Entry

lexicon ID #661 | revised Oct 31 2014

asimáchish / asimáchishrih- • v • put to sleep

Derivation: [ásiv-math-ish](#)
go.to.bed-CAUS-down

Source: WB 157.1, p.323; G754.12, G753.3

Grammatical note: Cf. *ásiv* 'to sleep', *-math* 'cause' (G754.12), *-ish(rih)* 'down' (G753.3).

- **kári xás tu'asimáchishrihvunaa páaxiich.** Then she put the children to sleep. [*Reference:* WB T24.12]

Sentence example (1)

Display mode: sentence | [word](#) | [word components](#)

1. **kári xás tu'asimáchishrihvunaa páaxiich.**

So she put the children to bed.

| Source: Mamie Offield, "The Greedy Father" (WB_KL-24) | [read full text](#)

Morphological parsing: Summary

- ▶ Lexicon database
 - ▶ Every attested stem (base of inflection) has an entry.
 - ▶ The coded ingredients of any complex stem are its maximal (attested) components. For example:
 - ▶ **ihukvunaa** “a flower dance” = **ihukvunaa** + DEVRB **-a**
 - ▶ **ihukvunaa** “to have a flower dance” = **ihuk** + PL **-vunaa**
 - ▶ **ihuk** “to do the flower dance” = **ih** “to dance” + **-uk** “hither”

- ▶ Text database
 - ▶ The coded ingredients of any complex form are its inflectional affixes and its stem.
 - ▶ Thus **tu’asimchishrihvunaa** “she put (them) to sleep” = PERF **t-** + 3SG **u-** + **’asimáchishrih** “put to sleep” + PL **-vunaa** (where **’asimáchishrih** is a complex stem in the lexicon).

- ▶ Thereby search queries are possible on minimal morphs or complex forms.

Pluractional **-va** (Bright 1957, Conathan & Wood 2003)

- ▶ Representative examples
 - ▶ **xás kári aséemfir t-u-turu-ráamnih-va**
 then then rock:hot PERF-3SG-handle-into-PLACT
 “Then he put in hot stones.” (Julia Starritt, WB_KL-81)
 - ▶ **chavúra itaharâan tá kun-p-arihíshriih-va**
 finally ten.times PERF 3PL-ITER-sing-PLACT
 “Finally they sang ten times.” (Nettie Reuben, WB_KL-02)

- ▶ How is **-va** ordered with respect to other suffixes?
 - ▶ Scope?
 - ▶ On the typological parameter space: Rice (2011)

Pluractional -va position: Immediately after the root

- ▶ Root + PLACT (AM = Associated Motion)
 - ▶ **xás u-kfuy-v-ûunish**
then 3SG-whistle-PLACT-at
“And she whistled (a signal) at him.” (Lottie Beck, WB_KL-35)
 - ▶ **chími ni-maah-v-ár-eesh**
soon 1SG-see-PLACT-AM-FUT
“I’m going to go visiting.” (Bright & Gehr 2005 s.v. **máahva**)
- ▶ Internally complex eventuality with sub-parts
 - ▶ **ikfúuy-va** “whistle a signal” (complex whistling)
 - ▶ **máah-va** “visit” (complex seeing)
- ▶ Other suffixes have scope over Root + PLACT

Pluractional -va position: Surrounded by other suffixes

- ▶ Directionals + AM + PLACT + TAM
 - ▶ **uknamxánahich chími nu-'íh-uk-an-v-eesh**
 placename soon 1PL-dance-hither-AM-PL.ACT-FUT
 “We’ll go flower-dance at **uknamxánahich**.”
 (Nettie Reuben, WB_KL-2a)
 - ▶ **pa=káan kun-'axúp-ruuprih-vu-ti**
 NOMZ=there 3PL-put.deermeat-in.through-PLACT-DUR
pa=púufich t-óo mtaap-ha
 the=deer PERF-3SG dust-DENOM
 “Where they used to put in the dressed deer meat was dusty.”
 (Mamie Offield, WB_KL-33)
- ▶ Multiple event instances or participants in a temporal window
 - ▶ multiple dancers
 - ▶ multiple instances of putting deer meat somewhere
- ▶ Compositional interpretation; no added conventional meaning

