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Tsimshianic

Abstract: Languages of the Tsimshianic family, spoken in the Skeena River watershed of British Columbia, share a number of properties with other languages of the Pacific northwest region. Their sound inventories feature glottal consonants, and they permit clusters of consonants without vowels. Their word order is verb-first (VSO), and a central property of the grammar is a robust system of plural marking on both nouns and verbs. This chapter reviews topics in the sound system, word formation, and sentence building. In particular, I review two topics that commanded the majority of linguists' attention until about a decade ago: glottalized sounds, and the agreement/pronoun system. This second is a complicated core area of the grammar, particularly for an L1 English learner, and is perhaps unique to Tsimshianic: linguists have described the pattern as one of 'pivoting ergativity' across two types of clauses. In the course of discussing sounds, words, and sentences, I also briefly review some more recent lines of linguistic work of interest to language learning and teaching: the placement of stress, mismatches between words and syntactic units, plural marking, tense and perspective, and ways to form questions and convey emphasis.

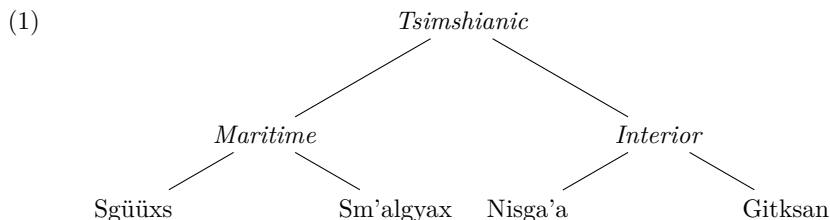
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1 Introduction¹

Tsimshianic derives from *Tsimshian*, an anglicization of Ts'msyen (*ts'm-* 'in' *syen*, *kisiyeen* 'the Skeena River'), used by the coastal Tsimshianic-speaking peoples to refer to themselves. The Tsimshianic peoples and languages are indigenous to the watersheds of the Skeena and Nass Rivers in the northern region of what is today called British Columbia, Canada, plus one community in Alaska. The territory spans from the uppermost reaches of the Skeena and Nass Rivers to

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where they empty into the Pacific Ocean. All four Tsimshianic-speaking groups are able to refer to their language as some variant of *s(i)m alg(y)a̱* ‘true/real speech’. The structure of the family is given in (1).



The earliest documentation of the Tsimshianic languages is from Boas (1902, 1911), who discussed “Tsimshian proper” and “Nass”. This reflects the deepest split in the family, between the Interior languages (Nisga’a [N] and Gitksan [G]), and the Coastal or Maritime languages (Sm’alg yax/Coast Tsimshian [CT] and Sgüüxs/Southern Tsimshian [ST]). Within the major branches, the languages are to a large degree mutually intelligible. The mutual intelligibility of Nisga’a and Gitksan caused some to consider these groups as a single language Nass-Gitksan, though they are now recognized as distinct languages (Rigsby 1986, 1989). The linguistic literature only noted the distinct identity of Sgüüxs from Sm’alg yax decades after Boas’s original categorization (Dunn 1979b). In general, the family can be considered a continuum of dialects, with each village speaking somewhat differently than its neighbors. People from nearby villages understand each other well, but the two farthest ends are unable to understand each other.

The Tsimshianic languages share many surface features with other languages of the Pacific Northwest geographic region, including verb-first word order and large inventories of consonants. They neighbor and have had contact with Tlingit and the northern Dene/Athabaskan languages, Wakashan languages to the south, and other languages through Chinook Jargon. However, the unique character of the Tsimshianic languages is well-recognized.²

In this paper I first review topics about sounds (§2), then word-formation (§3), then sentence-formation (§4), and last on setting up meaning and contexts (§5).

² There is a prevalent hypothesis originating from Sapir (1921) that the Tsimshianic languages can be genetically linked to Penutian languages in Oregon and California, supported later by Tarpent (1997). However, the long time depth of such a possible relation, as well as the significant surface difference between Tsimshianic and the other members – enough so that modern Tsimshianic languages neither typologically nor lexically resemble other proposed Penutian languages at all – makes this difficult to assess.

2 The sound level

2.1 Inventory

The Tsimshianic languages have large consonant inventories, and vowel inventories that contrast length. The Nisga’a and Gitksan consonant inventory is provided in Table 1.

	Labial	Coronal		Palatal	Labiovelar	Postvelar
Stops (Plain)	p	t	ts	k ^j	k ^w	q
Stops (Glottalized)	pʔ	tʔ	tsʔ	χʔ	k ^{wʔ}	qʔ
Fricatives		s	ʃ	x ^j	x ^w	χ
Sonorants (Plain)	m	n	l	j	w	h
Sonorants (Glottalized)	mʔ	nʔ	lʔ	jʔ	wʔ	ʔ

Tab. 1: Interior Tsimshianic consonants (Tarpent 1987; Rigsby 1986)

As characteristic of the region, there are several sets of dorsal *k*-like sounds, including palatals (or palatovelars), labio-velars, and uvulars. Sm’algyax only distinguishes two dorsal fricatives, /x/ and /x^w/, but otherwise maintains the inventory. There are lateral *l*-sounds but no rhotics. There is a contrast between plain versus glottalized sounds, which applies to both stops (e.g. /t/ versus /tʔ/) and sonorants (e.g. /n/ versus /nʔ/). Complex consonant clusters are permitted, particularly word-finally, and moreso in the Interior (e.g. CVCCCC in Nisga’a [mɾɬχk^ws], *mihlɬkws* ‘moxibustion’; Tarpent 1987: 82).

