# A Sketch Grammar of Adak 

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## 1 Introduction

In this document, we present a sketch of the grammar of the Adak language, known to its speakers as Dâ Ədak /dạ́: ədə:k/ [dạ́ ว̀dà:k], a name which literally means "our speech." Adak is spoken by approximately 400 members of a village in Irian Jaya, on the west of the island of New Guinea. Its phonology is characterized by the treatment of centrality, frontness, backness, and nasality as suprasegmental features ('prosodies') as well as the allophonic presence of glottal nasals, which are crosslinguistically rare. We posit a single underlying vowel quality whose realizations are specified by vowel length and prosody. Its morphology makes use of reduplication and disfixes as well as suprafixes, but Adak notably lacks any true affixation. Verbs share a word class with adjectives, numerals and determiners. More typically of languages in the region, it is head-final and makes use of clause chaining with switchreference.

Previous scholarship on the Adak language is sorely lacking. The language is likely that which was mentioned as Bahasa Edak by M. Soebroto and A. K. Goh in their 1956 survey of the languages of North-Central Irian Jaya. Since that mention, there has been no record of Adak in the literature and indeed it was generally considered a spurious language, since its speakers were not in contact with mainstream society. We were incredibly lucky to have met the Adak People and even luckier still that they happily supported our efforts to learn and document their language. We are incredibly indebted to the members of the Adak village, especially to the elders Dẃrvc, Wrìt', Gòtor, Doyò, Svdẃcvr, Yeriyád, Sêse, and Svrwdv́, and it is to them and the members of their community that we dedicate this project.

## 2 Phonology

### 2.1 Phonetic Inventory

### 2.1.1 Consonants

| Consonants | Labial | Alv. | Alv. Pal. | Pal. | Velar | Lab. Velar | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stop | $\mathrm{t}^{\mathrm{w}} \sim \mathrm{pd}^{\mathrm{w}} \sim \mathrm{b}$ | t d | $t^{\text {j }} \mathrm{d}^{j}$ | c f | kg | $\mathrm{k}^{\mathrm{w}} \mathrm{g}^{\mathrm{w}}$ | ? |
| Ejective Stop | $t^{\text {w}} \sim p^{\prime}$ | t' | $\mathrm{t}^{\text {j}}$ | c' | k' | $\mathrm{k}^{\mathrm{w}}$ |  |
| Nasal |  | n |  |  | ท |  |  |
| Glottalized Nasal |  | $\mathrm{n}^{2}$ |  |  | $\mathrm{y}^{\prime}$ |  |  |
| Fricative |  | s z | 67 | ç j | x y | $x^{w} y^{w}$ | h |
| Tap |  | ¢ $\tilde{r}$ | $\mathrm{r}^{\text {j }}$ |  |  |  |  |

### 2.1.2 Vowels

| Vowels | Front | Central | Back |
| :--- | :---: | :---: | :---: |
| Close | i: |  | u: |
| Mid | $\varepsilon$ | ə a | $\supset$ |
| Open |  | e: é: |  |

### 2.1.3 Tone and Phonation

A vowel carries one of four 'tones' (each of which is really a tone-phonation combination): low modal, high modal, low creaky, and high breathy. Although both tone and phonation is important to distinguish these patterns, they will be refered to as tones in this grammar, following the traditional descriptions of South-East Asian languages with often similar contrasts. Low modal [à] is pronounced with a flat or falling low pitch. High modal [á] is pronounced with a flat high pitch. Low creaky [ă] is pronounced with a low dipping pitch and creaky voice. All syllables with ejective or glottalized codas carry the low creaky tone. High breathy [ạ́] is pronounced with a high flat or falling pitch and breathy voice. High breathy tone is only possible in open syllables.

