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48 Wá·šiw

Abstract: Wá·šiw (also spelled Wahso, Washoe, and Wašiw [ʼwaːʃiw]; ISO: was) is an endangered language spoken in the Lake Tahoe region of northern California and Nevada. In this chapter, we outline the most significant grammatical features of this language, with special attention given to phenomena that are typologically interesting and which have influenced linguistic theory. As Wá·šiw straddles the Great Basin and California linguistic areas, we also highlight similarities and differences between Wá·šiw and neighboring languages and families. We draw on our own recent and ongoing research in phonology, morphology, syntax and semantics, as well as on previous grammatical descriptions. We close with a discussion regarding past and current efforts in language documentation and revitalization in the community.

48.1 Introduction

Wá·šiw (also spelled Washo, Washoe, and Wašiw [ʼwaːʃiw]; ISO: was) is an endangered language spoken in the Lake Tahoe region of northern California and Nevada. "Washoe" has been the official of the name of the tribe since its incorporation in 1934. "Washo" is the spelling most frequently found in anthropological and linguistic literature, however. "Wašiw" is the spelling often preferred by speakers of Wá·šiw, according to Gordon & Gordon (2019). In recent years, the Culture/Language Resources Department of the Washoe Tribe adopted the spelling, "Wá·šiw", as part of their language revitalization and reclamation efforts and it is the spelling we adopted in this work.

While members of the Washoe Tribe (*waší:šiw* "the people") live in four federally recognized communities: Woodfords in California and Carson, Dresslerville and Stewart in Nevada – Lake Tahoe (referred to simply as *dá?aw* "the lake" in Wá·šiw) and the surrounding areas have traditionally been the center of Wá·šiw life (i.e. *waːšiw itdé?* "Wá·šiw land"; Nevers 1976).

The linguistic classification of Wá·šiw has been a matter of much debate. Early works on Native American languages treated Wá·šiw as a linguistic isolate (Gatschet, 1882; Henshaw, 1887; Powell, 1891), a classification that is echoed in recent linguistic surveys (Campbell, 1997; Mithun, 1999). Other studies have linked Wá·šiw to Chumash (Harrington, 1917) and the hypothesized Hokan stock (Sapir, 1917, 1921; Dixon & Kroeber, 1919; Jacobsen, 1979), suggesting a deeper genetic relationship to a group of California language families and isolates. Jacobsen (1964, 10–21) provided an extensive account of the history of classification of Wá·šiw before 1964. For more discussion regarding linguistic relationships between languages of California, see Dagostino, this volume. For classification of languages more generally, see Haynie, this volume.

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In what follows, we profile different aspects of the Wá·šiw language, beginning with an overview of the sound patterns in Section 2, the structure of words in Section 3, sentence structure in Section 4, and the semantic and discourse aspects of the language in Section 5 and Section 6 respectively. We close with a discussion regarding past and on-going documentation and revitalization efforts in Section 7. Unless otherwise stated, Wá·šiw materials cited in this paper are based on fieldwork of one of the three authors. Wá·šiw materials cited in this article that have appeared in a published source are always accompanied by their source.

48.2 Sound patterns

48.2.1 Vowels

The vowel inventory of Wá·šiw is given in Table 1; the vowels are arranged in a manner corresponding roughly to the position of the tongue in the mouth. The symbol <ɨ> refers to a high back unrounded vowel [ɯ], as in words like c'*ɨ́kɨ* "spider" or *bɨ́k'ɨ* "grandmother's sister". Vowels can be short or long in Wá·šiw (e.g., *dámu?* "shirt" vs. *bá:mu*š "muskrat"), although long vowels are only found in stressed syllables. Wá·šiw does not have diphthongs (i.e. a sequence of vowels or a vowel with two articulatory targets in a syllable).

Tab. 1: Vowels of Wá·šiw.

	Front	Central	Back
High	**i, i:**	**ɨ, ɨ:**	**u, u:**
Mid	**e, e:**		**o, o:**
Low		**a, a:**	

48.2.2 Consonants

The consonant inventory of Wá·šiw as represented in the practical orthography used in this paper is shown in (2).[1] The symbol, <c'>, stands for a glottalized alveolar affricate [ts'] (e.g., ***c'ɨ́kɨ*** "spider") and <y> for a palatal glide [j] (e.g., ***yé:mi*** ['je.mi] "he's swimming"). Consonants in this language, both obstruents and sonorants (i.e. liquids, glides,

1 The phonemic inventory of Wá·šiw according to Jacobsen (1964) excludes the segments in parentheses.

and nasals), have three possible laryngeal settings. Traditional descriptions of Wá·šiw suggest that obstruents may be voiced, voiceless, or ejective/glottalized (Kroeber, 1907; Jacobsen, 1964, 1996). In word-final and preconsonantal positions, only the voiceless series is found. For example, the root-final /b/ in *maya**b***- "foot" appears as a voiced stop before a vowel-initial suffix *-a* (e.g., ['maj:aba] "foot-loc"), but as voiceless before a consonant-initial suffix *-lu* (e.g., ['maj:aplu] "foot-INST").[2] Obstruents written as voiced obstruents, i.e. <b>, <d>, and <g>, are often realized as voiceless unaspirated, especially in word-initial positions; they are most likely to be realized with prevoicing throughout the stop closure when surrounded by sonorants. Prevoicing may also be observed in word-initial positions but is highly variable within and across speakers. The alveolar /d/ is generally realized as a flap intervocalically. Depending on the speaker, [s] in one speaker's speech corresponds to [θ] in the other. The exact distribution of this variation is unclear, especially since some speakers vary between the two variants within their speech.

