

# What goes postverbal in a verb-final language?

## The interplay of syntactic category, information structure, and word order in Karuk\*

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### 1 Introduction

**Getting acquainted** Nettie Rueben’s telling of *Coyote’s homecoming*, a traditional Karuk story (*pikvah*).<sup>1</sup>

**Research question** What is the structural organization of Karuk clauses?

Existing descriptions are brief and emphasize the freedom of position that nominal arguments enjoy (de Angulo and Freeland 1931:194–5, Bright 1957:140–1, Macaulay 2000:479–80):

- (1) “Most of the business of the language goes on within the verb. The nouns that represent the actors in the sentence are interspersed between the verbs without syntactic cases or fixed order to show their relations.” (de Angulo and Freeland 1931:194–5)

More generally, Karuk exhibits Hale’s three characteristic for non-configurationality (Hale, 1983):

- (2) DP arguments may be
  - a. freely ordered
  - b. freely dropped
  - c. freely split

#### Claims to be developed here

1. Karuk is verb-final though this is obscured by two systematic exceptions:
  - (a) DP arguments follow V under certain information-structural conditions.
  - (b) Complement clauses and quotes invariably follow V
2. Karuk exhibits mixed headedness (cf. Aissen 1992 on Mayan)
  - (a) Projections of lexical categories (V, N, A, P) are head-final
  - (b) Projections of functional categories (Asp, C, D, Deg, Modal, Neg, Q, T) are head-medial.
3. Karuk word order is not particularly free; the elements that enjoy the greatest word order freedom are the ones that control agreement on the verb (DPs and some PPs), cf. Baker (1996).

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<sup>1</sup>Recorded in 1949 by Bill Bright. Original transcription and translation published in Bright (1957:168–171). Published online in modern tribal orthography and with accompanying audio by the Berkeley Karuk Study Group in 2012.

## Language background

- Setting
  - spoken along the middle course of the Klamath river in northwestern California
  - isolate within Hokan group
  - neighbours: Yurok (Algic), Shasta (also Hokan), Tolowa (Athabaskan), Hupa (Athabaskan)
  - severely endangered; first-language speakers all elderly; language teaching, documentation, revitalization in communities and local schools (head start through high school).
- Documentation and data sources:

RESEACHER	OUTPUT	PERIOD
Jeremiah Curtin	unpublished field notes	1889
Alfred Kroeber	unpublished field notes	1903
C. Hart Merriam	unpublished field notes	1910-21
John Peabody Harrington	Karok Texts (IJAL) Tobacco among the Karok Indians Unpublished fieldnotes	1920s and 30s
Jaime de Angulo and Lucy Freeland	Karok Texts (IJAL)	late 1920s
William Bright	The Karok Language (UC Press) unpublished field notes	1949–57, 1980s–2000s
Various community members <sup>2</sup>	instructional material, incl. video	1970s–present
UC Berkeley faculty and students	unpublished field notes	2010–present

- Large and multifaceted corpus of Karuk language use with a time-depth of 125 years
- More than 5,000 sentences have been transcribed in current tribal orthography and morphologically parsed into a searchable database that is integrated with the online Karuk-English dictionary.
- Data presented below comes from my work with Karuk elders, published materials and archival materials.<sup>3</sup>

## 2 Verb-finality

With the exception of VSO, every logical order of S, O and V is attested in the electronically searchable corpus (See Appendix A for examples).

So why might one think that Karuk is verb final?

**1. Adverbial complements** Certain verbs obligatorily occur with an adverbial dependent expressing manner or quality, including *ipmahóonkoon*, ‘feel’, *kúupha* ‘do, act’, *imúsaha* ‘look (like)’, *imxaath* ‘smell (like)’, *ákat* ‘taste (like)’.<sup>4</sup>

- (3) xás vúra **káarim** t=óo pmahóonkoon.  
 then INT bad PERF=3SG feel  
*Then he felt bad.* Julia Starritt, “Coyote’s Journey” (WB-KL-04:20)
- (4) **vaa** u-kúphaa-nik á ’iknêechhan.  
 thus 3SG-do-ANC falcon  
*Duck Hawk did this.* Chester Pepper, “Duck Hawk and His Wife” (WB-KL-26:1)
- (5) pa=’ishkêesh **yáv** u-músahi-tih.  
 the=river good 3SG-look-DUR  
*The river looks good.* Charlie Thom Sr., 06/05/2013

<sup>2</sup>Some, but by no means all, of the Karuk people doing language documentation are listed in the acknowledgements at the beginning of this handout.