### 2.2 Analysis of Phonemes and Romanization

The phonetic inventory of Adak is unusual for the region both in its size and the presence of phones such as glottalized nasals, which are rare cross-linguistically, let alone in the region where Adak speakers live. It was easy to find minimal pairs for all of the vowels, but the task of finding minimal pairs for the consonants proved more difficult, making it clear that extensive allophony was at play. For example, plain stops can only occur with oral central vowels, nasal stops can only occur with nasal central vowels, palatal stops can only occur with front vowels and labial stops can only occur with back vowels. Initial phonological descriptions posited eight vowels with consonant allophones conditioned by nearby vowels. This analysis was supported by the fact that minimal pairs can be found for each pair of vowels (indeed there is a single minimal octuplet distinguishing all eight of the vowels, which will be described below). However, all vowels in a word must agree in frontness and nasality with
harmony effectively reducing the vowels to a vertical system. The effects of harmony are wide-reaching, to the point that with the exception of glottal consonants, a word can only consist of central vowels and plain consonants, front vowels and palatalized consonants, back vowels and labial consonants, or nasal vowels, nasal consonants and certain voiced fricatives (which indeed are often nasalized themselves).

As such, it is best to analyze nasality, frontness, centrality, and backness as wordlevel features. This puts Adak as the first documented language outside of the Central Chadic family with such a prosody system. Here we will follow the Chadicist model of referring to these as individual 'prosodies' and notating them in phonemic transcriptions using superscript letters. Here, $/{ }^{2} /$ will indicate central prosody, $/^{1} /$ will indicate front/palatal prosody, $/^{\mathrm{i}} /$ will indicate back/labial prosody, and $/ \mathrm{n} /$ will indicate nasal prosody.

The realization of a consonant is always predictable based on the surrounding vowels, but because of the overlap between nasal, front, central, and back allophones for certain consonants, the realization of a vowel is not predictable based on the surrounding consonants. For this reason, we have chosen a romanization scheme which distinguishes the eight vowels originally posited as a way to show suprasegmental features, but does not distinguish between consonant allophones. The phonemic analysis and the proposed romanization scheme are outlined below.

### 2.2.1 Phonemic Consonants

The thirty-seven phonetic consonants belong to thirteen phonemic consonants. In phonemic transcriptions, we have chosen to use the 'central prosody' allophones to represent the phoneme, however it is important to remember that those allophones are no more fundamental to the phonemes than the other realizations and should not be thought of as 'default' realizations, because they too occur only in environments restricted by prosody. The following table shows the correspondences as well as the proposed romanized orthography. Although some usage may result in unintuitive transcriptions, such as 〈túyoc〉 [pú: $\boldsymbol{z}^{w} \dot{j} ?$ ] or $\left\langle\mathrm{k}^{\prime} \hat{\mathrm{w}} t\right\rangle$ [ $\mathrm{g}^{\prime}$ ạ̃:n], we believe that this system most closely represents the phonology of the language, and although it may seem unnatural to those who use Latin script for English, it has proven intuitive for speakers of Adak, who conceive of $[k],[c],\left[k^{w}\right]$, and $[\eta]$ as variants of the same sound.