Sonorants in Wá·šiw include nasals, liquids, and glides. They may appear as modal, hence canonical, voice (e.g., m, n, w, l), voiceless/breathy (e.g., m̥, n̥, w̥, l̥), or glottalized (e.g., m̓, n̓, w̓, l̓; Yu 2018). Modal voiced sonorants may occur in word-initial (e.g., *lák'a?* ['lak':á?] "one"), intervocalic (*dí**l**ek* ['d̥il:ek] "duck"), word-final (*c'í:be**l*** ['ts'i:bel] "louse"), and pre-consonantal (*hé**l**me?* ['helme?] "three') positions. Voiceless sonorants (m̥, n̥, ŋ, j, l̥, w̥) occur in prevocalic positions (e.g., *l̥é:?i* ['l̥e:?i] "I am", *mé:l̥u* ['me:l̥u] "old man") but never in coda positions. Phonetically, voiceless sonorants are realized as breathy for the early portion of the sonorant and as modal voice during the latter half. Glottalized sonorants (m̓, n̓, ŋ, l̓, j̓, w̓) are found word-initially (e.g., ***m̓**i:giyi* ['m̓i:giji] "he sees you"), intervocalically (e.g., *ŋámiŋ* ['ŋam̓:iŋ] "baby"), word-finally (e.g., *digóy̓* [d̥i'goj̓] "my father"), and in pre-consonantal positions (e.g., *diyáy̓li* [d̥i'jajli] "I cut it"). Glottalized sonorants are realized with either a full glottal stop or creakiness.

Wá·šiw has a restricted system of stress-governed quantity alternation (Yu, 2008). When preceded by a short stressed vowel, /s, š, m, n, ŋ, y, l, w/ are realized with a longer duration if the consonant is also followed by another vowel (e.g., *dáš:aŋ* ['d̥aʃ:aŋ] "blood", *dám:u?* ['d̥am:u?] "skirt"). When the preceding stressed vowel is long, the following consonant is always short (e.g., *wá·šiw* ['wa:ʃiw] "Wá·šiw", *bá:muš* ['b̥a:muʃ] "muskrat"). Long consonants, also known as geminates, are not observed anywhere else.

2 Wá·šiw forms in the practical orthography are italicized in the text. Phonemic transcriptions are given in / / and phonetic transcription in [ ]. Glosses: 1/2/3: 1st/2nd/3rd person; ACC: accusative; ATTR: attributive; CAUS: causative; COM: comitative; DEP: dependent mood; DIST.FUT: distant future; DIST.PST: distant past; DS: different subject; DU: dual; IMP: imperative; INCH: inchoative; IND: independent mood; INST: instrumental; INT.FUT: intermediate future; INT.PST: intermediate past; MOD: modal; NC: negative concord; NEAR.FUT: near future; NEG: negation; NM: clausal nominalizer; NOM: nominative; PST: past; PL: plural; Q: question particle; REC.PST: recent past; REFL: reflexive; SS: same subject; SBJV: subjunctive; STAT: static.

Tab. 2: Consonant inventory of Wá·šiw. The phonemic inventory of Wá·šiw according to Jacobsen (1964) excludes the segments in parentheses. /c'/ stands for a glottalized alveolar affricate and /y/ for a palatal glide. Depending on the dialect variety, [s] in one dialect corresponds to [θ] in the other.

b	d		g	m	n	ŋ	w	l	y	ʔ
	s	š								h
p	t		k	m̥	n̥	ŋ̊	w̥	l̥	y̥	
p'	t'	c'	k'	(m̓	n̓	ŋ)	(w̓	l̓	y̓)	

48.2.3 Sound sequences in Wá·šiw

The basic syllable structure has a (C)V(C) template.[3] Wá·šiw does not allow two or more consonants to appear immediately adjacent to each other word-finally. Such sequences can be avoided via vowel insertion. The quality of the inserted vowel differs depending on the nature of the first consonant in such a sequence. When the first consonant is a glottal stop, the intervening vowel is always the same quality of the vowel preceding the glottal stop. For example, the nominal root /daʔw/ "lake" in the locative form is *dáʔwa* [ˈd̥awʔa] "in the lake", but it is realized with an echo vowel in the nominative form, *dáʔaw* [ˈd̥aʔaw] "lake". Other consonant sequences are broken up via the insertion of /ɨ/. For example, the nominal root "arm" /alŋ/ is *t'álŋa* [ˈt'alŋa] "on her arm" when followed by a vowel-initial locative suffix *-a*, but is *lál:**ɨ**ŋlu* [ˈlal:ɨŋlu] "with my arm" when followed by the consonant-initial instrumental suffix *-lu*. Sequences of vowels (i.e. vowel hiatus) are not allowed in Wá·šiw. A glide is inserted to break up the potential vowel sequence (e.g., *gót'a**y**i* /got'a-i/ [ˈgot'aji] "it breaks" vs. *gót'aha* /got'a-ha/ [ˈgot'aha] "break it"; *lá:du**y**a* /l-a:du-a/ [ˈla:duja] "1.POSS-hand-LOC/on my hand" vs. *lá:dulu* /l-a:du-lu/ [ˈla:dulu] "1.POSS-hand-INST/with my hand").

In a restricted set of prefixes (e.g., the nominalizer *dE* –, 1st person subject marker *lE* –, 3rd person object marker *gE* –, imperative *gE* –; *E* indicates the alternating vowel), a limited pattern of vowel harmony is observed where the morpheme would be realized with [a] when the following stressed vowel is /a/ or /o/ (e.g., ***da**-háŋa* "his/her mouth", ***da**-tóʔo* "his/her throat") but as [e] when followed by a stressed /e/, /i/, /ɨ/, or /u/ (e.g., ***de**-k'étep* "his/her bottle", ***de**-gúʔu* "his mother's mother").

3 This analysis differs from that of Jacobsen (1964). According to Jacobsen (1964), there exist initial consonant clusters as well as word-final clusters. However, many of the examples are from loanwords. Other examples came from consonant sequences involving sonorants and glottal stop. The present description follows an analysis of such sequences as single segments, thus reducing the necessity of positing highly restricted consonant clusters in the language.