<sup>3</sup>Textual examples are identified by speaker, text followed by an alpha-numerical code indicating RESEARCHER-PUBLICATION-TEXT#:LINE#, where WB-KL = Bright (1957), DAF-KT = de Angulo and Freeland (1931), JPH-KT = Harrington (1930), JPH-TKIC = Harrington (1932), ALK = Kroeber field notes. Data from my own fieldwork is annotated with the name of the speaker and the date of recording.

<sup>4</sup>All examples are given in the orthography adopted by the Karuk tribe. I use the following abbreviations in the glosses: ANC = ancient tense, ANT = anterior tense, BEN = benefactive, C = complementizer, CAUS = causative, DIM = diminutive, DUR = durative, EVID = evidential, IMP = imperative, INT = intensive, IRR = irrealis, ITER = iterative, LOC = locative, NEG = negation, OBV = obviative, PERF = perfect, PL = plural, PL.ACT = plural action, PROS = prospective aspect, RES = resultative, SG = singular. 1SG>2SG = 1SG subject w. 2SG object (though see Macaulay (1992) for a different analysis). In some cases the derivational morphemes of a verb stem are not glossed individually.

Such adverbial complements invariably precede the verb and are judged ungrammatical in post-verbal position:

- (6) Naa **vúra yav** ni-pmahóonkoona-tih.  
 1SG INT good 1SG-feel-DUR  
*I feel good.* Vina Smith, 09/07/13
- (7) \*Naa ni-pmahóonkoona-ti (**vúra**) **yav**.  
 1SG 1SG-feel-DUR INT good  
 Vina Smith, 09/07/13

**2. PPs** PPs obligatorily precede the verb:<sup>5</sup>

- (8) [**ihêera kóo**] u-’úux.  
 tobacco as.much.as 3SG-be.bitter  
*It tastes as bad as tobacco.* Phoebe Maddux, “pahúut u’ákatih”, (JPH-TKIC, p. 49)
- (9) káru pa-súrip, pa=[**sárip kumá’ii**] ta kun-’áahka-haak, ...  
 and the-hazel.bush C=hazel.stick because.of PERF 3PL-burn-IRR  
*And the hazel bushes, when they burn them off for hazel sticks, ...* Phoebe Maddux (JPH-TKIC, p. 63)

When presented with the PP after the verb, the sentence is either judged ungrammatical (10) or reformulated to not involve a PP (11):

- (10) \*u-’úux [**ihêera kóo**]  
 3SG-be.bitter tobacco as.much.as  
 Intended: *It tastes as bad as tobacco.* Vina Smith, 15/01/2014
- (11) u-’úux, kúnish ihêera.  
 3SG-be.bitter, sort.of tobacco  
*It is bitter, sort of like tobacco.* Vina Smith, 15/01/2014

**3. Frequency** Using Nettie Rueben’s *Coyote’s Homecoming* for illustration:

- 71 clauses total. 67 of them contain a verb; call them ‘verbal clauses’
- 75% of verbal clauses are verb-final; 25% have one or more elements after the verb.
- Of the verb-final clauses, 40% are trivially verb-final, meaning that the clause consists of just a verb and one or more grammatical elements that only appear pre-verbally, such as conjunctions, discourse particles, evidential markers, and TAM particles.
- The other 60% of verb-final clauses have one or more non-grammatical elements before the verb, such as arguments and adverbials.

**4. Default in grammatical elicitation** When asked to provide a Karuk translation of an English transitive clause without any contextual clues, speakers systematically offer a verb-final structure. Note that this cannot be due to calqueing since English is SVO.

**5. Cross-category uniformity** Projections of other lexical categories are clearly head-final or consistent with a head-final analysis.