| Romanization | Central | Palatal | Labial | Nasal |
| :---: | :---: | :---: | :---: | :---: |
| 〈k＞ | ［k］ | ［c］ | ［ $\mathrm{k}^{\mathrm{w}}$ ］ | ［ y ］ |
| $\langle\mathrm{g}\rangle$ | ［g］ | ［ 7 ］ | ［ $\mathrm{g}^{\mathrm{w}}$ ］ | ［y］ |
| $\left\langle{ }^{\prime}\right\rangle$ | ［ $\mathrm{k}^{\prime}$ ］ | ［ $\mathrm{c}^{\prime}$ ］ | ［ $\mathrm{k}^{\mathbf{w}}$ ］ | $\left[\mathrm{g}^{2}\right]$ |
| $\langle\mathrm{t}\rangle$ | ［t］ | ［ $\mathrm{t}^{\text {j }}$ ］ | ［ ${ }^{\mathrm{w}} \sim \mathrm{p}$ ］ | ［n］ |
| $\langle\mathrm{d}\rangle$ | ［d］ | ［ $\mathrm{d}^{\mathrm{j}}$ ］ | ［ $\mathrm{d}^{\mathrm{w}} \sim \mathrm{b}$ ］ | ［ n ］ |
| $\left\langle{ }^{\prime}\right\rangle$ | ［ t ］ | ［ $\mathrm{t}^{\mathrm{j}}$ ］ | ［ $\left.{ }^{\text {w }}{ }^{\prime} \sim p^{\prime}\right]$ | ［ $\mathrm{n}^{2}$ ］ |
| $\langle\mathrm{x}\rangle$ | ［x］ | ［c］ | ［ $\mathrm{x}^{\mathrm{w}}$ ］ | ［ $\mathrm{\gamma}$ ］ |
| $\langle\mathrm{y}\rangle$ | ［ y ］ | ［j］ | ［ $\mathrm{y}^{\mathrm{w}}$ ］ | ［ y ］ |
| $\langle\mathrm{s}\rangle$ | ［s］ | ［c］ | ［s］ | ［z］ |
| $\langle\mathrm{z}\rangle$ | ［z］ | ［z］ | ［z］ | ［z］ |
| $\langle\mathrm{r}\rangle$ | ［r］ | ［ $\mathrm{r}^{\mathrm{j}}$ ］ | ［r］ | ［ $\check{\sim}$ ］ |
| 〈h＞ | ［h］ | ［h］ | ［h］ | ［h］ |
| $\langle\mathrm{c}\rangle$ | ［？］ | ［？］ | ［？］ | ［？］ |

## 2．2．2 Phonemic Vowels

The eight phonetic vowels of Adak consist of one pair for each prosody．Although each pair consists of a higher vowel and a lower vowel，morphological processes involving alternation of prosody make it clear that height is not the distinguishing factor between the vowels，but rather length or tenseness．Each pair consists of a long，tense vowel and a short，lax vowel．When the prosody of a word changes，the length／tenseness of a vowel does not，although the relative height of a vowel may．

Experiments in which Adak speakers were asked to judge whether a word with mismatched vowel quality and length were conducted．Participants consistently iden－ tified words such as＊［dàk］and＊［ $r^{\mathrm{j}} \dot{\varepsilon}$ ： $\mathrm{t}^{\mathrm{j}}$ ］with words／${ }^{\circ}$ dàk／and／${ }^{\mathrm{i}}$ rò̀t／where the vowels match in length rather than words such as $/{ }^{\circ} \mathrm{d} \grave{\partial} \mathrm{k} /$ and $/^{\mathrm{i}}$ ròt／where the vowels would match in quality．These experiments suggest that the distinguishing feature between the vowels is not quality but rather quantity．This would mean that there is a sin－ gle Adak vowel，which is unspecified for quality and has eight possible realizations depending on its length and the prosody of the word containing it．

The orthography proposed here for Adak chooses to write each of the possible re－ alizations using a different letter，which allows easier notation of prosody than mark－ ing prosody using distinct consonant letters，especially since all vowels change with prosody，but not all consonants do．

|  | Central | Palatal | Labial | Nasal |
| :--- | :--- | :--- | :--- | :--- |
| Short | $[\mathrm{a}]\langle\partial\rangle$ | $[\varepsilon]\langle\mathrm{e}\rangle$ | $[\mathrm{o}]\langle\mathrm{o}\rangle$ | $[\tilde{\mathrm{a}}]\langle\mathrm{v}\rangle$ |
| Long | $[\mathrm{a}:]\langle\mathrm{a}\rangle$ | $[\mathrm{i}:]\langle\mathrm{i}\rangle$ | $[\mathrm{u}:]\langle\mathrm{u}\rangle$ | $[\tilde{\mathrm{a}}: \mathrm{w}\rangle\langle\mathrm{w}\rangle$ |