48.2.4 Lexical stress

Lexical stress, indicated by the acute accent diacritic on vowels (í, é, á, ó, ú, ɨ́), is assigned within the domain of the stem. Inflectional affixes do not receive stress. Take, for example, the word [leˈguʔujiʔ] /le-guʔu-iʔ/. Primary stress remains on the second to the last syllable (penult) of the stem/root *gúʔu* "mother's father" even when inflected (i.e. neither the 1st person possessive prefix /le-/ nor the attributive-possessive suffix /-iʔ/ affected the primary stress placement). Reduplication is within the domain of stress assignment (e.g., *dámal-/damámal-* "to hear/PL"; *mé:hu-/mehú:hu-* "to be a boy/pl"). While main stress is generally on the penult (e.g., *memdéwi* "deer"; *masát'i* "flint arrow head"), it may surface on the final syllable if the final syllable contains a long vowel (e.g., *mudá:l* "winnowing basket"; *šuẇé:k* "clam"). Certain auxiliary verbs (e.g., *-áša?* FUT, *-šému-* "really', *-máma?-* "to finish", *-wéwš* – "slightly, almost") are also within the domain of stress assignment. There also exist certain suffixes that are inherently stressed (e.g., the negative suffix *-é:s*, the interrogative suffix *-hé:š*, *-áẏ* "discarded" etc.).

48.3 Structure of words

The morphological structure of Wá·šiw verbs generally follows the template shown in Table 3.

Tab. 3: Wá·šiw verbal template.

Inflectional prefix	Derivational prefix	Root/bipartite stem	Derivational suffix	Inflectional suffix
person-marking	stative; intransitive; reflexive	plural (§3.2)	auxiliary; negation; question; direction; manner; inchoative; aspect causative	mood; switch reference

Derivational morphological processes often result in changes in lexical category and/or changes to core aspects of word meaning. For example, the verb *yák'ašha-* "to warm something up; warm-CAUS") is derived from the verb *yák'aš* – "to be warm" and the causative suffix *-ha*. Some examples of derivations are given below:

– Causativation with *-ha*: *mí:p'ɨl-* "to be in the state of being full"/ *mí:p'ɨl**ha-*** "to fill something up".
– Instrumental nominalization *ʔit-*: *gé:gel* "to sit"/***ʔit**gé:gel* "chair"; *gumbéyit* "to brush/comb oneself"/***ʔit**gumbéyit* "a brush/comb".

– Deverbal nominalization /dE-/: *gumsu?ú?uš* “to dream”; ***de****gumsu?ú?uš* “dream”).
– Stativization *w* –: *t’é:be?* “fallen snow, snow on ground” vs. ***w****t’é:be?* “snow to be on the ground, to be accumulating on the ground”, *gális* ‘winter; year’ vs. ***w****gális* “to be winter; to spend the winter (in a certain place)”
– Negation *-e:s*: *didámali* “I heard it” vs. *didámal****é:s****i* “I did not hear it”.

Inflectional processes generally affect the word form without changing the core meaning of the word (*di-yák’aš-i* ‘I am warm; 1-warm-IND’) and can be prefixal or suffixal in Wá·šiw. Prefixal inflection is restricted to the imperative (a prefix added to verbs to indicate that one is making a command or request) and person markers (i.e. prefixes that refer to an entity elsewhere in the clause or discourse). All other inflectional morphology appears to be suffixal (e.g., the independent mood marker *-i*, the dependent mood marker *-a?*, and the switch reference marker *-š*).

The person marking system of Wá·šiw is fairly complex. Particularly noteworthy is the fact that the shape of the person/number marker often differs depending on whether the following morpheme begins with a vowel or a consonant. For example, the 2nd person subject marker (“you”) is *m-* before a vowel and *um-* before a consonant; the 3rd person possessive prefix (i.e. “his”, “hers”, “their”, “its”) is *t’* before a vowel and *dE* – before a consonant. Certain combinations of person features may be expressed by a single morpheme, rather than the combination of multiple morphemes (i.e. portmanteaux); see Douros 2019 for an analysis. For example, 1/2 refers to 1st person subject and a 2nd person object, which is marked by *mi* – before a consonant and *mile-* before a vowel.

Finally, an important division between morphemes in Wá·šiw concerns whether a morpheme is within the domain of stress assignment or not. The division is not simply a difference between derivational and inflectional morphemes, although inflectional morphemes are more likely to be outside the domain of stress assignment.

48.3.1 Bipartite stem formation

An important feature of Wá·šiw morphology is the prevalence of bipartite stems in the language (Jacobsen, 1980; Bochnak & Rhomieux, 2013). Bipartite stems are akin to verbal compounds in some languages (e.g., English *fist-bumping*, *eye-catching*, etc).[4] For example, the verb *šum̓áwd* – ‘to throw something over the edge’ contains two elements. The initial element *šum̓* – contributes the meaning “throw”, while the final element *-awd* contributes the meaning “over the edge”. Tense, aspect, mood, and agreement morphology appear outside the bipartite stem. The initial elements of bipartite stems have been

4 Bipartite stem formation might be an areal feature as it is also found in many of Wá·šiw’s neighboring languages (DeLancey, 1996).

classified into two subclasses (Bochnak & Rhomieux, 2013): those related to the body part involved in the action vs. those indexing the instrument involved in the action. The body-part initial verbs (e.g., *tum̓á?am-* "foot-into.water/to put one's foot into the water") are morphologically strictly intransitive and the initial element can introduce a discourse referent that can be referred to later. The nominal reference of the initial can also be doubled with an independent noun phrase in the instrumental case and can be subject to apparent external modification, also in the instrumental case. The instrument noun initial verbs (e.g., *ugát'g-* "with.club-kill.SG/to kill with a club-like object") can be transitive, intransitive, or ditransitive, and the nominal cannot introduce a new discourse referent, but also shows apparent doubling and external modification in the instrumental case, like the body-part initial verbs. For example, the sentence *tu?má?ami máyaplu* "he put his foot into the water" contains the additional (doubled) noun *máyab* "foot" with the instrumental suffix *-lu* even though the bipartite verb *tu?má?am-* (*tu?m-* "foot", *-a?am-* "into.water") already means "to put one's foot into the water".

