

# The Argument Structure of Halkomelem Verb Roots: Evidence from Intransitive/Transitive Alternations\*

Donna B. Gerdtts and Thomas E. Hukari

Simon Fraser University and University of Victoria

## 1. Introduction

Research on the lexical semantics of argument realization starts from the viewpoint that the mapping of the roles AGENT and PATIENT to argument structure can be used to classify predicates. More precisely, verbs sort into transitive and intransitive types, and intransitive verbs further sort into unergative and unaccusative types. Language-internal tests can be used to organize verbs with shared morphological, syntactic, and semantic properties into verb classes. The research on any language seeks to answer the following questions: What are the verb classes? What are the properties that distinguish them? How are the verb classes of a language similar to and different from verb classes in other languages of the world?<sup>1</sup>

Salish languages are noted for their “inchoative/causative” alternation: the inchoative forms are usually unmarked, while the corresponding causative verbs require the transitive suffix. This is demonstrated by the following Halkomelem data: *q̣aʔ* ‘get added’ in (1) contrasts with *q̣aʔ-t* ‘add it, put it in with’ in (2):<sup>2</sup>

(1) niʔ q̣aʔ kʷθə nə šeləmcəs ʔə kʷθə nə s-kʷu:kʷ.  
AUX add DT 1POS ring OB DT 1POS NM-cook  
‘My ring got into my cooking.’

(2) nem č q̣aʔ-t tʰə sqewθ ʔə tʰəñ stəp!  
go 2SUB add-TR DT potato OB DT.2POS soup  
‘Go put the potatoes into your soup!’

Such examples seem to be a prima facie case for deriving the causative verb from its intransitive counterpart (à la Levin & Rappaport Hovav 1995).<sup>3</sup> The verbs in question all have bare root intransitive alternants and marked transitive alternants in Halkomelem.

In fact, a look at most Salish languages gives the impression that a vast majority of verb roots are of this type. This has led to two hypotheses. First, some Salish scholars, for example Kuipers (1968), Hess (1973), Jelinek (1994), and Suttles (2004), claim that all verb roots in Salish languages are intransitive and require the addition of transitive morphology in order to serve as transitive stems. However, this result is somewhat misleading because in fact all syntactically transitive constructions in Salish, i.e. those with two direct nominal or pronominal arguments, take transitive marking. This has led to an alternative view taken by some Salish scholars, including Gerdtts (1988a), Nater (1984), Thomason & Everett (1993), and Gerdtts & Hukari (1998): the transitive suffix is a verbal inflection that appears on bases that are already semantically transitive. We explore this issue in section 2, showing that in fact at least some roots in Halkomelem are transitive.

Second, some Salish scholars take the hypothesis of intransitivity a step further, claiming that all roots are unaccusative in the argument structure (Davis 1997, 2000; Davis and Demirdache 2000). In our research, however, we have maintained an unergative/unaccusative distinction (Gerdtts 1991, Gerdtts and Hukari 1998, 2001). We explore this issue in section 3, showing that our tests reveal that at least some intransitive verb roots are unergative in Halkomelem.

## 2. Transitivity revisited

One way to explore the status of roots is to make a more complete survey of the  $\emptyset$ /*-t* pairs in the language, classifying them according to the semantic properties of the root. This is undertaken by Gerdtts and Hukari (2006b); some of their results are summarized here.

Section 2.1 shows that around one hundred verb roots that appear with the transitive suffix do not occur as a  $\emptyset$ -form intransitive. Section 2.2 shows that many bare roots used unaccusatively seemed to be coerced into this frame while the transitive alternants are more basic. We, thus conclude that the Halkomelem data do not support the viewpoint that all roots are intransitive. Rather, Salish verb roots should be classified, like those in other languages, into intransitive and transitive roots.

### 2.1 Some bare roots do not appear as words

Some verbs that occur with the suffix *-t* lack a corresponding bare root alternant that can appear as a free-standing word (93 of our sample of 489 roots (19%)). Some examples are:<sup>4</sup>

ACTIVITIES INVOLVING MANIPULATING, MOVING, ACQUIRING, INGESTING, ETC.