Pluractional -va position: After TAM

▶ TAM + PLACT

▶ **peheeraha-’ípa pa=kóo u-thvúy-tiih-va**

the:tobacco-tree the=all 3SG-be.named-DUR-PLACT

pa=mu-svitá-va

the=3SG.POSS-part-INDEF

“how all the tobacco plant’s parts are (variously) named”

(JPH_TKIC-III.2)

▶ **káruma ník apxan-yâamach-as tá**

in.fact a.little cap-pretty-PL PERF

kun-p-ithxuná-tiih-va

3PL-ITER-put.over.head-DUR-PLACT

In fact they wear pretty caps.” (Lottie Beck, WB_KL-30)

▶ Multiple (e.g. simultaneous) imperfective eventualities

Pluractional -va position: A near-minimal pair

- ▶ DUR (PLACT): multiple event instances in a temporal window

páy peethívthaaneen thaanêen

this the:land around

ni-p-thivrúh-iroopith-vu-tih

1SG-ITER-float-around-PLACT-DUR

“I float around and around this world.”

(Chester Pepper, WB_KL-52)

- ▶ PLACT (DUR): multiple (simultaneous) imperfective eventualities

u-thivrúh-tiih-va

3SG-float-DUR-PLACT

“(Clouds) are floating.”

(Bright & Gehr 2005 s.v. **thivruh**)

Pluractional -va position

▶ Multiple -va

tá kun-’ákun-v-an-va

PERF 3PL-shoot-PLACT_a-AM-PLACT_b

“They went hunting.”

(Nettie Reuben, WB_KL-72)

▶ Interpretation

- ▶ PLACT_a: can add conventional (non-compositional) meaning

akun- “shoot”

îmniḥ “love”

iin “be on fire”

íriḥ “drip”

mah “see”

sīr “disappear, be lost”

yuh “spit”

ákunva “hunt”

îimniḥva “have a love affair”

îinva “be a forest fire”

íriḥva “leak”

máahva “visit”

sīinva “fail to recognize”

yúuhva “vomit”

- ▶ PLACT_b: multiple event instances or participants

This is not canonical multiple exponence (Caballero & Harris 2012), because each instance of the affix is fully interpreted.

Pluractional -va: Summary

- ▶ Some locations for -va:

Root – **va**₁ – Directionals, AM – **va**₂ – TAM – **va**₃

- ▶ Meaning effects of -va due to semantic composition:
 - ▶ -va₁ combines with Root: adds lexical aspect or some other conventional meaning
 - ▶ -va₂ combines with Root + Directionals + AM: multiple instances or participants of the associated event
 - ▶ -va₃ combines with Root + Directionals + AM + TAM: multiple events with shared temporal features

There is only one -va, with different kinds of interpretation a compositional effect of its placement.

Morphological parsing and pluractional -va

- ▶ Bright's (1957) templatic analysis of Karuk suffixes describes about a dozen position classes. For example:
 - ▶ Class 3: directional suffixes
 - ▶ Class 4: AM -aĩ and several other suffixes

But his appendix lexicon is instead hierarchically structured, because complex word meanings are crucially compositional:

416. ʔih p.i. to dance
1. ʔihuk p.i. to do the 'flower dance,' i.e., the girls' puberty dance: G754.17?
 1. ʔihuka 'flower dance': G761
 2. ʔihukara 'flower-dance' song: "flower-dancing instrument"; G754.3., G761
 3. ʔihukĩ·m p.i. to do the 'flower dance' (T6.72): -ũ·m is not identifiable.
 2. ʔi·hvúna· brush dance: "plural dancing"; G756, G761

- ▶ We have shown that it is helpful to have direct access to these complex units in a text corpus. A good analysis benefits from more than just a list of all examples of a morpheme.

Yôotva!

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