48.3.2 Reduplication

Wá·šiw employs partial reduplication to denote plurality in nouns (e.g., *géwe*/*gewéwe* "coyote/coyotes") and pluractionality in the verbal domain (e.g., *dámal-i* "s/he hears"/ *damámal-i* "they hear/*-i* IND"; *bíŋil-* "to try"/*biŋíŋil-* "to try repeatedly"). Reduplication is partial in that the part that is duplicated (the reduplicant; see underlined) generally consists of only a consonant and a vowel (Yu, 2006), even when the noun or verb that is being copied from is much longer. The left edge of the reduplicant must be aligned with respect to the left edge of the stressed syllable. Since stress falls predominantly on the penultimate syllable of the stem, the reduplicant appears to be infixing (i.e. appearing internal to a root or stem) in many instances. The infixal nature of partial reduplication is best illustrated with stems that contain internal consonant sequences. For example, the singular form of "father's brother" is *?éwši?*, while the plural form is *?ešíwši?*.

48.3.3 Auxiliaries

Auxiliaries, which generally encode aspectual or adverbial information (e.g., *mama?* "finish", *gaŋa?* "start" *šemu* "really", *aŋaw* "good/well" etc.), most often appear as verbal suffixes, but may also be prosodically independent from the matrix verb as they can carry primary stress. Speakers allow a long pause between the verb stem and the auxiliary that would be impossible for other suffixes. Additionally, certain tense and auxiliary suffixes may also appear on their own when resuming or adding to discourse-established information (e.g., *?-áša?-i* "3-NEAR.FUT-IND/it will", *?-áŋaw-i* "3-good-IND/it is good"), which Jacobsen (1964, 397) refers to as 'anaphoric theme' constructions.

48.4 Sentence structure

48.4.1 Main clauses

The neutral word order of Wá·šiw is Subject-Object-Verb (SOV), though postverbal elements are sometimes permitted. This order is shown in (1); note that indirect objects precede direct objects:

(1) há:diʔ wí:diʔ bedíliʔ ʔ-íšił-i
that this matches 3/3-give-IND
"That one is giving this one matches." Jacobsen (1964, 456)

Wá·šiw displays the head-final property of making sole use of postpositions (e.g., "with", "for"). Postpositions follow nominals, as opposed to prepositions (which precede nominals in languages like English). An example of this is shown below with the instrumental postposition *-lu* (2).

(2) hélmeʔ máyap-lu Ø-séʔeš-i
three leg-INST 3-wade-IND
"He is wading with three legs."

Within modified nominal expressions however, word order is largely flexible. Modifiers with descriptive content, numerals, and quantifiers may precede or follow the noun they modify, as demonstrated in (3a-b) with the quantifier *míl̓eʔ* "all" (see Section 5.2 for more on modifiers):

(3) a. t'ánu míl̓e-w Adele Ø-sú:dɨm-i
person all-PL Adele 3/3-look.at-IND
b. míl̓e-w t'ánu Adele Ø-sú:dɨm-i
all-PL person Adele 3/3-look.at-IND
"Everyone is looking at Adele."

48.4.2 Clausal embedding

There are two prominent strategies for clausal embedding (the dependence of one clause on another). The first is clausal nominalization (a process whereby an entire clause is turned into a nominal argument) with the independent mood marker *-i*; the second is bare clausal embedding with the dependent mood marker *-aʔ*. Independent mood *-i* can be considered the default as it occurs in most matrix clauses, while dependent mood is used only in limited types of embedded clauses.

48.4.2.1 Clausal nominalizations

Clausal nominalizations are found in a range of environments in Wá·šiw: they are used in internally-headed relatives as in (4) (so-called because the semantic 'head' of the relative remains internal to the embedded clause, see Jacobsen 1998; Peachey 2006; Hanink 2021), as complements of factive verbs (5) (verbs that presuppose the truth of their complement, see Hanink & Bochnak 2018 and Bochnak & Hanink 2022), and as complements of perception verbs (6) (e.g., "see", "hear", Hanink 2016, 2018).

(4) *Internally headed relative*
[Adéle gawá:yiʔ ʔ-í:gi-yi-š-**gi**] Ø-ɱúʔuš-uweʔ-i
[Adele horse 3/3-see-IND-DS-**NM.NOM**] 3-run-hence-IND
"The horse that Adele saw is running away." Hanink (2018, 61)

(5) *Complement of factive verb*
[Ø-háʔaš-i-š-**ge**] di-hámupʼáy̓-i
[3-rain-IND-DS-**NM.ACC**] 1/3-forget-ind
"I forgot that it rained." Hanink & Bochnak (2018, 67)

(6) *Complement of perception verb*
[sí:su Ø-šéšim-áŋaw-i-š-**ge**] di-dámal-gal̓á:m-i
[bird 3-sing.pl-well-IND-DS-**NM.ACC**] 1/3-hear-like-ind
"I like hearing the birds' good singing." Hanink (2018, 74)

Clausal nominalizations are full clauses with the nominalizing element *-gi/-ge* (subject/object, respectively) at their right periphery, which turn them into arguments of the matrix verb. This nominalizer is identical in form to the third person pronoun; like third person pronouns, this nominalizer shows a subject/non-subject case distinction that reflects the grammatical argumenthood of the clause, either as a subject (4), or an object as in (5)–(6) (see Hanink 2018, 2021 for discussion).