**P** Karuk has seven adpositions:

- îin* marks an obviative subject (Macaulay 2000)
- koo* ‘as much as’
- kumá’ii* ‘because of’
- kuth* ‘because of’
- kuuk* ‘to’
- múuk* ‘with (instrumental)’
- xákaan* ‘with (comitative)’

All seven are postpositions

<sup>5</sup>Karuk has three postpositions that do not obey this generalization: *îin*, which marks an obviative subject (Macaulay 2000), *múuk* ‘with (instrumental)’, and *xákaan* ‘with (comitative)’. PPs headed by these postpositions may occur before or after the verb. I’ll return to these briefly at the end of the talk.

**N** There appear to be no complements to N or attributive modification in Karuk. Possessors precede the possessed N:

- (12) pa=nini-'ah-tákni pa=mu-yukúku  
 the=1SG-fire-wheel the=3SG-shoe  
*my car's tire*

Julia Starritt "A blow out" (WB-KL-91:2)

**A** Adjectives do not take complements.

On this basis, I hypothesize that Karuk is verb-final. Two complications:

1. DP arguments may follow V under certain information-structural conditions.
2. Complement clauses and quotes invariably follow V

### 3 Post-verbal DPs

While grammatically free, the position of DP arguments seems to be restricted by pragmatic status, such that rheme (new) precedes theme (old) (cf. Tomlin and Rhodes 1979 on Ojibwa and papers in Payne 1992)

- (13) a. focused DPs (new/contrastive/identificational) appear preverbally  
 b. post-verbal position restricted to non-new, less salient, non-focused elements  
 c. preverbal position as default (cf. Harbour et al. 2012 on Kiowa)

- (14) DP<sub>(FOCUS)</sub> V DP<sub>\*FOCUS</sub>

**A preverbal focus position** Karuk has three focus particles: *kích* 'only', *káru* 'also', *kúna* 'in addition'. These particles are right-adjoined to the focused element:

- (15) naa kích  
 1SG only  
*only me*
- (16) naa káru  
 1SG also  
*me too*
- (17) fâat kúna?  
 what in.addition  
*what else?*

Overtly focus-marked constituents invariably precede the verb:

- (18) xás [pa='únuh-ich kich] t=u-páth-ih.  
 then the=round.object-DIM only PERF=3SG-throw-BEN  
*Then he threw only the kidney to him.*  
 Mrs. Bennett, "Screech Owl and Coyote" (ALK-14-35:13)
- (19) [uumkun káru] kun-pakúriih-va.  
 3PL also 3PL-sing-PL.ACT  
*They (the Does) were singing too.* (After saying that Coyote was singing when he met the Does)  
 Mamie Offield "Coyote Trades Songs and Goes to the Sky" (WB-KL-09:4)
- (20) [âanxus uum káru] pákuri u-thiiná-tih.  
 weasel 3SG also song 3SG-have-DUR  
*Weasel had a song.* (After the Old Woman sings her song)  
 Lottie Beck, "The Perils of Weasel" (WB-KL-18:19)
- (21) [pa=mu-hrôoha kúna] ú-kfuukiraa.  
 the-3SG-wife in.addition 3SG-grab  
*He grabbed his wife in turn.* (After grabbing his child.)  
 Lottie Beck, "The Greedy Father" (WB-KL-23:67)

Postverbal placement judged ungrammatical (22); preverbal placement invariably volunteered (23):

(22) \*tá nu-’ákih [uxnáhich kích].  
 PERF 1SG>2SG-feed strawberries only  
 Intended: *All I gave you were strawberries.* Vina Smith, 16/06/2013

(23) [uxnáhich kích] tá nu-’ákih.  
 strawberries only PERF 1SG>2SG-feed  
*All I gave you were strawberries.* Vina Smith, 16/06/2013

⇒ focus-marked elements must occur preverbally.