$\sqrt{ha}^?x^w$  ‘steam bathe’,  $\sqrt{hes}$  ‘ritual brushing’,  $\sqrt{k}^wey$  ‘bathe in cold water’,  $\sqrt{y}ak^w$  ‘scrub, rub together’,  $\sqrt{y}atq^w$  ‘scrub’,  $\sqrt{y}ic$  ‘sand’,  $\sqrt{x}ip$  ‘scratch’,  $\sqrt{x}ay$  ‘beat’,  $\sqrt{t}ayq$  ‘move’,  $\sqrt{q}ix$  ‘slide’,  $\sqrt{y}iq$  ‘fell, tip over’,  $\sqrt{q}lax$  ‘drop off’,  $\sqrt{h}ik^w$  ‘rock’,  $\sqrt{c}am$  ‘pack on one’s back’,  $\sqrt{?}it$  ‘carry by the handle’,  $\sqrt{se}^?$  ‘put on lap’,  $\sqrt{t}aq^w$  ‘tap, pat’,  $\sqrt{k}^we^?$  ‘drop it, let go, leave it alone’,  $\sqrt{tan}$  ‘leave behind’,  $\sqrt{x}im$  ‘grab’,  $\sqrt{x}k^wa$  ‘grab and pull’,  $\sqrt{m}ak^w$  ‘pick up off the ground’,  $\sqrt{wen}$  ‘throw’,  $\sqrt{?}im$  ‘step on’,  $\sqrt{t}al$  ‘bail it out’,  $\sqrt{ma}^?$  ‘start a fire’,  $\sqrt{?}ilax$  ‘buy it’,  $\sqrt{t}k^wa$  ‘peck’,  $\sqrt{k}^we^?q$  ‘pop, slam, snap’,  $\sqrt{l}aq^w$  ‘drink in one swallow’,  $\sqrt{t}ok^wax$  ‘eat, riddle (as pests do)’

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$\sqrt{t}eq$  ‘whisper’,  $\sqrt{k}^we^?q$  ‘pop, slam, snap’,  $\sqrt{l}em$  ‘look at’,  $\sqrt{y}an$  ‘laugh at’,  $\sqrt{t}qax$  ‘insult, jeer’,  $\sqrt{x}itax$  ‘jinx’,  $\sqrt{x}k^wax$  ‘beat (in a game, race)’,  $\sqrt{na}^?$  ‘find s.o. dear, miss’,  $\sqrt{nan}$  ‘take someone’s side, defend’,  $\sqrt{p}x^wa$  ‘keep quiet, calm down’,  $\sqrt{neh}$  ‘name someone’,  $\sqrt{t}ih$  ‘ask him/her, beg’,  $\sqrt{?}a:$  ‘call for, invite’,  $\sqrt{ya}$  ‘order’,  $\sqrt{c}se$  ‘tell (to do)’,  $\sqrt{k}^wax$  ‘forbid’,  $\sqrt{?}ex^we^?$  ‘give, share with’

These verbs typically appear as transitives cross-linguistically, e.g. activity verbs involving a direct effect on the patient, often with an instrument; verbs involving the agent moving

the patient; ditransitive verbs of giving, letting, and telling; etc. The simplest analysis to posit for these verbs is that the roots are transitive.

## 2.2 Bare root is syntactically unaccusative but semantically transitive

A second challenge for the claim that all roots are intransitive come from a class of verbs that might at first seem like classic unaccusatives, since they appear in intransitive clauses where the sole argument is the patient. The following are typical examples:

- (3) ʔi ceʔ ʔə təʔi kʷs taχʷ-s kʷθə sənixʷəl  
 AUX FUT OB here DT.NM beach-3POS DT canoes  
 ʔəw̄ kʷeyələs.  
 LNK tomorrow

‘You will beach the canoes over here tomorrow.’  
 [Lit: ‘The canoes will be beached here tomorrow.’]

- (4) nem̄ ceʔ p̄ələç θəñ swetə kʷəñs çəyχʷ-t.  
 go FUT turn.inside.out DT.2POS sweater DT.2POS dry-TR  
 ‘You will turn your sweater inside out to dry.’  
 [Lit: ‘Your sweater will be turned inside out when you dry it.’]

- (5) ʔəȳ kʷs qiç-s t̄ə qeq ʔəwə kʷl ʔiʔ ʃaʔ.  
 good DT-NM bind-3POS DT baby not EMPH and stop.cry  
 ‘You’d better bind the baby that hasn’t stopped crying.’  
 [Lit: ‘It’s good for the baby that hasn’t stopped crying to be bound.’]