## 2．2．3 Tone and Phonation

As mentioned above，Adak distinguishes between four＇tones，＇which are really dis－ tinguished by tone and phonation．These are marked using several diacritics．
－Low modal tone is unmarked $\langle\mathrm{a}\rangle$
－High modal tone is marked with an acute accent 〈á〉

- Low creaky tone is marked with a grave accent 〈à〉
- High breathy tone is marked with a circumflex accent $\langle\hat{a}\rangle$


### 2.3 Phonotactics and Further Allophony

Syllable structure is CV(C). Glottal consonants do not occur in clusters. Voiced consonants before breathy vowels are often pronounced with breathy voice or breathy release. Consonants following creaky vowels may be lightly glottalized even when they are not phonemically glottal. Labialized alveolars stops and their corresponding bilabial stops are largely in free variation, but the bilabial allophones are preferred word-finally. It is believed that there were formerly strict rules governing agreement and assimilation, but these have developed into the prosody system characterizing modern Adak, so now it is largely sufficient to say that all allophones in a word must belong to the same prosodic class.

## 3 Nouns

### 3.1 Cases

Adak has three cases, the core (cor), oblique 1 (obl1) and oblique 2 (obl2) cases. Broadly, the core case is used for the agent and patient of the verb, the oblique 1 is used for static relations and possession of inanimate objects and the oblique 2 is used for dynamic relations and possession of animate objects. Their formation and usage are described below.

### 3.1.1 Core

The core case is used for the subject of intransitive verbs, the agent and patient of transitive verbs, and the donor and theme of ditransitive verbs. The core case is the unmarked form of the noun and consists of the plain noun stem.
(1) kərâ sèdé gwrv́ tô
rain fall.real continue.real.SER Q
"Is it still raining?"
(2) í dàk t'ô~ t'û á ho~ hukó

3sG.COR water.COR TR $\sim$ see.SS 3.MASS.COR TR $\sim$ drink.REAL
"They saw drinking water and drank it."
(3) kíke rise k'itê t'èyì cá~ cád
child.pl elder.pl palm.sugar.obl1 sago.cor TR $\sim$ give.REAL
"The children gave the elders sago pudding."

### 3.1.2 Oblique 1

The oblique 1 marks the possessor of an animate object, the recipient of a ditransitive verb, and the object of postpositions indicating motion and dynamic or changing states. It is formed by removing the coda consonant of the final syllable if there is one, shortening the final vowel if it is long, and changing the tone of the final vowel to breathy high.
(4) hedê dò á təgâ hu k'e~ k'éd
girl.obl1 parent.COR 3MASS.COR home.obl1 to TR~ walk.REAL
"The girl's parent walked home."
(5) í so kurùc gर̂ cə $\sim^{\prime}$ cád $^{\prime}$ 3PL.AN.COR be two.pTCP loincloth.COR 1SG.OBL1 TR~ give.REAL "They gave me two loincloths"

### 3.1.3 Oblique 2

The oblique 2 marks the possessor of an inanimate object and the object of postpositions indicating static or unchanging states. It is formed by debuccalizing the consonants in the final syllable and shortening the final vowel if it is long.
(6) rehe xèc yvrv́ kẃ rá
elder.obl2 staff.cor lose.real seq\FAIL.real iam
"The elder's staff is no longer lost."
(7) gog bóro də ~ dasâ á təcəh dá yo~ yù 1PL.EXCL.COR yam.COR TR $\sim$ heat.ss 3.MASS home.OBL2 in TR~ eat.IRR "We (but not you) could cook food and eat it at home."
(8) girê za kará yaka tòcu rù hə~ hác hunt.OBL1 some.PTCP worker.COR.PL prey.COR club.OBL2 INS TR $\sim$ strike.REAL "Some hunters struck their prey with a club."