The plain stops are voiced before vowels (e.g. *daa*) but voiceless otherwise (e.g. *aat*). An alternation can be observed when a vocalic or sonorant suffix is added to a word ending in a plain stop, as in (2).

- (2)
- | | | |
|-----------------------|----------------------|--|
| /wak ^j / | [wɛk ^j h] | wak ‘man’s brother’ |
| /wak ^j -n/ | [wɛg ^j m] | wagin ‘your brother (of a man)’ |
- G* (Rigsby 1986: 158)

Aspirated stops which remain voiceless aspirated before vowels (e.g. *taa*) can also be identified in a number of words, but these are much less numerous. Rigsby (1986) argues for Gitksan that this is exclusively due to sequences of sounds (for example, the aspirated *p* in *gipaykw* ‘fly’ is from /k^jip+hajk^w/ → [g^jip^hajk^w]). In

contrast, Sasama (1995) treats aspiration as phonemic in Sm’algyax, effectively a three-way phonation contrast (e.g. /t, t̚, tʰ/).

The Interior vowel inventory is presented in Table 2. All the languages contrast long and short vowels. The Maritime languages have an additional high back unrounded vowel /u(:)/.

	Front	Back
High	i, i:	u, u:
Mid	(e), e:	(o), o:
Low	a, a:	

Tab. 2: Interior Tsimshianic vowels (Tarpent 1987; Rigsby 1986; Brown et al. 2016)

In the Interior, short high and mid vowels are possibly allophonic, being lowered by neighboring post-velars, suggesting only three short vowels: /i~e/ versus /u~o/ versus /a/ (Rigsby 1986). Unstressed short vowels typically receive color from neighboring consonants, and their spelling is often variable. Phonologically, many of these unstressed vowels could be posited as a reduced phoneme /ə/.

2.2 Orthographies

The Interior versus Maritime language groups have different orthographies, with the Interior writing system developed by Hindle & Rigsby (1973) and the Maritime system developed by Dunn (1978). However, the distinction between the two orthographies belies the similarity of the sound system across the family.

There are a few sounds that have different spellings in the two systems, such as [ɬ] (Maritime *l*, Interior *hl*) or [ɖ~ɗ] (Maritime *dz*, Interior *j*). Another general contrast between the two writing systems is in the propensity of the Interior system to write reduced vowels, versus the propensity of the Maritime system to drop them, and in the Interior system to separate some morphemes as words, versus the tendency of the Maritime system to write them together. Consider (3), which exemplifies the phrase ‘true speech’, one with near-identical pronunciation across the family.

- (3) a. **Interior:** *sim algax* (variant *sim algyax*)
 b. **Maritime:** *sm'algyax* (variant *sm'algyax*)

Either orthography could almost equally effectively be applied across the Tsimshianic family, minus some additional consonant distinctions in the Interior (*x*, *ɣ*) and vowel distinctions on the Coast (*u*, *ü*).

2.3 Glottalization

The best-studied property of Tsimshianic phonology is the contrast between plain and glottal (“hard”) sounds. The glottal character of these sounds is quite lenis, often with an simple interruption of airflow, or addition of creakiness to a nearby vowel, rather than the characteristic “popping” sound of ejectives in some other languages. The preferred term is therefore “glottalized” rather than “ejective” (Ingram & Rigsby 1987; Rigsby & Ingram 1990; Schwan 2013; Brown et al. 2016; Sasama 1995). It’s common for even those with years of experience to have difficulty distinguishing plain and glottal sounds in running speech; in my experience, the most difficult is /ts/ versus /ts̺/.³

The glottal closure of these sounds is not always fixed to the position of the oral closure, particularly in Sm’algyax. Sasama (1995) notes that glottalization in a coda consonant may “float” backward elsewhere into a consonant cluster, or into a long vowel to create an interrupted vowel, as in (4):

- (4)
- | | | |
|----------|------------|-------------------------|
| /pa:lq̺/ | [ba:ʔlax̺] | <i>baa’lax̺</i> ‘ghost’ |
| /ti:k̺/ | [tʰiʔik̺] | <i>tʰi’ik̺</i> ‘navel’ |
- CT* (Sasama 1995: 22,25)

Glottalization therefore seems to have almost a suprasegmental character.

In general, the position of glottalization for stops is dependent on their relation to stress, while the position of glottalization for sonorants is fixed. Stops are post-glottalized ([Tʰ]) in word-initial position and before stress, but are elsewhere pre-glottalized ([ʔT]).³ Sonorants are always pre-glottalized ([ʔR]), which is often difficult to hear at the beginning of a word (Lyon 2008). Some examples are given in (5).

- (5)
- | | | |
|----------|------------|---------------------------|
| /ts̺ak̺/ | [ts̺ʰɛʔk̺] | <i>ts̺’ak̺</i> ‘dish’ |
| /nu:m̺/ | [ʔnu:ʔm̺] | <i>’nuu’m̺</i> ‘us (1pl)’ |
- G* (Rigsby 1986: 142; fieldnotes)

³ This is reflected in the variable position of the apostrophe in the Maritime orthography: *t’* or *’t* as needed. In contrast, the Interior orthography treats *t’* as a single invariable letter, sometimes written *t̺*.

This two-part, sequential realization of glottal sounds (as glottal closure + segment) includes the realization of glottalized glides and the glottal stop, which act like other glottal sonorants (Hunt 1990; Sasama 1997). These are realized as sequences of glottal stop + vowel sound ([ʔV]), sometimes as an “echo vowel”. Examples are in (6).