However, this construction is highly marked semantically. While the transitive alternants of these verbs are easily used in a variety of contexts, the intransitive verbs are used only in a construction that we call the pseudo-intransitive imperative. It functions as a polite or indirect imperative, with an implied second person agent. The sentence is usually framed in the future (3)–(4) or with the higher predicate ʔəȳ ‘good’ (5). Furthermore, the construction allows the motion auxiliary *nem̄* ‘go’, which is otherwise limited to clauses in which there is an agent that can move (Gerds 1988b); in (4) it is the implied agent that is moving.

A fair number of verb roots (37 out of 489, or 8%) appear in the pseudo-transitive imperative construction:

### PSEUDO-TRANSITIVE IMPERATIVES

ʔiyeʔq ‘change’, l̄te ‘flip’, p̄eʔ ‘skim cream off milk, flatten’, qəyeʔ ‘take out’, ʔaləχ ‘collect’, ʃəpχ ‘scatter it, spread it, broadcast’, çəȳt̄ ‘bring -together’, çəȳ ‘scrape, singe a canoe’, sał ‘suck’, səȳt̄ ‘tickle him/her’, šakʷ ‘bathe’, šem ‘dry, smoke’, łaləχʷ ‘send away, chase away’, weł̄ ‘knit; pry with a tool’, χcə ‘figure out’, çxʷa ‘more, add more to it’, θəyχ ‘stoke, rake’, łəlqiʔ ‘soak’, ł̄tełkʷ ‘pinch’, yəłq ‘paint’, məłxʷ ‘rub

oil on it, grease it’,  $k^w cə$  ‘shout at, use a sharp tone with’,  $k^w θə$  ‘lie down (a quadruped), crouch’,  $k^w še$  ‘number’,  $lə x^w$  ‘cover’,  $pəl ə c$  ‘turn inside out, turn over’,  $ta x^w$  ‘beach’,  $tə?$  ‘pull apart’,  $θə y q$  ‘uneven, staggered’,  $x θ e$  ‘jerk’,  $ya x̣$  ‘rub’,  $ye?$  ( $ya?$ ) ‘paddle backward’,  $qəl p$  ‘curl, bend’,  $θ i ma?$  ‘freeze’,  $x̣ q^w ə$  ‘wrap up, tidy up’,  $t^θ a l$  ‘dampen’,  $x^w k^w a$  ‘pull, pull the slack up’

Gerdt and Hukari (2006b) conclude that the best analysis for these roots is that they should be classified as transitive, since the transitive alternants seem semantically more basic than the intransitive ones. The unaccusative verbs are derived from transitive roots through zero derivation.

### 2.3 Summary

In sum, we posit that the 130 verb roots discussed in sections 2.1 and 2.2 are transitive. The recognition of a class of transitive roots opens up a Pandora’s box of questions about how to distinguish intransitive from transitive roots and how to relate the two types to each other—questions beyond the scope of this paper.

### 3. Intransitivity revisited

The question addressed in this section concerns intransitive verb classes: are unergative and unaccusative verb roots lexically distinguished in Halkomelem? We claim that they are. Unergative verbs, such as *yays* ‘work’, appear as bare roots in an intransitive construction where the sole argument is the agent of the event (6), while unaccusative verbs, such as *q̣a?* ‘get added to’, appear as bare roots in an intransitive construction where the sole argument is the patient of the event (7):

(6)  $ni?$   $yays$   $t^θ ə$   $swə y qe?$   
 AUX work DT man  
 ‘The man worked.’

(7)  $ni?$   $q̣ a?$   $k^w θ ə$   $n ə$   $š e l ə m c ə s$   $? ə$   $k^w θ ə$   $n ə$   $s - k^w u : k^w$ .  
 AUX add DT 1POS ring OB DT 1POS NM-cook  
 ‘My ring got into my cooking.’

Furthermore unergative and unaccusative verb roots behave differently with respect to how they form transitives, as discussed in section 3.1. They also behave differently with respect to suffixes of agent-oriented modality, as discussed in section 3.2. These differences allow us to derive profiles for canonical unergative versus canonical unaccusative verb roots, as summarized in section 3.3.

#### 3.1 Two types of transitives

As pointed out in Gerdt (1988a, 1991), unergative and unaccusative verbs differ with respect to how they form transitive clauses. Unergative verbs transitivize with the causative suffix *-stəx<sup>w</sup>*, for example *yays-stəx<sup>w</sup>*:

- (8) niʔ cən yays-stəx<sup>w</sup> tʰə swəy̌qeʔ.  
 AUX 1SUB work-CS DT man  
 ‘I put the man to work.’