**Postverbal DPs** An explicit positive characterization of the information structural properties of post-verbal DPs still eludes me, but there are some intriguing textual cues, illustrated here with Chester Pepper’s *Coyote Tries to Reach the Sun* (WB-KL-12).<sup>6</sup>

[1] vaa u-kúpha-anik pihnêefich uum.  
 so 3SG-do-ANC coyote 3SG  
*Coyote did this way.*

[2] mâam pa=kúusra t=u-vá-ruprav.  
 uphill the=sun PERF=3SG-come-out.through.solid  
*The sun rose just uphill.*

[3] u-xú-tih “ku-mâam ú-krii pa=kúusrah”.  
 3SG-think-DUR 3SG-uphill 3SG-live the=sun  
*He thought, “The sun is just uphill from here.”*

[4] xás u-xú-tih “vaa tá káan ú-krii pa=kúusrah”.  
 then 3SG-think-DUR so PERF there 3SG-live the=sun  
*He thought, “The sun’s right there.”*

[5] p=oo-kfúk-uvraa yánava ithyáruk xás t=u-vá-ruprav pa=kúusrah.  
 C=3SG-climb-over EVID across then PERF=3SG-come-out.through.solid the=sun  
*When he climbed up over (the ridge), he saw the sun was rising across (above the next ridge).*

[6] chavúra pu=mah-ára hôoy p=oo-’aramsüpriv-tih.  
 finally NEG=see-NEG where C=3SG-start.out-DUR  
*In the end he didn’t find where it came from.*

[7] víri-va pihnêefich u-kúpha-anik.  
 so-INDEF coyote 3SG-do-ANC  
*Coyote did that.*

Postverbal DPs are

- protagonist of story, *pihnêefich* in line 1, OR
- Discourse-Old: *pa=kúusrah* in lines 3, 4 and 5.

## 4 Clausal complements

While there appear to be no clausal subjects in Karuk, finite complement clauses are found with verbs of perception, attitude, cognition, and communication,<sup>7</sup> as well as aspectual verbs:

<sup>6</sup>I believe there is an independent prosodic licensing mechanism whereby prosodically complex or heavy DPs may occur postverbally; see Appendix B.

<sup>7</sup>These verbs more typically occur with direct speech complements, but they are also attested with subordinate complement clauses. Quotation also appear postverbally; see Appendix C.

- (24)
- |               |                   |
|---------------|-------------------|
| aachíchha     | ‘to be glad’      |
| áapunma       | ‘to know’         |
| imus-         | ‘to look at’      |
| ikrúunti      | ‘to wait for’     |
| ikyâavarihva  | ‘to try’          |
| ipêer         | ‘to tell’         |
| ipshinvárihva | ‘to forget’       |
| káriha        | ‘to be ready’     |
| kôoha         | ‘to stop’         |
| mah           | ‘to see, to find’ |
| pasúpiichva   | ‘to reveal’       |
| piip          | ‘to say’          |
| pikrôok       | ‘to remember’     |
| pikyaar       | ‘to finish’       |
| táapkup       | ‘to like’         |
| thitiv        | ‘to hear’         |
| ûurih         | ‘to be unwilling’ |

- Complement clauses are introduced by the proclitic *pa=*, which Bright (1957:121–2) analyzes as a nominalizer; here I treat it as a complementizer (C).<sup>8</sup>
- Complement clauses invariably follow the verb in texts:

- (25) tá kun-’áapunma **p=oo-kitaxríharahi-tih.**  
 PERF 3PL-know C=3SG-be.unfaithful-DUR  
 They found out that he was being unfaithful.  
 Nettie Reuben, “The Adulterers Discovered” (WB-KL-39:24)
- (26) kéevníikich vúra uum u-tapkúupu-ti **p=óo-thtii-tih.**  
 old.woman INT 3.SG 3SG-like-DUR C=3SG-gamble-DUR  
*An old woman liked to gamble.*  
 Mamie Offield, “The Perils of Weasel” (WB-KL-19:1)
- (27) naa íp ni-pasúpiichv-at [**pa=sôomvaan** **t=i-’ípasuk**].  
 1SG PAST 1SG-reveal-PAST C=woman.who.offers.self.in.marriage PERF=2SG-bring.person.back  
*I revealed that you were bringing home a new wife.*  
 Mamie Offield, “Duck Hawk and His Wife” (WB-KL-27:23)

and in elicited forms:

- (28) naa vúra ni-tapkúupi-ti **pa=ni-’uufíthvu-tih.**  
 1SG INT 1SG-like-DUR C=1SG-swim-DUR  
*I like to swim.* Vina Smith 09/07/2013
- (29) ni-krúunti [**iim p=ee-mnísh-eesh**].  
 1SG-wait.for 2SG C=2SG-cook-PROS  
*I am waiting for you to cook.* Vina Smith, 09/08/2013