- | | | | |
|-----|--------------------------------|-----------|------------------------------|
| (6) | /qəna:ʔ/ | [ɢana:ʔu] | <i>ganaa'w</i> ‘frog’ |
| | /kʲaʔ/ | [gʲaʔa] | <i>ga'a</i> ‘see’ |
| | <i>G</i> (author’s fieldnotes) | | |

In some varieties, the post-glottal sonorant or vowel is “swallowed”, and becomes very difficult to hear (e.g. Western Gitksan).

In sum, the plain/glottal contrast is phonetically subtle, and typically difficult for both learners and linguists to perceive, especially at the beginnings or ends of words. However, the distinction is also extremely important, as it is the minimal contrast between many sets of words.

3 The word level

3.1 Categories

There is a clear division between nouns and verbs in Tsimshianic, although these categories are somewhat versatile. Nouns and verbs can both be used bare as the main predicate of a clause, and both can be used as arguments, as demonstrated in (7). However, when verbs function as entity-denoting arguments, they require some modification through relativization, as is the case in (7b): *'witxw* ‘arrive’ becomes *'witxwit* ‘the one who arrived’. (Relativization is detailed further in §5.2.)

- (7) a. *'Witxw*hl *hanak'*ast.
 'witxw=hl *hanak'*=ist
 arrive=CN woman=AFFRM
 ‘The woman arrived.’
- b. *Hanak'*hl *'witxwidist*.
 hanak'=hl *'witxw*-it=ist
 woman=CN arrive-SX=AFFRM

‘The one who arrived is a woman.’

G (Davis et al. 2014: 197)⁴

The division between verbs and adjectives is less clear (discussion in Stebbins 1996; Forbes 2012). Nouns and verbs/adjectives are both able to inflect with the use of agreement suffixes: these mark possessors, for nouns, and arguments, for verbs.

There are also non-inflecting categories. The largest and most notable of these are the modifying proclitics, which have different sets for nouns versus verbs: there are *pre-nouns* and *pre-verbs*, as illustrated in (8).

- (8) *Luu*t’aa **ts’im** wilp.
luu=t’aa **ts’im** wilp
 in=sit in house
 ‘S/he stayed in the house.’
N (Tarpent 1987: 27)

The proclitics typically provide information about location, direction, and manner. For preverbs, there are also control-type concepts such as ‘try to’ or ‘want to’, and for prenouns there are also focus markers, and some adjectival concepts like ‘old’, ‘new’, ‘small’, ‘big’ (Stebbins 1996). Some examples from the Sm’algyax dictionary are given in (9) (Ts’msyen Sm’algyax Authority 2013).

- (9) PREVERBS:
tgi ‘down’, *’yaga* ‘down along plane/ground’, *gisi* ‘downstream’, *hagwil* ‘slowly’, *k’amgayt* ‘at first’, *si’il* ‘try to’
- (10) PRENOUNS:
lax ‘on’, *t’m* ‘on surface’, *sta* ‘one side, half’, *k’aba* ‘small (PL)’, *su* ‘new’, *ksa* ‘only’

⁴ All examples in the paper are cited from their original source, but some glosses have been edited for consistency. Abbreviations are as follows: 1=first person, 2=second person, 3=third person, AFFRM=affirmative, ANTIP=antipassive, ASSOC=associative, ATTR=attributive, AX=agent extraction, CAUS=causative, CN=common noun determiner, COMP=complementizer, DEM=demonstrative, DN=determinate noun determiner, DUR=durative, FOC=focus, INCEP=inceptive, INS=instrumental, INTR=intransitive, IPFV=imperfective, IRR=irrealis, LOC=locative, NEG=negative, NMLZ=nominalizer, OBL=oblique, PFV=perfective, PL=plural, POSS=possessive, PROG=progressive, PROSP=prospective, PROX=proximal, PST=past, SG=singular, SPT=spatiotemporal, SX=intransitive subject extraction, T=T-morpheme, TR=transitive, YNQ=yes-no question.

In general, the structure of inflecting words is as given in (11):

- (11) (proclitics=)derivation–plural–ROOT–valence–agreement(=enclitics)

Occasionally proclitics appear inside derivational morphemes, likely indicating a lower level of attachment or greater degree of lexicalization, though they usually remain outside of plural marking and reduplication. An example of a complex word exhibiting most of these slots is given in (12), with the root **bolded**:

- (12) *hagukwsgalt'amdinsxw*
 ha-gukws-tk'al-**t'am**-in-asxw
 INS-self-against-**mark**-CAUS-ANTIP
 'camera'
G (Rigsby 1986: 85)

There are also particles which appear clause-initially, including tense-aspect words and complementizers (see §5.1) and some modal and perspectival clitics, which attach to other words at various positions in the sentence (e.g. question markers =*aa* [N,G] and =*yu* [CT], or the reportative =*gat*).

3.2 Complex words and stress

The Tsimshianic languages are morphologically analytic, with sentences usually being constructed of multiple words rather than a single long word. For the Interior, the complexity of words has been said to resemble that of German (Tarpent 1987: 26). For the Maritime languages, the morphological structure is near-identical, but more elements (including modifiers and pronouns) are pronounced and written as single-word units.

Compounding or incorporation are the typical means of creating complex words, and there are both prefixes (attaching before the root) and suffixes (attaching after). Some examples of complex compounded forms in Sm'algyax are given in (13); compare similar Nisga'a structures in (14).

- (13) a. *hagalksagosmhagwilhuu*
 ha-galksi-gos-m+hagwilhuu
 INS-through-jump-ATTR+rope
 'skipping rope'
 b. *K'aa'lgmgant'miisi'nu.*
 k'aa'lk-m+gan-t'miis='nu
 steal-ATTR+means-write=1SG

‘I stole a pencil.’