In contrast, this suffix is not usually allowed with unaccusative verbs, for example \*q̌aʔ-stəx<sup>w</sup> (‘add’ + CAUSATIVE). Other examples of unergative verb roots that form causatives are given in Table 1.

BASIC VERB		-stəx <sup>w</sup> CAUSATIVE	
ɲem	‘go’	ɲeməstəx <sup>w</sup>	‘take it’
m̄i	‘come’	m̄istəx <sup>w</sup>	‘bring it’
cam	‘go uphill’	cəməstəx <sup>w</sup>	‘take it uphill’
l̄ew̄	‘run away, flee’	l̄əw̄stəx <sup>w</sup>	‘run away with him/her’
ʔa:l̄	‘get on board’	ʔa:l̄stəx <sup>w</sup>	‘put it on board’
t̄ək <sup>w</sup>	‘go home’	t̄ək <sup>w</sup> stəx <sup>w</sup>	‘take it home’
ʔənəx <sup>w</sup>	‘stop’	ʔənəx <sup>w</sup> stəx <sup>w</sup>	‘stop it’, ‘make him/her stop’
k̄ <sup>w</sup> iʔ	‘climb’	k̄ <sup>w</sup> iʔstəx <sup>w</sup>	‘lift/raise it’, ‘make him/her climb’

Table 1. Unergative verb roots with the causative suffix

As discussed in Gerdts and Hukari (2006a), causatives formed on activity verbs usually have the meaning of a causer making the agent perform the action indicated by the verb root, while causatives of motion verbs often have an associative meaning: the object expresses the person or thing that is taken or brought along during the performance of the motion.

In contrast, unaccusative verbs form transitives with the transitive suffix *-t*, for example q̌aʔ-*t*:

- (9) nem̄ č q̌aʔ-t tʰə sqewθ ʔə tʰəñ s̄lap̄.  
 go 2SUB add-TR DT potato OB DT.2POS soup  
 ‘Go put the potatoes into your soup.’

In contrast, this suffix generally does not appear on unergative verbs, for example \*yays-*t* (‘work’ + TRANSITIVE) ‘work it’. Table 2 gives additional examples of verbs with the transitive suffix.

BASIC VERB		-t TRANSITIVE	
ʔak <sup>w</sup>	‘get hooked’	ʔak <sup>w</sup> ət	‘hook it’
čəx <sup>w</sup>	‘increase’	čəx <sup>w</sup> ət	‘add more to it’
k <sup>w</sup> ət	‘spill’	k <sup>w</sup> ətət	‘pour it’
lək <sup>w</sup>	‘break in two’	lək <sup>w</sup> ət	‘break it in two’
čəy <sup>x</sup> w	‘get dry’	čəy <sup>x</sup> wət	‘dry it’
ləč	‘(container) get full’	ləčət	‘fill it’
ləq <sup>w</sup>	‘get wet’	ləq <sup>w</sup> ət	‘wet it’
čəq <sup>w</sup>	‘get pierced’	čəq <sup>w</sup> ət	‘pierce it’
səq	‘get torn’	səqət	‘tear it’
ləx <sup>w</sup>	‘get covered’	ləx <sup>w</sup> ət	‘cover it’
k <sup>w</sup> es	‘burn’, ‘get hot’	k <sup>w</sup> esət	‘burn it’, ‘singe it’, ‘scorch it’

Table 2. Unaccusative verb roots with the transitive suffix

### 3.2 Two tests for agentivity

Two suffixes of agent-oriented modality, in the sense of Bybee et al. (1994), give additional evidence for intransitive verb classes. As discussed in Gerdts (1988b, 1991) the desiderative suffix *-əlmən* behaves differently on unergative and unaccusative verbs. On unergative verbs like *yays* ‘work’, the suffix straightforwardly indicates the desire of the agent to perform the action:

- (10) ni<sup>?</sup> yays-əlmən t<sup>θ</sup>ə swəy<sup>?</sup>qe<sup>?</sup>.  
 AUX work-DES DT man  
 ‘The man wanted to work.’