When presented with a preverbal complement clause in elicitation, the speaker rejected it as “no good”:

- (30) \*naa vúra **pa=ni-’uufíthvu-ti** ni-tapkúupi-ti.  
 1SG INT C=1SG-swim-DUR 1SG-like-DUR  
 Intended: *I like to swim.* Vina Smith 09/07/2013

or reinterpreted the subordinate clause as an adverbial clause and adjusted the form of the matrix clause accordingly:

- (31) [**iim p=ee-mnísh-eesh**] ni-krúuntih-eesh.  
 2SG C=2SG-cook-PROS 1SG-wait.for-PROS  
*If you are going to cook, I will wait.* (Vina Smith, 09/08/2013)

<sup>8</sup>This proclitic is segmentally identical to the definite determiner; Bright (1957) distinguishes the two based on the morphophonological processes they trigger.

**Note** Adverbial clauses use the same proclitic subordinator as complement clauses (*pa=*), but unlike complement clauses adverbial clauses may precede or follow matrix verb, as is typical for languages with an initial subordinator (Diessel, 2001).

- Some of the verbs in (24) also allow DP complements and, unlike complement clauses, a DP complement may follow or precede the verb:

- (32) **purafâat** vúra ná-'aapunmu-tih-ara.  
 nothing INT 1SG-know-DUR-NEG  
*I don't know anything.* Charlie Thom, Sr., 06/05/2013
- (33) xás káan **asiktávaan** u-tápkuup.  
 then there woman 3SG-like  
*He liked a woman there.* Lottie Beck, "Duck Hawk and His Wife" (WB-KL-25:6)
- (34) xás pihnêefich t=u-tápkuup **pa='asiktávaan-sa**.  
 then coyote PERF=3SG-like the=woman-PL  
*And Coyote took a liking to the women.* Chester Pepper, "Coyote's Journey" (WB-KL-03:98)

⇒ It is not that these particular verbs require their internal argument, irrespective of category, to follow them; rather CP complements must follow the verb, whereas DP complements may precede or follow the verb, as is generally true of DP arguments.

## 5 Interactions

Four word order patterns documented so far:

- i. [XP FOCUS-PARTICLE] > V
- ii. Adv > V
- iii. PP > V
- iv. V > CP

These set up two potential word order conflicts:

1. If CPs can be overtly focus marked, (i) and (iv) conflict
2. If CP can be complements of P, (iii) and (iv) might conflict

Both are possible and both are resolved by cataphora across the verb:

- (35) [*vaa*<sub>i</sub> FOCUS/P] > V > CP<sub>i</sub>

*vaa* 'thus' is the proform used with verbs that take adverbial complements. *vaa* also has anaphoric uses with CP antecedents.

### Focus-marked CPs

- (36) iinâak [**vaa**<sub>i</sub> **kích**] u-thítim-ti [**p=oo-pakuríih-vu-ti**]<sub>i</sub> "yôotva t=u-'iiv'íiv íkamish t=u-'iiv'íiv".  
 indoors thus only 3SG-hear-DUR C=3SG-sing-PL.ACT-DUR hurray! PERF=3SG-die son.in.law PERF=3SG-die  
*Inside he just heard her singing, "Hurray, he's dead, son-in-law is dead!"*  
 Lottie Beck, "The Perils of Weasel" (WB-KL-18:18)
- (37) uum [**vaa**<sub>i</sub> **kích**] u-'ítaap-ti [**pa='arah u-patum-kôo-ti kuma-ánav**]<sub>i</sub>.  
 she this only 3SG-know-DUR C=person 3SG-suck-to-DUR kind-medicine  
*She only knows how to treat the person with the sucking kind of medicine.*  
 Nettie Rueben in conversation with Lottie Beck (LA 078, tape 1, side A, line 397 of Bright's transcription)

**CP complements to P** *ík* and *vúra* are second position clitics and therefore intrude between the postposition and its complement in (38)