CT (Sasama 2001: 75)

- (14) a. *hayala’am-hlgimat*
 ha-yal-a’a-m+hl^gimat
 INS-turn-ATTR+egg
 ‘eggbeater’
- b. *Silakw’a’am-am’ugit* *’nii’y.*
 si-lakw-a’a-m+am’ugit *’nii’y*
 CAUS-burn-DETR-ATTR+clothes 1SG
 ‘I burned some old clothes.’
- N* (Tarpent 1987: 558,792)

There are often both synthetic (single-word) and periphrastic (multi-word) ways of saying something. Some common events like ‘making’, ‘going to’, and ‘eating/drinking’ can be expressed either with transitive verbs that take an object, or with prefixes that affix to an object to create an intransitive verb. The two options are given in (15).

- (15) *Neediit* *anook^s* *noxo’y...*
 nee=dii=t *anook*-t=t *no^x*-’y
 NEG=FOC=3 allow-3=DN mother-1SG
 ‘My mother does not allow me...’
- a. ... *nim* *guphl* *keek.*
 n=dim **gup**-t=hl **keek**
 1SG=PROSP eat-3=CN cake
 ‘...to eat cake.’
- b. ... *dim* *xkeegi’y.*
 dim **x**-**keek**-’y
 PROSP eat-cake-1SG
 ‘...to eat cake.’

The complex word’s root almost always has main stress, or emphasis (Shaw 1992; ?).⁵ Where there are two roots, such as in incorporation, the second root receives main stress and the other, secondary.

⁵ For example, the complex word in (12), has stress on the root *t’am* ‘mark’, as shown in (i). This root connects to the meaning ‘make an image’.

- (i) *ha-gukws-gal-t’am-din-szw*
 INS-self-against-**mark**-CAUS-ANTIP
 ‘camera’

Stress can therefore, theoretically, fall on any given syllable. This property of root-based stress contrasts with other languages, which use stress as a way of marking word edges. Identifying stress can be informative; the stressed root in an unknown complex word is a potential cue to figuring out the meaning of that word.

3.3 Clitics and word boundaries

The fact that stress marks roots, rather than word edges, can make it hard to determine where exactly word edges are: what constitutes a word rather than an affix or other bound element? This is an issue particularly on the initial edge of a word, for the writing and analysis of prefixes and the prenoun and preverb “proclitics”. Beyond prenouns and preverbs, there are many other elements in Tsimshianic which raise questions about the nature of words. I’ll here discuss properties of some additional clitics (sub-word elements which “lean” onto other full words for support, and are often written together) which are found across Tsimshianic (Stebbins 2003).

The first are flexible clitics which vary in their mode of attachment. Most clitics in languages of the world consistently “lean” in one direction. In the Tsimshianic languages, one set of pronoun clitics are instead flexible in what direction they lean; they appear before the main predicate or verb of the sentence, and before all proclitic modifiers, but rather than attach to the end of a word (“enclitic”) or front of a word (“proclitic”), they can be considered “flexiclitics” (Mulder & Sellers 2010). Some different ways that the clitics can appear before the main predicate, on particles before the verb, are given in (16) with the first person marker *n*.

- (16) a. *Nii xhlii guut ...*
 n=ii xhlii guu-t
 1=and all.apart take-3
 ‘And I took it apart...’
 b. *Iin yatshl pole loot...*
 ii=n yats-t=hl pole loo-t
 and=1 hit-3=CN pole OBL-3
 ‘And I hit the pole with it...’

- c. *Ii na'wahl anhahla'lst goohl Stockholm*
 ii n='wa-t=hl an-hahla'lst goo=hl Stockholm
 and 1=find=CN NMLZ-work LOC=CN Stockholm
sawatdiit.
 si-wa-t-diit
 CAUS-name-T-3PL
 'And I found work in Stockholm, that's what they call it.'
G (Forbes 2018: 55)

Clitics associated with nouns are also interesting. The status of a noun as common or determinate (see §4.4) is signaled by a clitic that comes before the noun, but attaches to the preceding word, as illustrated in (17).

- (17) a. *Yukwt gibas Maryhl hlgiikwt.*
 yukw=t giba-t[=t Mary][=hl hlgiikw-t]
 IPFV=3 wait[=DN Mary][=CN sister-3]
 'Mary is waiting for her sister.'
 b. *Yukwt gibahl hanak' t Lucy.*
 yukw=t giba-t[=hl hanak'] [t Lucy]
 IPFV=3 wait=[CN woman] [DN Lucy]
 'The woman is waiting for Lucy.' *Nisga'a* (Tarpent 1987: 211–2)

This means that the syntactic boundaries of the noun phrase are at odds with the prosodic boundaries of words.

In the first case from (16), the pronoun clitic is free to associate with a host word in different positions, and in the other case in (17), the noun clitic attaches in a consistent way, but always to a different word than the one it is associated with. These issues about what constitutes a word, how words can be flexibly constructed, and mismatches between words and syntactic constituents, raise both theoretical linguistic questions, and practical questions about writing.

3.4 Plural marking and reduplication

Pluralization is the major morphological process in Tsimshianic, and it has been well studied (Rigsby 1986; Tarpent 1983; Sasama 1995). Both nouns and verbs undergo pluralization, and there are a number of morphological strategies for this transformation. Some examples are given in (18).

- (18) a. hap → **haphap** → 'lid'
 b. xbiis → **gaxbiis** → 'box'
 c. gyaps → **laps** → 'high'

- d. hadiks → **la**heediks → ‘to swim’
 e. baa → **k’oɪ** → ‘to run’
CT (Sasama 1995)

There is no easy way to predict how to form a plural; these typically have to be learned on a case-by-case basis. The precise rules of pluralization and the most common or default strategies for doing so differ across the family (e.g., CVC-reduplication in G, but CVk- reduplication in CT; Brown 2008: 153) or even between speakers. Finally, there are many words which do not have plurals; for example, animals are often invariant.