Other examples of the desiderative use of this suffix are given in Table 3:

BASIC VERB		-əlmən	
k <sup>w</sup> i <sup>?</sup>	‘climb’	k <sup>w</sup> i <sup>?</sup> əlmən	‘want to climb’
lək <sup>w</sup>	‘fly’	lək <sup>w</sup> əlmən	‘want to fly’
nem	‘go’	neməlmən	‘want to go’
q <sup>w</sup> al	‘speak’	q <sup>w</sup> aləlmən	‘want to speak’
lək <sup>w</sup>	‘go home’	lək <sup>w</sup> əlmən	‘want to go home’
həye <sup>?</sup>	‘depart’	həye <sup>?</sup> əlmən	‘want to depart’

Table 3. Desiderative use of *-əlmən*

Attaching the desiderative suffix *-əlmən* to an unaccusative verb root gets a much different result. Either the form is not acceptable at all, or it has an aspectual meaning,

indicating that the event is ‘almost’ happening, ‘on the verge of’ happening, ‘about to’ happen, or ‘ready to’ happen:

- (11) niʔ q̄aʔ-əlmən ʔə kʷθə nə stʰǰ̄’əlwətəm.  
 AUX add-DES OB DT 1POS washing  
 ‘It almost got mixed in with my washing.’

BASIC VERB		<i>-əlmən</i>	
ləqʷ	‘get wet’	ləqʷəlmən	‘almost damp’
p̄il	‘fill’	p̄iləlmən	‘starting to fill’
yeq̄	‘fall down’	yeq̄əlmən	‘almost falling down’
yaǰ̄ʷ	‘melt’	yaǰ̄ʷəlmən	‘almost melting’
k̄ʷes	‘get hot’	k̄ʷesəlmən	‘starting to sweat’
ʔəw̄k̄	‘gone, finished’	ʔəw̄k̄əlmən	‘almost gone, finished’
məs	‘get smaller’	məsəlmən	‘starting to shrink’
pay	‘bend, get bent’	payəlmən	‘almost bent’

Table 4. Aspectual use of *-əlmən*

Gerdts and Hukari (2006c) explore this development further, relating it to the path of grammaticization proposed by Bybee et al. (1994). Lexical forms for ‘desire’ are frequent sources for futures cross-linguistically (cf. English *will*). They posit the following pathway: desire > willingness > intention > prediction. Table 5 shows the results for *-əlmən* on 457 roots, some of which are used in more than one way:

	+ <i>əlmən</i>	– <i>əlmən</i>
DESIDERATIVE	176	—
ASPECTUAL	118	—
TOTAL	287	170

Table 5. Two uses of *-əlmən*

The limited control form *-namət* shows a second case of agent-oriented modality. Gerdts (1998, 2000) claims that the suffix *-namət* originates as a limited-control counterpart of the plain reflexive *-θət*, as seen in Table 6. The basic meaning of this suffix is thus ‘manage to/accidentally do something to oneself’.

REFLEXIVE		LIMITED CONTROL REFLEXIVE	
q̇ayθət	‘kill self’	q̇aynamət	‘accidentally kill self’
həliθət	‘save self’	həlinamət	‘manage to save self’
q̇ <sup>w</sup> aq <sup>w</sup> əθət	‘club self’	q̇ <sup>w</sup> əq <sup>w</sup> namət	‘accidentally club self’
ʔak <sup>w</sup> əθət	‘hook self’	ʔək <sup>w</sup> namət	‘accidentally hook self’

Table 6. Two types of reflexives

In addition, the limited control reflexive *-namət* regularly appears on unergative verbs with the meaning of ‘manage to do something’, as in:

- (12) niʔ yays-namət t<sup>θ</sup>ə swəy̆qeʔ.  
 AUX work-L.C.REFL DT man  
 ‘The man managed to work.’

BASIC VERB		<i>-namət</i>	
taḵ <sup>w</sup>	‘come home’	taḵ <sup>w</sup> namət	‘manage to come home’
təs	‘get there’	təsnamət	‘manage to get there’
q <sup>w</sup> al	‘speak’	q <sup>w</sup> əlnamət	‘manage to speak’
tax <sup>w</sup>	‘go down’	tax <sup>w</sup> namət	‘manage to go down’

Table 7. Non-reflexive use of *-namət*

Furthermore, on process and stative verbs, *-namət* has an aspectual meaning; it indicates an anterior (perfect) whose endpoint is in the recent past, and thus is translated ‘finally’, ‘just’, ‘now’, etc.

- (13) a. niʔ q̇<sup>w</sup>əl t<sup>θ</sup>ə st<sup>θ</sup>u:m.  
 AUX ripe DT berry  
 ‘The berries got ripe.’
- b. niʔ q̇<sup>w</sup>əl-namət t<sup>θ</sup>ə st<sup>θ</sup>u:m.  
 AUX ripe-L.C.REF DT berry  
 ‘The berries are finally ripe (despite the inclement weather).’