### 3.2 Number

Number is not pervasively marked in Adak. Animate nouns may lengthen their first vowel to show plurality. A small number of animate nouns have suppletive plural forms. Plurality is optional unless the noun is preceded by the participle of a plural determiner or numeral, in which case it is mandatory if possible. The following table shows some examples of common regular animate nouns as well as several irregular forms.

| Gloss | Singular | Plural |
| :--- | :--- | :--- |
| elder | rese | rise |
| child | ké | kíke |
| girl | hedì | hidì |
| parent | dò | dùco |
| person | rvd | gərâ |

## 4 Pronouns

### 4.1 Personal Pronouns

Adak distinguishes first, second, and third person pronouns as well as singular and plural for animate referents. There are two first-person plural pronouns, one including the listener, and one excluding the listener. Countable inanimate referents are referred to with yè regardless of number. The pronoun á is used for items regarded as uncountable as well as when a dummy pronoun is needed. The oblique 1 and oblique 2 can be used as possessive forms, in which case they agree in prosody with the object of possession.

|  | Core | Oblique 1 | Oblique 2 |
| :--- | :--- | :--- | :--- |
| 1SG | gv̀c | ĝ̀ | gv̀ |
| 2SG | gv́ | ĝ̀ | gv́ |
| 3SG.AN | é | ê | é |
| 3INAN | yè | yê | yè |
| 1PL.INCL | gvgv́ | gvgर̂ | gvcv́ |
| 1PL.EXCL | gog | gô | goc |
| 2PL | kẃ | k̂̂ | kú |
| 3PL.AN | í | $\hat{1}$ | í |
| 3MASS | á | â | á |

### 4.2 Interrogative Pronouns

There are four interrogative pronouns, whose division corresponds to the four thirdperson pronouns. The possessive form of the 3mass $\grave{a} c$ is used to ask which object when selected from a fixed number of choices or types, and translates to English as "which one" or "what kind of."

|  | Core | Oblique 1 | Oblique 2 |
| :---: | :--- | :--- | :--- |
| INT.SG.AN | hèc | hê | hé |
| INT.INAN | yèc | yê | yè |
| INT.PL.AN | hìc | hî | hí |
| Int.MAss | àc | â | àc |

There is some overlap with the personal pronouns in the oblique cases, which produces some ambiguity, for example, sentence 9 could mean "What did you wash your hands with?" or "Did you wash your hands with it?"
(9) gê tàt' àc rù k'v~ k'w tô
2sG.cor hand.cor int.mass.obl2 INS TR~ rinse.REAL $Q$
"What did you wash your hands with?"

## 5 Verbs

### 5.1 Verb Roots

Bare verb roots are always intransitive and are generally unaccusative. Most verb roots are two or three syllables long and end in an open syllable, but there are exceptions.
(10) yòy dít kẃ
pig.COR awaken.REAL SEQ\FAIL.REAL
"The pig didn't wake up."
(11) wrv̀t' t'û rá
mouse.cor see.real iam
"A mouse has been seen!"
Verbs are made transitive by reduplicating the initial consonant and tone of the first syllable with a short vowel.
(12) Dúrvc wrv̀t' t'ô~ t'û rá

NAME.COR mouse.COR TR $\sim$ see.REAL IAM
"Dúrvc has seen a mouse!"
(13) gv́ sûzo kə~ kərác dw~ dẃd tô?

2SG.COR canoe.COR TR finish.real SEQ.TR make.real $Q$
"Have you finished making the canoe?"
Some verbs, which do not have a clear semantic patient, are marked as transitive and require a dummy third-person pronoun, usually á, as the syntactic patient.
(14) gvgv́ á twcv̀c hu zò~ zùc
1PL.INCL.COR 3.MASS.COR river.OBL2 to TR $\sim$ run.IRR
"Let's run to the river (us and you)."