For verbs, pluralization typically indicates that the object is plural. If there is no object, then pluralization marks plurality of the simple subject.⁶

- (19) a. *Walga jixts’iikwhl ha’aks dipun.*
 walga **CVC~ts’iikw**-t=hl ha-aks dip=xwin
 all PL~leak INS-water ASSOC=DEM.PROX
 ‘All these pails leak.’
 b. *’Nii t’ahldi’yhl lakw lax anlakw.*
 ’nii **t’ahl**-t-i-’y=hl lakw la_x an-lakw
 on put.PL-T-TR-1SG=CN fuel on NMLZ-fire
 ‘I put (more than one piece of) wood on the fire.’
G (Hunt 1993: 152)

As both nouns and verbs can be pluralized, it is possible (even common) for plurality to be marked in multiple places in the sentence. It must be marked at least once, but need not always be marked everywhere applicable. Sasama (2001) and Brown (2008) both report a scale in the obligatoriness of plural marking: stems with suppletive or irregular plural forms most often require pluralization, while stems that take regular reduplicative plurals can often appear as singulars (so long as plurality is indicated somewhere else).⁷

Reduplication has several other uses aside from marking plurality. CVC-reduplication can also mark iterative actions, as in (20); Sasama (1995: 64) also notes it can provide emphasis to a statement in Sm’algyax.

⁶ Verbal plurality tracks absolutive arguments, rather than ‘internal’ arguments. No distinction is made between unaccusative and unergative intransitive subjects; all plural intransitive subjects trigger a plural verb.

⁷ This contrasts with some of the theoretical linguistic landscape on number, where pluralization has been characterized as either totally optional (‘general number’) or totally obligatory (Wiltschko 2008).

- (20) *Laxlaxsa duusa ha'lit'aa.*
CVC~laxs-t=a duus=a ha-'li-t'aa
 PL~scratch-3=CN cat=CN INS-on-sit
 'The cat is scratching the chair.'
CT (Sasama 1995: 63)

CV- reduplication can be used to mark extended or durative action.

- (21) *Bibaxt, k'iit ga'ahl smax.*
CV~bax-t k'ii=t ga'a-t=hl smax
 DUR~run-3 and=3 see-3=CN bear
 'While (s/he was) running, s/he saw a bear.'
N (Tarpent 1987: 218)

Finally, personal names are exempt from this plural-formation system, but do have a special plural marker *dip* (G/N), *dp* (CT/ST). This plural marker marks groups including the named person, for example *dip/dp Barbara* 'Barbara and them' (Tarpent 1981; Forbes 2013). This group marker can be used with all determinate-class nouns (§4.4), including demonstratives and certain kinship terms.

4 Constructing sentences

4.1 Word order

Word order in Tsimshianic is almost exclusively Verb-Subject-Object (VSO). This is illustrated in (22). Subordinators and tense/aspect/mood-related particles precede the verb without changing the order, while arguments like subjects, objects, and other phrases like locations follow it.

- (22) *La yagwit si'ki niisdi oli hoan.*
 la yagwi=t si'ki niist-t=i ol=i hoan
 INCEP IPFV=3 maintain see-3=CN bear=CN fish
 'The bear is staring at the fish.'
ST (Dunn 1990: 119)

VOS order can also be used in the Maritime languages and Nisga’a when the object of the sentence is ‘you’ or ‘me’ (Jelinek 1986; Forbes 2018).⁸ This is shown in (23).

- (23) *Hlimoomit ’nii’y t Ann.*
hlimoom-i-t ’nii’y t Ann
help-TR-3 1SG DN Ann
‘Ann saw me.’
N (Jelinek 1986: 9)

The Tsimshianic languages generally show ‘head-initial’ properties: verb-object order, preposition-noun order, and tense, aspect, and mood elements preceding the verb. There are some exceptions to this however, such as typical adjective-noun order and (in the Interior) a sentence-final question particle.

4.2 Clause types

The Tsimshianic languages have two different kinds of clauses, in which the marking for subject and object proceeds differently. I refer to these two patterns as *independent* versus *dependent*, following Rigsby (1986).⁹ The two patterns seem to depend on whether certain auxiliaries precede the verb; dependent clauses appear in the presence of elements listed in Table 3 – they are “dependent” on these elements.

Maritime (CT/ST)	Interior (N/G)	Gloss
<i>ada</i>	<i>k’ii, ii</i>	‘and’
<i>at, aka</i>	<i>nii, nee</i>	‘not, NEG’
<i>yakw (yagwa)</i>	<i>yukw</i>	‘-ing, IPFV/PROG’
<i>la</i>	<i>hlaa</i>	‘about to, just now, INCEP’
<i>wil</i>	<i>wil, win</i>	‘that, COMP’
<i>dzi</i>	<i>ji</i>	‘if, IRR’

Tab. 3: Some dependent clause markers across Tsimshianic

⁸ Gitksan, in contrast, now uses VSO in all contexts (Rigsby 1986).

⁹ In the linguistic literature, the clause types have been variously called “indicative/subjunctive” (Boas 1911), “independent/dependent” (Rigsby 1986), “predicate-focused/normal” (Tarpent 1987), and descriptively as “*nah-dm/yagwa-la*” clauses (specifically for Sm’algayax in Anderson & Ignace 2008).

Independent clauses are typically main clauses which lack all of these markers. Some other preverbal elements, such as *dm/dim* ‘PROSP’ and *na(h)* ‘PST’ (Maritime only), do not affect the clause type; they are used in both independent and dependent clauses.