- (38) [vaa<sub>i</sub> ík vúra kóo] káan ku-'íin-eesh [pa=axvâahar t=óo msíp-ishri-haak]<sub>i</sub>  
 this must INT as.much.as there 2PL-be.(dual)-PROS C=pitch.wood PERF=3SG cool.off-RES-IRR  
*You must stay there until the pitch-wood is extinguished.*  
 Julia Starritt, “The Bear and the Deer” (WB-KL-32:39)

Other logically possible ways of resolving the word order conflict:

- (39) a. [CP P/FOCUS] > V  
 b. V > [CP P/FOCUS]  
 c. P/FOCUS > V > CP

- none of these strategies are attested in the 5000-sentence corpus.
- absence of (39a) confirms that CP complements—to V or P!— must occur postverbally (cf. section 4)
- absence of (39b) confirms that:
  - PPs must occur preverbally (cf. section 2)
  - focused elements must occur preverbally (cf. section 3)
- absence of (39c) suggests that:
  - PPs, unlike DPs, cannot be split across the verb in Karuk
  - there is no long-distance association with focus particles (unlike English)

## 6 Word order and agreement

Why should it be the case that non-nominal arguments (subcategorized Adverbs, PPs and CPs) have less freedom of position than nominal arguments?

Baker’s (1996) analysis of polysynthesis suggests a possible explanation for this split:

- Nominal dependents do not exhibit fixed position relative to the verb because they are in fact adjuncts and they may be left-adjoined or right-adjoined (to TP).
- The real nominal arguments are null pronominals and these null pronominals are the controllers of agreement on the verb.
- Non-nominal arguments are actual arguments of the verb—there is no agreement associated with these and no null proforms—and thus they are in structurally fixed positions.

**A wrinkle** Recall that there are three postpositions that are not required to occur preverbally—obviative *îin*, comitative *xákaan*, and instrumental *mûuk* —but may occur pre- or postverbally.

Two of those three postpositions are in fact transparent to agreement with the verb, such that their complement controls (or co-controls) subject agreement:

- (40) Obviative *îin*
- a. ... naa vúra [púra fâat îin] nee-shkâxishrih-math-eesh  
 1SG. INT nothing OBV 3SG>1SG-stop-CAUS-PROS  
 (*And Fire said,*) “*Nothing can stop me.*” Mamie Offield “Victory Over Fire” (WB-KL-45:18)
- b. ... tá kun-tápkuup [pa-'arara-'îin].  
 PERF 3PL-like the-human-OBV  
 ... *the people liked him.* Daisy Jones “The Snake People” (WB-KL-60:22)



- (41) Comitative *xákaan*
- a. *xás* [pa=mú-chaas *xákaan*] *sáruk* **kun**-ithvírip-fak.  
 then the=3SG-younger.brother with downhill 3PL-(two).run-from.uphill  
*And he and his younger brother ran downhill.* Julia Starritt, “The Bear and the Deer” (WB-KL-32:44)
- b. *ikxunanáhaanich* **kun**-’íin [mu-keechíyav *xákaan*]  
 evening.star 3PL-(two).be 3SG-sweetheart with  
*Evening Star lived with his sweetheart.*  
 Nettie Reuben, “Medicine for the Return of a Sweetheart” (WB-KL-49:1)

The third postposition that may occur before or after the verb is instrumental *múuk*. Unlike *íin* and *xákaan*, *múuk* does not control agreement, and I don’t have an explanation for why it is free to occur post-verbally. It does have a closer morphophonological connection with its complement than the postpositions that must appear preverbally, possibly suggesting that it is more of an enclitic (or post-pound in Bright’s terminology) than an adposition.

## 7 Conclusions

1. Karuk is verb-final though this is obscured by two systematic exceptions:
  - (a) DP arguments follow V under certain information-structural conditions.
  - (b) Complement clauses and quotes invariably follow V
2. Karuk exhibits mixed headedness (cf. Aissen 1992 on Mayan)
  - (a) Projections of lexical categories (V, N, A, P) are head-final
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## Appendix A: Order of S and O relative to V

### Intransitive clauses

- (42) xás pa-kah'arah-sas kun-ivyíhuk.  
then the-Shasta.Indian-PL 3PL-come.PL  
*And the upriver people came.* [SV]  
Julia Starritt “Coyote Steals Fire” (WB-KL-10:2)
- (43) t-u-piváxra pa-'ishaha.  
PERF-3SG-dry.up the-water  
*The water had dried up.* [VS]  
Nettie Reuben “Coyote’s Journey” (WB-KL-01:62)