Finally, as Jacobsen (1998) notes, the presence of a clausal nominalization can perturb the typical SOV order of Wá·šiw, as such nominalizations generally appear as the first argument, even to the left of the subject (*léši* 'we') (7):

(7) [git-ŋaʔmíʔmiŋ bugayáy-i-š-ge] lé-ši di-dámal-leg-i
[3.POSS-cub.R 3.talk-IND-DS-NM.ACC] 1.PRO-DU 1/3-hear-REC.PST-IND
"We both heard her talking to her cubs." Jacobsen (1998, 114)

48.4.2.2 Bare embedded clauses

Non-factive verbs (verbs that do not presuppose the truth of their complement) occur instead with bare clauses, which are so described because they lack the normalizing morphology observed in the types of clauses in Section 4.2.1. (Hanink & Bochnak 2018).

These clauses occur with the mood marker *-a?*, as in (8). Notably, these clauses also lack switch reference morphology (see Section 6.1), which would otherwise mark the distinctness of cross-clausal subjects in (7). The absence of nominalizing and switch reference morphology indicates that they contain less structure.

(8) Béverli [démlu di-begúwe?-é:s-**a?**] ∅-hámu-yi
Beverly [food 1/3-buy-NEG-**DEP**] 3-think-IND
"Beverly thinks I didn't buy the food."

48.4.2.3 Adjuncts

The dependent mood marker *-a?* is also used in adjuncts, which are optional clauses that add information to the main clause. Adjuncts are used for example to indicate temporal simultaneity of actions, states, or events (9). Note that unlike in clauses embedded by non-factive verbs, temporal adjuncts display the predicted different subject marker *-š*.

(9) di-hámu-ʔáŋaw-i [díːbe w-álag-ewe?-**a**-š]
1-feel-well-IND [sun STAT-shine-hence-**DEP**-DS]
"I feel good when the sun is shining."

48.4.2.4 Embedded imperatives

Finally, a typologically uncommon behavior of Wá·šiw is that it allows imperatives to be embedded, both within a clausal nominalization (10) and within an adjunct (11):

(10) [séwɨt ge-séʔš-uweʔ-i-∅-ge-lu] ga-l̓ók'aš-ha
[porcupine IMP-take-hence-IND-SS-NM.ACC-INST] IMP-scare-CAUS
"Take a porcupine and scare him with it." Jacobsen (1998, 111)

(11) [húŋa g-éːd-éːs-aʔ-∅] ge-géːgel
[what IMP-say-NEG-DEP-SS] IMP-sit
"Don't say anything and sit!"

48.4.3 Questions

Wá·šiw seems to lack any true *wh*-movement. This means that *wh*-words are often found in-situ (12a), but may also appear in a clause-initial position, as in (12b) (obligatory in English):

(12) a. Eddy húŋa-t'eʔ-hé:š Ø-yá:šuʔ-i
Eddy what-kind-Q 3/3-wash-IND
b. húŋa-t'eʔ-hé:š Eddy Ø-yá:šuʔ-i
what-kind-Q Eddy 3/3-wash-IND
"What is Eddy washing?"

'Long-distance' *wh*-movement across clauses is accordingly not permitted, as shown in (13), in which the *wh*-word *gúdiŋahe:š* 'who' remains in the embedded clause.

(13) [Eddy gúdiŋa-hé:š ʔ-í:gi-yaʔ] ʔum-hámu-yi
[Eddy who-Q 3/3-see-DEP] 2-think-IND
"Who do you think Eddy sees?"

Note that the suffix *-hé:š* is a question particle that generally occurs as a suffix on *wh*-words (e.g., on 'horse' in (13)). In the case of 'yes/no' questions on the other hand, it generally occurs as a suffix on the verb, as in (14):

(14) gawá:yiʔ ʔum-sudɨm-**hé:š**-i
horse 2/3-look.at-**Q**-IND
"Are you looking at the horse?"

48.5 Meaning

48.5.1 Tense, modality and mood

48.5.1.1 Temporal interpretation with and without tense

Wá·šiw uses several strategies to encode temporal interpretation. First, there are clauses which do not contain any tense marker at all. These can be interpreted as referring to the past or present, depending on contextual factors (Bochnak, 2016). The verb type also has an effect: tenseless clauses with stative verbs (15) tend to receive a present interpretation, while clauses unmarked for tense with eventive (action) verbs (16) tend to receive a past interpretation. There is no dedicated present tense in Wá·šiw.

(15) wá:diŋ Ø-wa-yák'aš-i
now 3-STAT-warm-IND
"It (the weather) is warm now." (Bochnak, 2016, 252)

(16) watlí: zí:gɨn l-é:bik-ha-yi
morning chicken 1/3-be.cooked-CAUS-IND
"I cooked chicken this morning." (Bochnak, 2016, 252)

Nevertheless, there also exist several past tense morphemes that can be used to make past temporal interpretation more precise (Jacobsen, 1964). The most frequent are the so-called graded tenses which encode different 'grades' of temporal distance/remoteness), which indicate whether the sentence is about a time in the near, intermediate or distant past; see (17). Alongside these is a general past marker *-uŋil* ("defunctive" in Jacobsen 1964), which does not specify any remoteness value (Bochnak, 2016). Using the defunctive *-uŋil* typically implies either that a state that held in the past no longer holds at present, or that the result state of an event that occurred in the past no longer holds at present; see (18).