BASIC VERB		<i>-almən</i>	
tʰex <sup>w</sup>	‘(sun) set’	tʰəx <sup>w</sup> namət	‘(sun) has finally set’
ʒəlχ	‘(fire) spark’	ʒəlχnamət	‘finally start sparking’
ləm	‘erode’	ləmnamət	‘has finally eroded’
k <sup>w</sup> əyχ	‘stir, (car) to start’	k <sup>w</sup> əyχnamət	‘(car) finally started’
qis	‘get knotted up’	qisnamət	‘all knotted up now’
təl	‘unravel, spread open’	təlnamət	‘finally spread open’

Table 8. Aspectual use of *-namət*

Bybee et al. (1994) cite cases of anteriors developing from resultatives, passives, or dynamic verbs (‘finish’, ‘complete’, ‘do before’). But, since *-namət* has its historical source in a limited control reflexive, we suggest the following pathway: limited control > managed to do > managed to finish > finished. Table 9 gives results for 467 roots tested for *-namət*; some roots allow more than one use.

	+	–
	<i>namət</i>	<i>namət</i>
REFLEXIVE	109	—
MANAGE TO	156	—
ASPECTUAL	74	—
TOTAL	339	128

Table 9. Verb roots and uses of *-namət*

We see then that the suffixes *-almən* and *-namət* indicate agent-oriented modality only when they appear on unergative verbs. With unaccusative verbs, if the suffixes are allowed at all, *-almən* has an aspectual meaning and *-namət* has either a reflexive or aspectual meaning.

### 3.3 Profiling unergatives versus unaccusatives

To summarize the previous sections, we can develop a profile for canonical unergative or unaccusative verb roots. The unergative root in the bare form takes an agent as the sole argument and transitivizes by means of the causative suffix. The agency of the argument is further established by the use of the desiderative or limited control suffixes with the agentive meaning. Unaccusatives on the other hand, take the patient as the sole argument, transitivize with the suffix *-t*, and do not take agentive meanings for the desiderative and limited control suffixes.

FORM	FUNCTION	UNERGATIVE	UNACCUSATIVE
∅	intransitive	agent	patient
-stəx <sup>w</sup>	causative	yes	no
-t	transitive	no	yes
-almən	desiderative	‘want to’	no/aspectual
-namət	limited control	‘manage to’	no/reflexive/aspectual

Table 10. Unaccusative vs. unergative verb profiles

A search of our database for these five features reveals that 28 verb roots test to be canonical unergatives:

#### CANONICAL UNERGATIVES

cam ‘go uphill’, hek<sup>w</sup> ‘recall to mind’, həye<sup>?</sup> ‘depart’, k<sup>w</sup>i<sup>?</sup> ‘climb’, lak<sup>w</sup> ‘fly’, nem ‘go’, q<sup>w</sup>lan ‘be forward’, q<sup>w</sup>al ‘speak’, tax<sup>w</sup> ‘bring down’, tak<sup>w</sup> ‘go home’, θət ‘say to’, x<sup>w</sup>in ‘growl’, x<sup>w</sup>te<sup>?</sup> ‘go/come to’, yays ‘work’, ʔəmət ‘sit down/rise out of bed’, ʔənəx<sup>w</sup> ‘stop’, ʔa:l ‘get on vehicle’, ʔeli ‘away, take away’, ʔewə ‘come here’, ʔitət ‘sleep’, ta:l ‘go to middle of floor’, x<sup>w</sup>iw ‘sneak off, run away’, he:wə ‘go away for a long time’, k<sup>w</sup>ayək<sup>w</sup> ‘fish with line, gaff’, ləne ‘go along a way’, təy ‘pull (race) a canoe’, ləw ‘flee’, tel ‘be like’

Searching for canonical unaccusatives yields a larger, but still unexpectedly small result. Only 55 verb roots, which Gerdts and Hukari (2006b) further divide into three types: spontaneously-occurring processes (26 verbs), externally-caused events (17 verbs), and states (12 verbs):