### Transitive clauses with one overt DP argument

- (44) kári xás pa-mú-vaas u-p-ishnáka-rishuk.  
then then the-3SG-blanket 3SG>3-ITER-put.aside-out  
*And he undid his blanket.* [OV]  
Nettie Reuben “Coyote’s Journey” (WB-KL-01:56)
- (45) xás kúuk u-páath-ma pa-mú-vaas.  
then to.there 3SG>3-throw-toward the-3SG-blanket  
*And he threw his blanket at it.* [VO]  
Nettie Reuben “Coyote’s Journey” (WB-KL-01:60)
- (46) naa ník ni-p-shan-siipree-vish.  
1SG a.little 1s>3-ITER-carry-up-FUT  
*I'll carry them away.* [SV]  
Mamie Offield “Duck Hawk and His Wife” (WB-KL-27:27)
- (47) ... tá kun-tápkuup pa-'arara-'iin.  
PERF 3PL>3SG-like the-human-OBV  
*... the people liked him.* [VS]  
Daisy Jones “The Snake People” (WB-KL-60:22)

### Transitive clauses with two overt DP arguments

- (48) púyava kári pa-'áaraar pa-'urípi u-p-ithyúru-riipaa  
you.see then the-human the-net 3SG>3-ITER-pull-out  
*Then the Indian pulled the net out of the water.* [SOV]  
Julia Starritt “Salmon Fishing” (WB-KL-69:16)
- (49) xás pa-pihnñich u-píimni pa-mú-'aramah  
then the-old.man 3SG>3-fall.in.love the-3SG-child  
*And the old man fell in love with his child.* [SVO]  
Julia Starritt “Coyote Marries His Own Daughter” (WB-KL-16:3)
- (50) ta'ítam kun-ífik-aheen pa-xuntápan pa-'asiktávaan-sa  
so 3PL>3SG-pick.up-ANT the-acorn the-woman-PL  
*Then the women gathered the acorns.* [VOS]  
Mamie Offield “Coyote Gives Salmon and Acorns to Mankind” (WB-KL-17:34)
- (51) pufích-taay kun-iykára-tih, itráhyar mu-túnviiv  
deer-much 3PL>3SG-beat-DUR ten 3SG-children  
*His ten sons were killing lots of deer.* [OVS]  
Chester Pepper “Deer Hunting Medicine” (WB-KL-53:4)
- (52) ... chavúra p-eethívthaaneen u-p-áxyar pa-'áaraar  
finally the-land 3SG>3-ITER-fill the-human  
*... finally the people filled up the earth.* [OVS]  
Mamie Offield “A Trip to the Land of the Dead” (WB-KL-58:56)

- (53) ... naa vúra púra fâat îin nee-shkâxishrihmath-eesh  
 1SG. INT nothing OBV 3SG>1SG-stop.from.doing-FUT  
 (*And Fire said,*) "*Nothing can stop me.*"  
 Mamie Offield "Victory Over Fire" (WB-KL-45:18)

[OSV]

- (42)–(53) confirm grammatically free order of S and O
- verb-final and verb medial order appear to be more common (consistent with Bright (1957:141)).
- No examples in corpus of VSO (cf. Adger et al. (2009) on Kiowa), but VOS is also rare.

## Appendix B: Posodic licensing of postverbal DPs

- Coordinated DPs are typically post-verbal (54) or split across the verb (55), perhaps because they are prosodically heavy/complex:

- (54) pa-mukun-âpxaan u-kyâar-ahi-ti                    **sârip**    **kâru sârum**.  
 the-their-cap                    3s(>3)-make.with-ESS-DUR    hazel.twigs also    Jeffrey.pine.root  
*Their hats were made with hazel twigs and pine-roots.*                    Julia Starritt, "Indian Clothes" WB-KL-86:10
- (55) **axyúus**    u-kyâar-ahi-ti                    **kâru yuxthâran** kâru sâpruuk    u-kyâar-ahi-tih.  
 pine-nut.sp. 3s(>3)-make.with-ESS-DUR also    abalone                    also    olivella.shell 3s(>3)-make.with-ESS-DUR  
*It (the dress) was made with digger-pine nuts and abalone shell and it was made with olivella shells.*  
 Julia Starritt, "Indian Clothes" WB-KL-86:7