(17) a. Ø-há?aš-**leg**-i
3-rain-REC.PST-IND
"It was raining." (adapt. Jacobsen 1964: 633)

b. mi-damal-é:s-**ay̓** -i-Ø-gi
1/2-hear-NEG-INT.PST-IND-SS-NM.NOM
"I didn't hear you." (adapt. Jacobsen 1964: 636)

c. Ø-yé?eš-uwe?-**lul**-i?-i-š-gi
3-fly.away-hence-DIST.PST-ATTR-IND-DS-SUBJ.REL
"He flew away long ago." (adapt. Jacobsen 1964: 636)

(18) di-táwɨn-i?-giš-uwe?-**uŋil**-i-š-ŋa wa-yásaŋ-i-š
1-town-ATTR-along-hence-PST-IND-DS-but STATIC-hot-IND-DS
di-p'-í:gel-ay?-leg-i
1-walk-turn.around-away-REC.PST-IND
"I went to town, but it was too hot, and I turned back."
(adapt. Jacobsen 1964: 609)

Whereas tenseless clauses may refer to either the present or the past, a future interpretation almost always requires a future marker. Future markers in Wá·šiw specify whether the time being talked about is in the near, intermediate or distant future (Jacobsen, 1964). Note that what counts as near, intermediate or distant is not symmetrical between the past and future.

(19) a. l-émlu-**yáša**?-i
1-eat-NEAR.FUT-IND
"I'm going to eat (right away)." (adapt. Jacobsen 1964: 593)

b. m-íp'am-**t**-i-Ø-gi ṃ-é?-i
2-arrive-INT.FUT-IND-SS-NM.NOM 2-MOD-IND
"You will arrive (later today)." (adapt. Jacobsen 1964: 642)

c. Ø-há?aš-**gab**-i-gi wát
3-rain-DIST.FUT-IND-NM.NOM tomorrow
"It'll rain tomorrow." (adapt. Jacobsen 1964: 649)

48.5.1.2 Modality and mood

Wá·šiw has very few expressions that correspond to the English modal auxiliaries (e.g., *must*, *can*, *might*, etc.). One such expression is the modal verb *-e?*, which is homophonous with the copula 'to be'. The modal use of *-e?* can be recognized by its clausal embedding properties: either embedding a clausal nominalization, like in (20a) and (20c), or a smaller clause without mood marking, as in (20b). Unlike modal verbs in English which specify modal force (i.e., whether something is necessary or just possible; compare *must/have to* versus *can/may*), the modal *-e?* is compatible with both necessity and possibility interpretations (Bochnak, 2015a,b), a property shared by modals in other languages of the greater Pacific Northwest. Sentences containing the modal *-e?* are compatible with a wide range of modal interpretations, or "flavors", including epistemic (relative to a body of knowledge; see (20a)), deontic (relative to a set of rules; see (20b)), or pure circumstantial (relative to a set of salient facts (20c)).

(20) a. Context: you are planning to drive over the mountains. It has started to snow, and you know that whenever it snows, the road over the mountains is closed.
Ø-dé?eš-áŋaw-i-š yéweš gum-beyéc'ig-i-Ø-gi k'-e?-i
3-snow-good-IND-DS road REFL-be.closed-IND-SS-NM.NOM 3-MOD-IND
"It's snowing a lot, so the road must be closed." (Bochnak, 2015a, 7)

b. Context: Mary's friends come over to see if she is allowed to come out to play.
wá:diŋ hé:š ʔum-p'áyt'i-giš-uwe? k'-é?-i
now Q 2-play-along-hence 3-MOD-IND
"Now can you come play?" (Bochnak, 2015a, 8)

c. Context: you are discussing what could grow in the garden, given the type of soil
dawp'áp'ɨl ʔ-íʔim-áŋaw-i-Ø-gi k'-é?-i wá? ŋáwa-ya
flower 3-grow-good-IND-SS-NM.NOM 3-MOD-IND here dirt-LOC
"Flowers could grow well here in this dirt.""" (Bochnak, 2015a, 9)

Another strategy is the subjunctive marker *-hel*, which is used for possibility statements. Note that the modal verb *-e?* is also present in (21).

(21) Context: you have been working on fixing the house for quite a while now. It is almost done, but you are not sure if you will be able to finish it by tomorrow.
wát di-dó:da?-máma-**hel**-i-š-gi k'-é?-i
tomorrow 1-work-finish-SUBJV-IND-DS-NM.NOM 3-MOD-IND
"I might finish it tomorrow." (Bochnak, 2015b, 110)

The verbal suffix *-i* that has appeared in the vast majority of examples so far was analyzed by Jacobsen as an imperfective aspect, while the suffix *-a?* was analyzed as an aorist form. These have since been re-analyzed as independent and dependent mood markers, respectively (e.g., Bochnak 2015b, 2016, 2023; Hanink & Bochnak 2018).

Some of the evidence for this re-analysis is as follows. First, as already acknowledged by Jacobsen, these morphemes often do not contribute their hypothesized aspectual meaning to the sentences they appear in. That is, both *-i* -marked and *-aʔ*-marked clauses can have imperfective or perfective aspectual reference (Bochnak, 2016, 2023). The distribution of these two morphemes is better characterized on syntactic grounds. Dependent *-aʔ* is restricted to certain subordinate clauses, including complements of verbs of thinking or saying, and many adjunct clauses. It also appears frequently in texts as a clause-chaining strategy. Bochnak & Hanink (2022) analyze *-aʔ* as having the semantics of conjunction 'and'. Meanwhile, *-i* is a default mood marker – it appears in most matrix clauses and whenever *-aʔ* or another mood marker is not or cannot be used. Second, *-i* and *-aʔ* are in complementary distribution with other mood morphemes, such as optative *-hi*, imperative-∅ (unmarked),[5] hortative *-hulew*, and the so-called "redundant" *-le* (see Jacobsen (1964) for more detailed descriptions of these suffixes).

48.5.2 Numerals and quantification

Wá·šiw has a full series of numerals, with a base-ten numeral system. Numerals come in three forms (Jacobsen, 1996): ordinary counting forms, which end in a glottal stop (e.g., *hésgeʔ máʔak* 'two sticks'); 'exactly' or 'just' forms, which append *-ŋ* (e.g., *lák'aŋ méːhu* 'just one boy'); and forms used for counting humans (e.g., *t'ánu háẇaw* four people'). In the latter case, *-w* is appended to numerals greater than two, with special forms for 'one' and 'two'. These forms are shown in Table 4 for numerals up to five. As shown in the examples above, the numeral may appear before or after the noun. This is true no matter which form of the numeral is used.