#### PROCESS (SPONTANEOUS) VERBS

lək<sup>w</sup> ‘break’, me<sup>?</sup> ‘come off’, yəx<sup>w</sup> ‘come undone, set free’, q<sup>w</sup>əl ‘cook, bake, ripen’, k<sup>w</sup>es ‘get burnt, scald, injure by a burn’, m<sup>w</sup>qə ‘get full of food’, xəł ‘get hurt’, q<sup>w</sup>is ‘get knotted’, q<sup>w</sup>ay ‘get sick, die’, liq<sup>w</sup> ‘get slack’, cəq ‘get surprised’, s<sup>w</sup>qe ‘tear’, c<sup>w</sup>q<sup>w</sup>a ‘absorb’, ləłq ‘soak, flood, (river) rise’, l<sup>w</sup>q<sup>w</sup>a ‘take bark off’, ləm ‘fold, hem’, pq<sup>w</sup>a ‘break’, səłq ‘twirl, swing’, x<sup>w</sup>k<sup>w</sup>a ‘wedge, get stuck’, x<sup>w</sup>ay ‘die (plural)’, si<sup>w</sup>k<sup>w</sup> ‘peel’, ca<sup>?</sup> ‘pull off a layer of clothing’, t<sup>w</sup>ə ‘spread, open’, tx<sup>w</sup>a ‘uncover’, cən ‘lean against something’, x<sup>w</sup>i<sup>w</sup>q ‘cheer up’

#### EXTERNALLY-CAUSED EVENTS

t<sup>θ</sup>as ‘get bumped’, q<sup>w</sup>aq<sup>w</sup> ‘get clubbed’, pas ‘get hit’, t<sup>θ</sup>əx<sup>w</sup> ‘get washed’, q<sup>w</sup>a<sup>p</sup> ‘wrinkle, pleat’, qəp ‘stick something to something’, x<sup>w</sup>i<sup>w</sup>q<sup>w</sup> ‘loop’, qit ‘tie in the middle’, ʔaq<sup>w</sup> ‘soak up, absorb’, ʔaq<sup>w</sup> ‘brush’, t<sup>θ</sup>ek<sup>w</sup> ‘shine a light on’, pah ‘blow on, blow out, inflate it’, qem ‘bend’, t<sup>θ</sup>is ‘nail’, le<sup>?</sup> ‘put away’, pšə ‘spit medicine’, t<sup>θ</sup>əl ‘lose it all gambling’

## STATES

həli ‘be alive, living’, ʔəʔw ‘be hard’, qəʔ ‘much, lots’, tq<sup>w</sup>a ‘be taut’, ʔəq<sup>w</sup> ‘be wet’, məs ‘decrease in size’, ʔcə ‘close together’, ʔpə ‘deep’, p̄il ‘fill to brim’, ʔec ‘dark’, ʔəlp̄ ‘flatten, flop’

In sum, 83 verb roots (17%) test to be canonically unergative or unaccusative. Although they comprise less than a fifth of the total data, these roots suffice to show that both unergative and unaccusative verb roots exist in Halkomelem.

However, it also raises the issue of why so few verb roots test to be canonically unergative and unaccusative. First, as discussed by Gerds (2006), half of the verb roots in our sample are “swingers”. That is, the bare root appears in either an unergative or an unaccusative frame, as required by the context. For example, the root *p̄ək<sup>w</sup>* ‘float’ behaves unergatively with a sentient subject, denoting an action under the control of the agent NP (see (14)), but it behaves unaccusatively with inanimates, denoting an activity that the NP undergoes (see (15)).

- (14) nem̄ cən nəqəm-nəs ʔəw̄ p̄ək<sup>w</sup> ceʔ niʔ  
 go 1SUB dive-APPL LNK surface FUT AUX  
 ʔə t̄ə niʔ ʔam̄ət s-q<sup>w</sup>əs=ʂeñ.  
 OB DT AUX sit NM-submerge=foot

‘I’m going to dive, and then I’ll come out in front of the one that’s got his leg in the water.’

- (15) naʔət wəʔ p̄ək<sup>w</sup> t̄ə q<sup>w</sup>leý.  
 AUX:DT now surface DT log  
 ‘The log has floated up.’

Since the verb root can be either unergative or unaccusative, the suffix *-əlmən* can appear on the root with either meaning, depending on the context. In (16) *-əlmən* has the agent-oriented modality meaning and in (17) it has an aspectual meaning.

- (16) niʔ p̄ək<sup>w</sup>-əlmən t̄ə təməs.  
 AUX surface-DES DT sea.otter  
 ‘The sea otter wanted to surface.’