The clause type difference results two distinct patterns for using pronouns and verbal agreement. A contrast can be seen in the pronoun used for an independent clause like (24), versus a dependent clause like (25).

- (24) *Dm* *’yagabaa’nu.*
 dm *’yaga-baa=’nu*
 PROSP down-run=1SG
 ‘I will run down.’
 CT (Anderson & Ignace 2008: 134)
- (25) *Yagwa* *’yagabaayu.*
 yagwa *’yaga-baa-u*
 IPFV down-run-1SG
 ‘I’m running down.’
 CT (Anderson & Ignace 2008: 134)

Though the clause type division is present in essentially the same way in all of Tsimshianic, the two different branches have developed different variations on the patterns in each clause type. The Interior languages have an elaborated system in dependent clauses, having to do with the expression of full nouns and plurals as agent subjects (Hunt 1993; Forbes 2017), and retain simple independent clauses. The Maritime languages have the reverse: a more elaborate system in independent clauses having to do with the expression of *me* and *you* in object position (Mulder 1994; Peterson 2017; Forbes 2018), and a simple system in dependent clauses.¹⁰ In the rest of this section I detail only the simple versions of each clause type.

Where language learning is concerned, mastery of the pronoun and subject/object marking system of both clause types, as well as knowing where to use them, is important aspect of fluency. The “independent” patterns are most typical of short remarks, conversation, out of the blue statements, and general emphasis, while the “dependent” pattern is predominant in extended speech

¹⁰ The full details of agreement in Gitksan/Nisga’a are consolidated in the appendix to Forbes (2018), and summarized in Forbes (2017). Details on agreement in Sm’algyax are provided in Anderson & Ignace’s (2008) pedagogical grammar, and summarized in Forbes (2018: ch6).

where sentences tend to be linked together in a stream of thought, as well as any sentence using a non-default tense or mood.

4.3 Pronouns and agreement

The pattern of pronouns and verbal agreement is ergative in both types of clauses. This means that a distinction is marked between simple subjects, which simply perform an action, and agent subjects, who perform an action on an object. Agent subjects are always marked specially (“ergative”), while simple subjects and objects are marked the same (“absolutive”).

In independent clauses, illustrated in (26), the agent subject is marked with a verb agreement suffix, while simple subjects and objects are marked with pronouns. Transitive stems in this clause type are supported by a vowel before the agreement suffix.

(26) INDEPENDENT PATTERN

- a. *Bax'niiy.*
run 1SG
'I ran.'
 - b. *Ileni'y ('nit).*
hilen-i-'y ('nit)
chase-TR-1SG (3SG)
'I chased him/her.'
 - c. *Ilenit'niiy.*
hilen-i-t 'nii'y
chase-TR-3SG 1SG
'S/he chased me.'
- G* (Forbes 2018)

In dependent clauses, illustrated in (27), the agent subject is marked with preverbal agreement on preverbal negation, while simple subjects and objects are marked with verbal agreement suffixes.

(27) DEPENDENT PATTERN

- a. *Needii baxa'y.*
nee=dii bax-'y
NEG=FOC run-1SG
'I didn't run.'
- b. *Neediin iilent.*
nee=dii=n hilen-t
NEG=FOC=1 chase-3

- ‘I didn’t chase him/her.’
 c. *Neediit iileni’y.*
 nee=dii=t hilen-’y
 NEG=FOC=3 chase-1SG
 ‘S/he didn’t chase me.’
G (Forbes 2018)

Agreement on the verb is never doubled by a co-occurring pronoun; agreement and pronouns are complementary. Other than this, the Tsimshianic languages are not typical pro-drop languages. When the referent is clear from context, only third person pronouns can be dropped;¹¹ first and second person pronouns must be pronounced.

This pattern cannot really be described as “split-ergativity” – rather, it has been called “pivoting ergativity” (Davis 2018). The basic idea is that alignment remains consistent, but that verbal agreement suffixes have a different job in either clause type. The pattern is illustrated in Table 4.

	Independent	Dependent
Agent Subject (A)	suffix	preverbal clitic
Simple Subject (S)	pronoun	suffix
Direct Object (O)	pronoun	suffix

Tab. 4: “Pivoting ergative” agreement in the Tsimshianic clause types (simplified)

Learners often find the full pronouns and agreement suffixes most salient. It is easy to overlook the preverbal agreement markers, particularly in a learning style that focuses on conversational speech where independent clauses predominate; this is particularly true for Interior Tsimshianic varieties, where preverbal agreement is not used in independent clauses at all. For Maritime Tsimshianic varieties, preverbal agreement plays a larger role in independent clauses, and so can be learned more quickly in the course of developing conversational proficiency.

¹¹ In the Interior languages where there is a third person singular/plural contrast, only the singular pronouns may be entirely dropped (Forbes 2016).

4.4 Full nouns

Nouns in the Tsimshianic languages come in two classes: common nouns, and so-called “determinate” nouns Tarpent (1987). This latter class is composed of personal names (e.g. ‘Thelma’), free pronouns and demonstratives (e.g. ‘him/her’, ‘this’, ‘that’), and kinship terms referring to the parent generation and higher (e.g. ‘mother’, ‘grandmother’). Place names are treated as common nouns. This class division is one way that the cultural importance of personal names and hereditary titles is linguistically marked.

In general, the two different classes are signaled by an article that attaches to the preceding word. In the Tsimshianic literature, these are called “connectives” (Boas 1911). For common nouns, this article is *=hl* in Nisga’a and Gitksan, *=a* in Sm’algayax, and *=i* in Sgüüxs.¹² Determinate nouns are a bit more complex; as argued by Davis (2018), all Tsimshianic languages mark determinate nouns with an article *t* or *s*, depending on the position and function of the noun in the sentence. Examples of both types of connectives are given below.