**Appendix C: Quotations** Like complement clauses quotations follow the verb of saying, typically *piip* ‘say’ or *ipêer* ‘tell’:

- (56) kári xás pa-’asiktávaan u-piip “chími kan-thimnîup-i”  
 then then the-woman 3sg.(:3)-say soon 1sg.(-3sg./pl.)(imper.)-roast.with.coals-IMPER  
*And the woman said, “Let me roast it!”*  
 Source: Mamie Offield, “The Devil Who Died Laughing” (WB-KL-63), line 6.
- (57) xás pa-pihñüich ú-peen-vunaa pa-yeeripáxvuh-sas “chími kiik-p-iru-vôonishuk-i!”  
 then the-old.man 3SG-say.to-PL the-adolescent.girl-PL soon 2PL-ITER-PL-crawl.out-IMP  
*And the old man told the girls, “Crawl out again!”*  
 Source: Julia Starritt, “The Hair in the Soup” (WB-KL-21)

Unlike the situation with complement clauses, there are there are examples of quotations that are split across the verb or fully preceed the verb of saying. Of 378 corpus examples of *piip* ‘to say’ with a quotative complement, 1 has the quote preceding *piip* and 2 have the quote split. Of 110 examples of *ipêer* ‘to tell’ with a quotative complement, 1 has the quote split and 1 has the quote preverbally. These might have independent explanations or they show that postverbal position is not grammatically determined, but highly dominant in the narrative genres represented in the corpus.

Again, DP objects and manner complements to the same verbs may precede these verbs, suggesting that it is the category of the dependent, not the verb itself, that matters:

- (58) vúra kúnish hûut téé piip.  
 INT sort.of how PERF-2SG say  
*You sort of said something.*  
 Source: Mamie Offield, “Duck Hawk and His Wife” (WB-KL-27)
- (59) pûu, púra fâat vúra n-eepí-tih-ara.  
 no nothing INT 1SG-say-DUR-NEG  
*No, I didn’t say anything.*  
 Source: Mamie Offield, “Duck Hawk and His Wife” (WB-KL-27)
- (60) púra fâat vúra kin-ípeen-tih-at  
 nothing INT 3>1PL-say.to-DUR-PAST  
*They (the government) didn’t say anything to us.*  
 Source: Emily Donahue, “Preparing Basket Materials” (WB-KL-85)
- (61) fatamakêesh kích ára ú-peer-eesh.  
 anything only person 3SG-tell-FUT  
*She’ll tell a person just anything.*  
 Source: Nettie Reuben, “Blue Jay As Doctor” (WB-KL-29)
- (62) payêem vaa nee-pêer pa-píkvah.  
 now thus 2SG>1SG-tell the-story  
*Tell me that story again.*

Vina Smith, 03/26/2014

Interaction with focus marking:

- (63) xás vaa kích kun-ipí-tih “pu-kín-taapxuv-eesh-ara”  
 then thus only 3PL-say-DUR NEG-1PL-capsize-FUT-NEG  
*And they said only that, “We won’t capsize.”*  
 Source: Nettie Reuben, “The Boy from Itúkuk” (WB-KL-57)
- (64) vaa kích u-pí-ti pa-kéevniikich “yôotva t-u-’iv pa-nani-’íkam”  
 thus only 3SG-say-DUR the-old.woman.DIM hurray PERF-3SG-die the-1SG-son.in.law  
*The old woman was just saying, “Hurray, he’s dead, my son-in-law.”*  
 Source: Lottie Beck, “The Perils of Weasel” (WB-KL-18)
- (65) víri vaa kích u-pí-ti p-oo-’íih-tih “shakatíyu’inaa híyoo”  
 so thus only 3SG-say-DUR C-3SG-dance-DUR shakatíyu’inaa híyoo  
*He said only this as he danced, “shakatíyu’inaa híyoo.”*  
 Source: Nettie Reuben, “Lizard and Grizzly Bear” (WB-KL-34)