The verb class includes not only dynamic verbs but also stative verbs which fill the role not only of English adjectives but also of determiners and numerals. Attributives, including determiners and count numerals, take the form of verb participles, which are discussed in section 5.4.
(15) gv́ dẃrvc gò

2sG.cor clever.real hsy
"You are clever (so they say)."
(16) gê t’ê se cídi hí 1sG.obl1 be whole.pTCP.ss be three.pTCP sibling.cor.pl be here.real
"All three of my siblings are here."

### 5.2 Verb Inflection

The final vowel of a verb stem is unspecified for tone, and takes one of the four tones depending on its role in the sentence. The high modal tone indicates a finite verb in the realis mood. This is used for any event which the speaker believes has happened, is happening, or will happen.

$$
\begin{aligned}
& \text { (17) bóro hi dá cẃ } \\
& \text { yam.COR PROX in grow.REAL } \\
& \text { "Yams grow here." }
\end{aligned}
$$

Sentence 17 does not mark tense or aspect, so it could equally well be translated as "yams will grow here," or "yams used to grow here" depending on context. Similarly, the irrealis form in sentence 18 could translate as "yams may grow here," "yams would have grown here" or "[I wish that] yams grew here" again depending on context. The irrealis is marked with a low creaky tone.

> (18) bóro hi dá cù
> yam.cor prox in grow.IRR
> "Yams may/would grow here."

The high breathy tone marks a converb with the same subject as the main verb of the sentence. If the verb stem ends in a consonant, that consonant is lost in the converb form. This form is commonly used in clause chaining as well as in cases where multiple participles modify a single noun head. Its use is further discussed below in section 5.5.
(19) bóro hi dá ĉ rérí
yam.cor prox in grow.ss be tall.real
"Yams grow here and (they) are tall."
The low modal tone marks the participle form, which is used when a verb modifies a noun either as a standalone modifier or as part of a relative clause. Participles also must agree in prosody with their head. Their use is discussed in section 5.4.
(20) hi dá cu bóro rérí
prox in grow.PTCP yam.cor be tall.real
"The yams that grow here are tall."

### 5.3 Verb Serialization and Auxiliaries

Verb serialization is common in Adak. When a single clause has multiple verbs, all verbs other than the first lengthen their first vowel. Several verbs are commonly used in serial verb constructions as auxiliaries.

### 5.3.1 Recent Past: tac\|'to come'

The verb taca is used to indicate the recent past. It can come before or after the main verb chain, so sentence 21 and sentence 22 carry the same meaning.
(21) rehe xèc yvrv́ tacá
elder.obl2 staff.cor lose.real seq\come.real
"The elder's staff has just been lost."
(22) rehe xèc tacá ywrv́
elder.obl2 staff.cor come.real Seq\Lose.real
"The elder's staff has just been lost."

### 5.3.2 Near Future: hóku 'to go'

Similarly, the verb hóku 'to go' is used to indicate the near future, especially when the speaker has directly witnessed evidence that something is going to happen.
(23) rise yòy yo~ yú húkú
elder.PL.COR pig.COR TR $\sim$ EAT.REAL SEQ\GO.REAL
"The elders are about to eat the pig."

### 5.3.3 Transitive Negative: $h o$ 'to miss'

Transitive verbs are negated with the verb ho meaning 'to miss,' which has the irregular transitive form $h u$.
(24) Gòtor dóro yo~ yú hú tô

NAME.COR yam.COR TR~EAT.REAL SEQ\MISS:TR.REAL Q
"Does Gòtor not eat yams?"

### 5.3.4 Intransitive Negative: $\boldsymbol{k v}$ 'to fail'

Intransitive verbs are negated by using the serial verb $k v$, whose standalone meaning is 'to fail.'
(25) yòy dít kẃ
pig.cor awaken.real seq\fail.real
"The pig didn't wake up."