Tab. 4: Forms of numerals up to five in Wá·šiw.

	ordinary	'exactly'/'just'	human
one	**lák'aʔ**	**lák'aŋ**	**lék'iliŋ**
two	**hésgeʔ**	**hésgeŋ**	**hésgilši**
three	**hélmeʔ**	**hélmeŋ**	**hélmiw**
four	**háẇaʔ**	**háẇaŋ**	**háẇaw**
five	**dubáldiʔ**	**dubáldiŋ**	**dubáldiw**

The quantification words *t'éːk'eʔ* 'many' and *míl̓eʔ* 'every/everything' also come in three forms: *t'éːk'eʔ* 'many [things]', *t'éːk'eŋ* 'definitely a lot', *t'éːk'ew* 'many [people]'; and *míl̓eʔ* 'everything', *míl̓eŋ* 'definitely all', and *míl̓ew* 'all [the people]/everyone'. There is also the

5 Note that imperative verb forms are marked by a prefix *ge-/ga-*, or *le-* with a first person object, and can appear with dependent mood *-aʔ* in embedded clauses; see section 48.4.2.4.

special dual form *míl̓eši* 'both'. These quantification words can also appear either before or after the noun, see for instance example (3).

48.5.3 Negation

Negation in Wá·šiw is expressed by the morpheme *-e:s*. In sentential negation, this suffix occurs on the verb, as in (22). There are however also cases of phrasal negation – in particular, quantificational modifiers tend to bear the suffix, as in (23).

(22) Adéle-ŋa wá?-ŋa ʔ-áŋal-**é:s**-i
Adele-NC here-NC 3-reside-**NEG**-IND
"Adele doesn't reside here."

(23) t'ánu-ŋa míl̓e-w-**é:s** baŋáya ʔ-éʔ-gáp'ił-i
person-NC all-PL-**NEG** outside 3-be-around-IND
"Not everyone is around outside."

The suffix *-ŋa* in (22) and (23) is a negative concord morpheme that is licensed by local negation, more specifically, by a clause-mate negative suffix *-é:s* (see Hanink 2019 for an overview).

48.6 Discourse

48.6.1 Switch reference

Switch reference is a cover term referring to morphology that tracks whether subjects are the same or different across clauses (Jacobsen 1967), and is a common phenomenon in North America (McKenzie 2015, this volume). In Wá·šiw, this morphology appears on embedded verbs solely across subordinate clause boundaries (Finer 1985; Arregi & Hanink 2018, Arregi & Hanink 2022). The following clauses represent this behavior in the case of embedded relatives, though this marker occurs in all subordinate clause types (aside from the complements of non-factive verbs, as discussed in 4.2.2). In (24), the subject of the embedded clause is *Adele*, while the subject of the matrix clause is 'the horse that Adele saw'. For this reason, the different subject morpheme *-š* appears on the embedded verb. (Subscripts indicate co-reference or disjoint reference, i.e., constituents marked with the same subscript refer to the same individual.)

(24) [Adéle$_i$ gawá:yi ʔ$_j$ ʔ-í:gi-yi-**š**-gi]$_j$ ∅$_j$-m̥ú?uš-uwe?-i
[Adele$_i$ horse$_j$ 3/3-see-IND-**DS**-NM.NOM]$_j$ 3-run-hence-IND
"The horse$_j$ that Adele$_i$ saw is running away." =(4)

In (25) on the other hand, the subject of both clauses is 'the girl', and no switch reference morphology appears on the embedded verb (glossed here as a null 'same subject' morpheme):

(25) [šáwlamhu$_i$ t'é:liwhu$_j$ ∅-bóŋi-yi-**Ø**-gi]$_i$ wáʔ ʔ$_i$-éʔ-i
[girl$_j$ man$_j$ 3/3-call-IND-**SS**-NM.NOM]$_i$ here 3-be-IND
"The girl$_i$ that called the man$_j$ is here."

48.6.2 Sentential connective theme

Wá·šiw makes use of an interesting discourse feature that Jacobsen (1964) refers to as the 'sentential connective theme' (Jacobsen 1964, 397). This refers to the use of peripheral verbal suffixes such as mood and nominalizing morphology that appear without a verb stem, and are used to refer back to a preceding clause. For instance, this morphology can be used when a speaker wishes to form a relative clause out of a clause they have just ended with the dependent mood marker *-aʔ*. As relative clauses may only be formed out of clauses with the independent mood marker *-i* (Jacobsen 1964, 663), the speaker may repeat this mood marker, followed by switch reference and nominalizing morphology in order to continue the sentence, as in (26):

(26) mudaláʔ ∅-l̓áṫ'ig-aʔ **ʔi:-∅-ge** ʔ-íʔw-aʔ
doe 3-kill.by.biting-DEP **IND-SS-NM.ACC** 3/3-eat-dep
"She ate the doe that she killed by biting." (adapt. Jacobsen 1998, 111)

The sentential connective theme comes in a variety of forms, and may also occur with the dependent mood (27) or sequential morpheme *-ud* (28).

(27) d-émlu-ya ∅-hámu-p'-aw̓-i **ʔaʔ-∅** ʔ-émlu-yé:s-i
food-LOC 3-think-crawl-away-IND **DEP-SS** 3-eat-NEG-IND
"She forgot the food and didn't eat."

(28) mé:hu la-bugay'áw̓-i **ʔud-i-∅** mé:hu ʔida šáwlamhu
boy 3/1-talk-IND **SEQ-IND-SS** boy and girl
∅-wagayaw̓-áša?-i
3-talk-NEAR.FUT-IND
"The boy's talking to me and then the boy and girl will talk (together)."