- (28) a. *Limx t Mary.*
 sing DN Mary
 ‘Mary sang.’
 b. *Limxhl hanak’.*
 sing=CN woman
 ‘The woman sang.’
 N (Tarpent 1987: 484)
- (29) a. *Miilgit Kayla.*
 dance=DN Kayla
 ‘Kayla is dancing.’
 b. *Mmoo’mxax ’yuuta.*
 smile=CN man
 ‘The man is smiling.’
 CT (Sasama 2001: 92,8)

The complexity of the system arises due to the interaction of these connective clitics (which attach not to the noun itself but to the prior word) and suffixes on the verb. In (28) and (29), there is no verbal suffix. However, in most other sentence types (transitives, or dependent clauses, as discussed in §4.2) there is

¹² The Maritime languages are noted to use an article *=l* in a small number of contexts, such as irrealis sentences, cognate to the Interior (Mulder 1994: 89). The vocalic connectives *=a/i* are also typically deleted if attached to a sonorant Anderson & Ignace (2008).

agreement on the verb, and a noun connective is able attach directly to the agreement suffix.

When agreement is with the same noun that immediately follows, the noun's connective effectively “hides” the agreement. If agreement is not with the immediately following noun, then both morphemes are present. This is illustrated in (30) based on the contrast that arises when an agent subject is present or absent. In (30a), the agent subject would receive verbal agreement, but it is also expressed with a full noun =*a haas* ‘dog’. The subject connective entirely obscures the agreement suffix, leaving only the connective =*a*. In contrast for (30b), the agent subject is only expressed with the agreement suffix. The suffix then remains separate from the connective for the following object, =*a hoon* ‘fish’.

- (30) a. *Dm gaba haasa hoon.*
 dm gab-i-t[=**a** haas][=**a** hoon]
 PROSP eat-TR-3_i[=**CN** dog]_i[=**CN** fish]_k
 ‘The/a dog will eat the/a fish.’ (N: *gibihl*, G: *gubihl*)
- b. *Dm gabida hoon.*
 dm gab-i-t[=**a** hoon]
 PROSP eat-TR-3_i[=**CN** fish]_k
 ‘She/he/it they will eat the/a fish.’ (N: *gibithl*, G: *gubithl*)
CT (Davis 2018: 499)

Another way to see this effect in Maritime languages is in the contrast between independent and dependent clauses. In an independent clause like (31a), agreement on the verb is with the agent subject =*t Wes* ‘Wes’. Consequently, the combined agreement suffix and connective reduce to the special determinate connective =(*a*)*s*. In contrast, for a dependent clause like (31b), agreement on the verb is with the object, =*a hoon* ‘the fish’. The object suffix and subject connective for =*t Margaret* ‘Margaret’ therefore remain separate.

- (31) a. *Nah gabas Wesa hoon.*
 na gap-i-t[=**t** Wes][=**a** hoon]
 PFV eat-TR-3_i[=**DN** Wes]_i[=**CN** fish]_k
 ‘Wes ate the fish.’ (N: *gibis*, G: *gubis*)
- b. *Yagwat gapdat Margareda hoon.*
 yagwa=t gap-t[=**t** Margaret][=**a** hoon]
 PROG=3_i eat-3_k[=**DN** Margaret]_i[=**CN** fish]_k

‘Margaret is eating the fish.’ (N: *gips*, G: *gups*¹³)
CT (Anderson & Ignace 2008: 101)

The interaction of nominal connectives, which mark noun class, and agreement, which marks syntactic function, led much early work such as Boas (1911) and Dunn (1979a) to characterize the connectives as case markers, in particular for Sm'algyax. However, unlike in a true case-marking system, an important aspect of the system is *verb-adjacency*: special connectives like =s are triggered from a combination of receiving agreement being adjacent to the agreement marker (Hunt 1993). In general, Davis's (2018) proposal that the connectives interact directly with the agreement suffixes has provided a great deal of cross-Tsimshianic clarity. Typologically, the Tsimshianic languages can be considered exclusively head-marking (agreement, no case).

5 Elaborating on sentences

5.1 Situating sentences in time and space

While the previous section provides a walkthrough of the most basic essentials of a grammatical sentence (VSO order, agreement, noun connectives), there are many other components that provide necessary aspects of meaning. These elements come on the edges of the VSO template almost without exception, either before V or after O.

The primary tool for conveying spatial perspective is the preverb system. These markers note directions in the event as well as relative locations like ‘upstream’. In addition, adjunct phrases can be added after the VSO template, conveying full concepts like ‘on the table’ or ‘in Terrace’. The contrast between two ways to convey ‘outside’ is illustrated by the following two examples: (32) uses a preverb, while (33) uses a phrase.

- (32) *Ksidsili'y* *t niye'e'y*.
ksi-sdil-i-y **t niye'e-y**
 out-accompany-TR-1SG DN grandfather-1SG

13 This particular pair only results in a contrast in the Maritime languages. In the Interior languages, agreement is with the agent subject in both cases (Hunt 1993), and both cases use =s. The detailed distributions of each particular connective in both branches are explored in Davis (2018).

‘I went outside with my grandfather.’

N (School District 92 1986: 225)

- (33) *Lukw'il ts'axw^{hl} 'mukws gyalk.*
 lukw'il ts'axw=^{hl} 'mukws **gyalk**
 very notable=CN storm outside
 ‘There is a bad snowstorm outside.’
N (School District 92 1986: 34)

There are also pre-VSO and post-VSO temporal markers. Tense in Tsimshianic is essentially future versus non-future; an unmarked sentence can be interpreted as either present or past, as in (34), but anything with future-oriented temporal perspective requires the marker *dim/dm*, as in (35) (Jóhannsdóttir & Matthewson 2007; Matthewson 2012).