### 5.4 Participles

Participles are verb forms used to modify nouns. In Adak, they are placed before the noun, and must agree with the noun in prosody. The last vowel of the closest participle to the noun is marked with a low modal tone, and previous ones are marked with high breathy tone similar to same-subject converbs, but must still agree in prosody.
(26) gê t'ê xe cídi hí 1sG.obl1 be whole.pTCP.ss be three.pTCP sibling.cor.pl be here.real
"All three of my siblings are here."
Relative clauses are formed using clauses headed by participles modifying the head noun.
(27) hi dá cu bóro rérí prox in grow.PTCP yam.COR be tall.real "The yams that grow here are tall."

### 5.5 Clause Chaining and Switch-Reference Marking

Clause chaining is commonly used in Adak. A series of background clauses ending in verbs marked as same-subject converbs. Adak, has a nominative pivot so the subject here is the agent of transitive verbs or the subject of intransitive verbs (including stative verbs). All verbs in a sentence from the subject to the final finite verb refer to the same subject. In storytelling, long sentences consisting of many clauses with the same subject are common, with finite verbs serving to indicate a change of subject.
(28) Dèc k'ətát kə~ kâ t’ə̀t to~ tû á twdv̂ dá ye~ yìt NAME.COR pebble.cor TR $\sim$ grab.ss hand.COR TR $\sim$ fill.SS 3MASS.COR fresh water.OBL1 in TR $\sim$ throw.REAL "Dèc seized a handful of pebbles and threw them into the lake "

To show an iterative or durative action, a verb may be repeated with the first instance marked as a same-subject converb and the second verb optionally lengthening its first vowel, although this construction is syntactically distinct from verb serialization.
(29) $\hat{e}$
ké dî
yiyê
yiyé

3sg.An.obl1 child.COR awaken.ss seq\Cry.SS SEQ\CRy.REAL
"His child woke up crying and crying"
When multiple participles modify one noun, all but the last participle are marked as coverbs, but all participles must agree in prosody with the noun head as long as they are not separated from the head noun by an invariant word of a different prosody.
(30) gê t'ê xe cídi hí

1sG.obl1 be whole.pTCP.ss be three.pTCP sibling.Cor.pl be here.REAL
"All three of my siblings are here."

## 6 Particles

### 6.1 Postpositions

Obliques such as instruments and locatives are marked with postpositions. Generally obliques with static relations are marked with the oblique 2 and those with dynamic relations are marked with the oblique 1 . This means that the same postposition could take either case depending on context.

$$
\begin{aligned}
& \text { (31) gê tàt' àc rù k'v } \sim \text { k'ẃ tô } \\
& \text { 2SG.cor hand.cor int.mAss.obl2 INS TR } \sim \text { rinse.REAL Q } \\
& \text { "What did you wash your hands with?" }
\end{aligned}
$$

Postpositions are commonly stacked to express more complex locatives and latives. They are typically ordered with locatives closed to the noun followed by postpositions of relative motion, followed by postpositions of definite motion. For example sentence

32 first uses locative dá 'in,' then ha 'from' which indicates motion away relative to the object, then last tù 'down' which indicates absolute direction of motion. Note that unlike its English counterpart, Adak tù can be used as a standalone adposition, so the phrase $k$ 'ê tù could mean 'down from the tree,' 'down to the tree,' or 'down past the tree.'
(32) t'əy t'àt k'ê dáha tù rú rá tô be whole.pTCP leaf.cor tree.obl1 in from down fall.real iam $Q$
"Have all the leaves fallen from the trees?"

### 6.2 Sentence-Final Particles

### 6.2.1 Iamitive: rá

The particle rá is used sentence-finally when a sentence contains information about a state that is new and is still the case. It is often paired with the recent past using taca. When negated with either ho or $k v$ it carries the meaning of "no longer."

```
(33) rehe xèc yvrv́ kẃ rá
    elder.obl2 staff.cor lose.real SEQ\fail.real iam
    "The elder's staff is no longer lost."
```

It is also used in clause chaining after a background clause's final verb to indicate that the foreground clause or clauses occurred when the background clause's action was complete.