In general, the sentential connective theme is used to resume a clause at the level of the mood morpheme, and may not include any tense morphology (aside from the sequential marker, as in (28), which precedes mood).

48.6.3 Clause chaining with *-a?-clauses*

In texts and narratives, it is common to find series of clauses marked with the dependent mood *-a?*. This clause chaining strategy is hypothesized to be a variety of the clausal adjunction function of *-a?* (Bochnak & Hanink 2022; cf. sect. 4.2.3). The following example comes from a version of the Coyote and Lizard story told to Jacobsen by John Wiger in 1955/1956. The first two full clauses in (29a)–(29b) are marked with *-a?*, while the final clause in the chain, (29c), uses the independent *-i*. (Note also the use of the sentential connective theme at the beginning of (29a) and (29b), as well as the different subject marker in (29b), indicating a change in subject from the previous clause.)

(29) a. ʔuŋil-i-š-gi píteli? ʔit-mélmaẏ-k'eŋ-aʔ-∅
PAST-IND-DS-NM.NOM lizard INST-keep.asking-just-DEP-SS
"But lizard just kept asking"

b. ʔi-š ga-ḷóyaw-etiʔ-aʔ-∅
IND-DS 3/3-angry-INCH-DEP-SS
"and coyote got angry at him"

c. géwe píteli? ʔ-išúʔuš-uweʔ-i
coyote lizard 3-go.after-hence-IND
"and coyote went after the lizard."

48.7 Documentation and revitalization

The first systematic investigation of Wá·šiw was conducted by Alfred L. Kroeber in the early twentieth century. Kroeber's work with Robert Schermerhorn, a Wá·šiw speaker living near Reno, resulted in the publication of a sketch of the phonology and morphology of the language as well as an accompanied text (Kroeber, 1907). Grace Dangberg collected stories from Blind Mike and Bill Fillmore in the summers of 1919 and 1920 in Minden, Nevada and worked on the translation of the myths with Henry Moses Rupert. Dangberg published a short description of Wá·šiw (Dangberg, 1922) and a collection of Wá·šiw stories (Dangberg, 1927), presented both in Wá·šiw and in English. Robert H. Lowie worked with Dave Cheney from Minden, Nevada and Jack Pitts and Bill Cornbread from Coleville, California in 1926. The English translation of a collection of Wá·šiw stories appeared in Lowie (1939), while the Wá·šiw transcriptions were published posthumously in 1963. William Jacobsen Jr. began working on the Wá·šiw language in the late 1950s, primarily with Roy James, Wally John, and Roy and Jemimah Cornbread of Woodfords, California, Bertha Holbrook, Hank Pete, Clara Frank, Mike Holbrook, and Donnie and Eenie Cornbread of Dresslerville, Nevada, and John Wiger, Frank Morgan, and Lizzie Evans of Loyalton, California. His 1964 University of California, Berkeley dissertation offered a comprehensive description of the phonological and morphological aspects of Wá·šiw grammar. Jacobsen continued to publish on various topics of Wá·šiw

grammar (see below), as well as a short pedagogical book on learning Wá·šiw (Jacobsen, 1996). Audio recordings from Jacobsen's fieldwork in the late 1950s as well as those from the anthropologist Warren d'Azevedo have been archived at the Berkeley Language Laboratory and are accessible at http://cla.berkeley.edu/list.php?langid=375=Washo.

Prior to Jacobsen's dissertation, which introduced a pseudo-phonemic writing system (i.e. the system allows some predictable information to be written), language maintenance and revitalization efforts were mainly done at the individual level. Roma James recorded a journal of stories that detailed the tribe's way of life using a system adopted from the International Phonetic Alphabet (Irwin, 2015). Wá·šiw words were written in a mixed alphabet-syllabic script in Nevers (1976). No standard orthography has officially been adopted by the tribe. Jacobsen began teaching language classes near Dresslerville in 1979 and language circles initiated by language activists brought together elders to share stories in Wá·šiw began in early 1980s. The Wašiw Wagayay Maŋal (the house where Wá·šiw is spoken) was established in September 1997 to teach pre-schoolers through eighth-graders all subjects except math in Wá·šiw. The immersion school closed in 2003. Between 2012–2015, the "Patalngi Me?ki" (Eagles Nest) Immersion Project created a language nest in a Head Start classroom within the tribe's Dresslersville community and provided Wá·šiw language immersion instruction to children between the ages of three to five years old and to their parents and family members to increase the knowledge of the language in the community. Community language classes continue up to the present.

Linguistic investigation of the Wá·šiw language experienced a renewal with the launch of the Wá·šiw Documentation Project in 2006 with the support of the Documenting Endangered Languages program at the National Science Foundation. The Wá·šiw elders who contributed centrally to this effort include Ramona Dick, Adele James, Steven James, and Eleanor Smokey. Besides academic articles regarding various aspects of Wá·šiw grammar, the project developed an online database for the Wá·šiw language http://washo.uchicago.edu, including a mobile-friendly searchable English-Washo/Washo-English lexicon equipped with audio samples (http://washo.uchicago.edu/mobile/) which aims to assist in revitalization and language maintenance efforts.

As noted above, Jacobsen's dissertation offered a comprehensive description of the phonological and morphological systems of Wá·šiw. Other topics of Wá·šiw grammar that have received attention include consonantal phonetics and phonology, vowel harmony, lexical stress, reduplication, morpheme ordering, pronominal markings, numerals and quantifiers, bipartite stem, switch reference, transitivity, and internally headed relatives. The Wá·šiw Documentation project also maintains a bibliography of Wá·šiw-related work and can be found at http://lucian.uchicago.edu/blogs/washo/?page_id=82. Readers interested in language maintenance and revitalization might use the information provided in Jacobsen's pedagogical text (Jacobsen, 1996) as well as in this article as entry points to facilitate the interpretation and perusal of materials available on the Wá·šiw Documentation Project website.

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