- (34) *Ginats'ii'ka na xsooyu.*
 gina-ts'ii'k=a na xsoo-u
 leave.behind-dry.up POSS canoe-1SG
 ‘My canoe dried up (when the tide fell).’
CT (Ts'msyen Sm'algyax Authority 2013: ginats'ii'ka)
- (35) *Dm sigyootga'nm dzida ganlaak dm*
dm si-gyootk='nm dzi-da ganlaak **dm**
 PROSP CAUS-travel-INTR=1PL IRR-SPT morning PROSP
sihoonm.
 si-hoon-m
 CAUS-fish-1PL
 ‘We will set out in the morning to fish.’
CT (Anderson & Ignace 2008: 335)

Most other tense and aspectual perspective is marked before the verb, often with dependent markers as listed in §4.2 (Jóhannsdóttir 2006). Phrasal elements like ‘when it’s morning’ follow the verb, as illustrated in (35).

5.2 Questions, answers, and emphasis

Forming a sentence into a yes/no question does not involve many additional tools; typically, the addition of an interrogative clitic is sufficient to turn a sentence into a question. In the Interior, the clitic =*aa* is sentence-final; in Maritime languages, the clitic =*i* seems to be placed after the first prosodic phrase (from Sasama 2001: 84, it appears after a fronted element, else the verb). An example is given in (36).

- (36) *Hooynil* *ha'lit'aa gwa'a?*
 hoy-i-n=**i**=l ha-'li-t'aa gwa'a
 use-TR-2SG=YNQ=CN INS-on-sit this
 'Are you using this chair?'
CT (Sasama 2001: 84)

Commonly, yes/no questions are politely formed as negative questions. A question *Did you not see it?* is semantically equivalent to *Did you see it?*, and may be more polite.

There are several different ways to construct a sentence when asking or answering a content question. Parallel strategies are used when providing an answer to a question, or when otherwise placing emphasis on some aspect of the sentence due to its topical importance. The emphasized word always moves from its position in the typical VSO sentence to instead appear at the front, in a process of A'-extraction.¹⁴ This is illustrated in the following Gitksan examples from (37)-(40), which involve focused information, and might be used as question answers. Note also that the remaining sentence after the fronted element takes a specific form or uses a specific marker, depending on what is being asked about. These special markers are bolded.¹⁵

- (37) *'Nii'yhl bahat.*
 'nii'y=hl bax-it
 1SG=CN run-SX
 'I'M the one who ran.' SIMPLE SUBJECT
- (38) *Anaaxhl gubi'y.*
 anaax=hl gup-i-'y
 bread=CN eat-TR-1SG
 'It was BREAD that I ate.' OBJECT
- (39) *Sarah **an**(t) hlimoo'y.*
 Sarak an=t hlimoo-'y
 Sarah AX=3 help-1SG
 'SARAH is the one who helped me.' AGENT SUBJECT

¹⁴ An issue of theoretical relevance is whether A'-fronting constructions arise through a process of direct movement, or through *wh*-words serving as clause-initial predicates, as has been proposed in work on Salish languages. Davis & Brown (2011), in addressing this question, suggest both strategies are possible.

¹⁵ Note that in the Maritime languages, content question constructions are usually accompanied by a question particle =*yu*/=*du*.

- (40) *'Nithl wil 'nii 'masi'y lax Gisbayakws.*
 'nit=hl wil 'nii 'mas-'y lax gitsbayakws
 3SG=CN COMP on grow-1SG on Kispiox
 'It was THERE that I grew up, in Kispiox.' OBLIQUE/LOCATION
 G (Rigsby 1986: 282,288,285,294)

Some generalizations can be made about these different types of fronting. In all of them, the verb suffix agrees with something in the left-behind part of the sentence, rather than the focal element that has moved forward. In simple subject questions, the verb is instead marked by a special suffix *-it*. Object questions are constructed like independent clauses, while all other types of questions are constructed like dependent clauses Forbes (to appear). These other types of questions typically involve other markers: for example, questions and focus on agent subjects are marked with *an~in*. Questions and focus on locations (where), times (when), reasons (why), manners (how), and choice (which) use their own specific particles, rather than being differentiated by the form of the question word. Further details of complex questions and extraction markers are provided in other sources (e.g. for Interior Tsimshianic: Rigsby 1986; Tarpent 1987; Davis & Brown 2011; Brown 2016; Forbes to appear. For Maritime Tsimshianic: Dunn 1979a; Sasama 2001; Anderson & Ignace 2008).

The exact same constructions are used to form relative clauses and modifiers such as 'the (one who) helped me', 'the (place where) I saw you'.

6 Conclusion

This chapter has presented an overview of the grammar of the four Tsimshianic languages, discussing sounds, words, and sentence-level constructions, based on the history of linguistic research in the last fifty years. Issues of long-term investigation have been glottalization, which demands attention even from experienced learners and linguists; plurality, which is best learnt on an item-by-item basis; and the complex ergative agreement/pronoun system across two clause types. This chapter has also presented discussion on topics like mismatches in the correspondence between syntactic phrases and words, and a detailed system of argument marking in questions, focus, and other A'-contexts. An additional goal of this chapter has been to demonstrate the many properties shared across the Tsimshianic family.

While the languages diverge in their orthographic systems and vocabularies, some grammatical resources could feasibly be shared and applied family-wide, with localization to the specific region.

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