- (17) ʔi cə p̄əp̄ək<sup>w</sup>-əlmən̄ t̄ə stəq-s t̄ə sqəlew̄.  
 AUX EVID surface(IMPF)-DES DT dam-3POS DT beaver  
 ‘The beaver’s dam is starting to float up.’

This fact is not unexpected; work on unaccusativity cross-linguistically has shown that verbs in many languages switch easily from one type to another and that some classes have mixed properties (Rosen 1984, Levin and Rappaport Hovav 1995). For example,

Halkomelem motion verbs (Gerdtts and Hukari 2001) and middles (Gerdtts and Hukari 1998) show mixed properties, manifesting some unergative and some unaccusative features.<sup>5</sup>

Second, as discussed in Gerdtts (2006) and Gerdtts and Hukari (2006a), some attention needs to be paid to the accuracy of the transitive test. We posited that unergativity is correlated with the causative suffix and unaccusativity with the transitive suffix. But in fact, many verbs take either suffix. So clearly this test should be fine-tuned.

#### 4. Conclusion

We conclude that any analysis that tries to put all the roots into a single class is un insightful for Halkomelem. At least some of the roots are transitive, as discussed in section 2, and the intransitive verb roots can be separated into unergatives and unaccusatives, as discussed in section 3. We give the totals for the number of verb roots of each type in Table 11:

TRANSITIVE	UNERGATIVE	UNACCUSATIVE	TOTAL
130	28	76	234

Table 11. Classes of Halkomelem verb roots

In other words, Halkomelem probably exhibits a normal tripartite system: there are three major verb classes—unergative, unaccusative, and transitive—and these map to three different syntactic structures.<sup>6</sup> It is unnecessary to posit a view of argument realization in Salish languages that is radically different from that proposed for English or other languages of the world. Differences between Halkomelem and other languages should not be handled by positing deep conceptual differences, but rather by accommodating differences in the verb class of particular roots, or in their ability to swing between types.

#### Notes

\* Halkomelem is a Central Salish language spoken by around one hundred elders in southwestern British Columbia. For the last twenty-five years, we have been studying verb classes in the Island dialect. Thanks to the expertise of three native-speaker linguists, Ruby Peter, the late Theresa Thorne, and the late Arnold Guerin, around 486 verb roots have been identified and tested in combination with two dozen affixes (transitive, causative, reflexive, etc.). Forms were judged for acceptability, and illustrative sentences were composed for each allowed form. From this corpus, supplemented by additional verb data culled from elicitations, texts, dictionaries, and language teaching materials, we have constructed a database coded for argument realization and semantic nuances. Thanks also to Sarah Kell and Kaoru Kiyosawa for research assistance, to Todd Peterson and Charles Ulrich for editing, and to SSHRC, SFU, UVic, Jacobs Fund, Phillips Fund, The Museum of Civilization, Ottawa, and the Canadian Consulate, Washington, D.C., for funding.

1 We use the term ‘root’ to include both monomorphemic bases and frozen forms that include one inseparable suffix. Much of what we say here also applies to complex forms.

2 The following abbreviations are used in glossing the data: APPL: applicative, AUX: auxiliary, CS: causative, DES: desiderative, DT: determiner, EMPH: emphatic, EVID: evidential, FUT: future, IMPF: imperfective, L.C.REFL: limited control reflexive, LNK: linker, NM: nominalizer, OB: oblique, PL: plural, POS: possessive marker, Q: interrogative, SER: serial, SUB: subject, SSUB: subordinate subject, TR: transitive.

3 Indeed, Salish languages are “transitivizing” languages in the sense of Nichols et al. (2004), who looked at eighteen intransitive/transitive pairs in eighty languages, including the neighboring Salish language Squamish, and rated them on the basis of whether the intransitive or the transitive alternant was morphologically marked.

4 Eight of these verbs form intransitive forms with the middle suffix: *təyqəm* ‘move’, *qixəm* ‘slide’, *tətχəm* ‘shiver, tremble’, *qətʰqəm* ‘squeak, rasp’, *qʰəm* ‘drop off’, *yiqəm* ‘fall, tip over’, *təpʰqəm* ‘boil’, and *χəwqəm* ‘flicker’.

5 Section 2.2 shows that around forty Ø/transitive pairs show an unergative/transitive alternation, where the agent remains constant, rather than an inchoative/causative one, where the patient remains constant.

6 See Levin & Rappaport Hovav 2005 for a survey of how this is accomplished in various theories.

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