### 6.2.2 Emphatic: ki

The emphatic particle $k i$ is used to strengthen statements, often introducing contradiction or indicating that a speaker is certain of something in spite of contrary evidence.
(34) hedí tíscic búbû nv~ nẃ ki girl.COR doll.obl2 dress.COR TR $\sim$ make.real EMP
"The girl made the doll's dress herself."

### 6.2.3 Interrogative: $\boldsymbol{t} \hat{0}$

All questions are marked with the word tô. A polar question is made by simply adding the particle tô to the end of the sentence, and a wh-question includes both a question word and the interrogative particle. If multiple sentence-final particles are used in a sentence with it, then tô always comes last.
(35) kẃ á â hu hó~ hókú tô 2PL.COR 3MASS.COR INT.MASS.OBL1 to TR~ go.REAL Q "Where are you going?"

### 6.2.4 Hearsay: gò

If a speaker only knows a statement to be true from hearsay, they may end it with gò, which is sometimes interpreted as casting doubt on the veracity of a statement.
(36) gv́ dẃrvc gò

2sG.cor clever.real hsy
"You are clever (so they say)."

### 6.2.5 Assumption: yèc

The particle yèc is used when the speaker believes a statement to be true but only based on assumptions rather than based on evidence.
(37) í
tê hí
yèc

3pl.an.cor be whole.ss be here.real asm
"They are all here (I assume)."

## 7 Challenge

1. This document presents the grammar of the Adak language and shows how it meets the criteria, specifically:

- Phonology
- The tones contrast modal, breathy, and creaky voice and stops contrast voiced, unvoiced, and glottalized/ejective at two points of articulation.
- My analysis suggests exactly one phonemic vowel with eight phonetic realizations depending on length and prosody. Other possible analyses could include a two-vowel system depending only on prosody or even an eight-vowel system with crazy allophony and harmony rules, but Occam's razor suggests that the latter is not the case.
- Since a single-vowel system seems to be the best way to describe Adak, that means all vowels are unspecified for quality and their realizations depend entirely on their length and environment.
- Grammar
- Reduplication is productively used to produce transitive verbs from intransitive verbs.
- Cases are marked with disfixes and tone changes. Number is rarely marked, but when it is, it is either suppletive or marked with vowel lengthening. Verbs are inflected using tone changes, reduplication, and vowel lengthening. There is agreement in prosody between participles and their head. Other grammatical categories are marked with particles or helping words.
- Adak grammar distinguishes animacy in two places. First, plurality is only marked on animate nouns and the third-person plural pronoun can only be used for animate referents. Second, the case used for marking possession of animates is different from that used for possession of inanimates.
- It is fairly common for the role of adjectives to be filled with stative verbs, but Adak takes that one step further, using stative verb participles not only for adjectives, but for numbers, determiners, and some demonstratives.

2. I used four random sentences gathered by asking Leo as well as the four most recent sentences from "Just Used 5 Minutes of your Day" as example sentences. Some words or names were modified to better fit the context. These are example 1 (st \#21), 32 (st \#96), 28 (st \#142), and 34 (st \#169), as well as examples 29 (ju5moyd \#1008), 13 (ju5moyd \#1009), 5 (ju5moyd \#1010) and 9/31 (ju5moyd \#1011).
3. When we met the Adak people, they greeted us with a traditional greeting, although as several of them later mentioned, they did not expect us to understand.
(38) kẃ á â hu hó~ hókú tô

2PL.COR 3MASS.COR INT.MASS.OBL1 to TR~ go.REAL Q
"Where are you going?"
Had we understood, we would have said the traditional response of tù tù ‘downwards, downwards.' This is seen as an acknowledgment that we all return to the Earth in the end.

