Classifying Halkomelem causatives°

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Halkomelem has three main transitive suffixes—the general transitive, the limited control transitive, and the causative. This paper focuses on the causative. We address two questions: what classes of verb roots take the causative suffix? and what are the syntactic and semantic properties of the resulting causative constructions? Although we have discussed causatives in our previous work, our on-going research into verb classes allows us to give a more thorough picture of this construction. For instance, our research has revealed one robust class of causatives not previously noted: causatives built on transitive bases.

1 The Halkomelem causative suffix

In all syntactically transitive constructions in Halkomelem, i.e. those with two direct arguments (or their pronominal equivalents), the verb is inflected with a transitive suffix. There are three transitive suffixes in Halkomelem: the general transitive suffix -t, the limited control suffix $-n \ni x$, and the causative suffix $-st\ni x$.

- (1) ni? dew-ət-əs k wθə swəyqe? tə steni?.

 AUX help-TR-3ERG DT man DT woman

 'The man helped the woman.'
- (2) ni⁹ ləm-nəx "-əs k "θə swəyqe⁹ lə sleni⁹.

 AUX look-LCTR-3ERG DT man DT woman

 'The man saw the woman.'

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¹ The following abbreviations are used in glossing the data: ACT: activity, AUX: auxiliary, BEN: benefactive applicative, COMP: complementizer, CONJ: conjunction, CS: causative, DAT: dative applicative suffix, DT: determiner, ERG: ergative, FUT: future, IMPF: imperfective, INQU: inquisitive, LCTR: limited control transitive, LNK: linker, NM: nominalizer, OBJ: object, OBL: oblique, PL: plural, POS: possessive marker, PRO: pronoun, Q: interrogative, REC: reciprocal, REFL: reflexive, RES: resultative, SER: serial, STA: stative, SUB: subject, TR: transitive.

(3) ni? łxiləs-stəx w-əs k wθə swəyqe? łə słeni?.

AUX stand-CS-3ERG DT man DT woman 'The man had the woman stand.'

All three transitive constructions are identical in terms of their surface syntax. Subject and object noun phrases are direct arguments, and third-person mainclause subjects determine ergative agreement. The transitive suffixes fuse with the object suffixes which follow.

- (4) ni? ? σ č ce w-σθamš

 AUX Q 2SUB hit-TR:1OBJ

 'Did you help me?'
- (5) ni? ?a č lam-namš? AUX Q 2 SUB look-LCTR:10BJ 'Did you see me?'
- (6) łxiləs-stams ? o c ce?? stand-CS:2OBJ Q 2SUB FUT 'Will you have me stand?'

For example, the paradigm for the causative + object forms are given in the following table:

	SINGU	LAR	PI	LURAL
FIRST PERSON	-staṁ̀š	'me'	-stalx "	ʻus'
SECOND PERSON	-stamə	'you'	-stalə	'you people'
THIRD PERSON		-stəx w	'her/him/it/tl	nem'

Table 1. Object suffixes with causative -stax w

The transitive suffixes are ubiquitous, appearing frequently in both natural and elicited data. One project that we have been undertaking for the last twenty years is to test Halkomelem verb roots in combinations with the various suffixes. So far we have identified 486 verb roots and tested them in combination with twelve suffixes (transitive, causative, reflexive, desiderative, etc.). We checked with speakers to see if forms were acceptable and asked for illustrative sentences. We also took materials from our elicitations, texts, dictionaries, etc., and composed a database coded for argument realization and semantic nuances. Totals for acceptable root + transitive suffix combinations are given in Table 2.

ROOT		486	100%
TRANSITIVE	- t	398	81.9%
LIMITED CONTROL TRANSITIVE	-nəx ^w	398	81.9%
CAUSATIVE	-stəx™	276	56.8%

Table 2. Halkomelem transitive suffixes

The causative, while not as frequent as the other transitive suffixes, nevertheless occurs on over fifty percent of Halkomelem roots.

The transitive suffixes are also used on bases that consist of more than a root. For example, the general transitive suffix –*t* follows the benefactive suffix (7), and the causative follows the reflexive (8) and reciprocal (9) suffix.

- (7) ni? lək*-əłc-t-əs t^θə swiŵləs [?]ə k*θə sċešt. AUX break-BEN-TR-3ERG DT young.man OBL DT stick 'She broke the stick for the boy.'
- ni? ťθə swawlas (8) θəy-θət-stəx^w cən AUX 1SUB make-REFL-CS young.man(PL) DT cθt 2i2šals າລ tim-əls k ws paddle(IMPF)-3POS DT do.hard-ACT COMP.NM OBL

'I had the young men train themselves for paddling hard.'

(9) nem ^γ-ya^γq-təl-stəx^w ^γə t^θə kəpu-s t^θən memənə. go exchange-REC-CS OBL DT coat-3POS DT:2POS offpring(PL) 'Go get your children to trade their coats.'

We have discussed the combinatorial properties of causative suffixes elsewhere (see especially Gerdts 1980, 1988, 2004) and limit the discussion here to cases where the causative suffix is attached directly to the root.

In this paper we address the issue of which verbs take the causative suffix, drawing on data from our verb class database. We seek to answer two questions: what classes of verbs allow the causative suffix? and what are the syntactic and semantic properties of the resulting causative construction? We divide our discussion into two parts. In section 2, we discuss causatives formed on intransitive bases, that is, causatives like (10b) where the corresponding non-causative form (10a) is a intransitive clause with a verb that has a single semantic argument.

- (10) a. ni? ?iməš t⁰ə swiwləs.

 AUX walk DT young.man
 'The young man walked.'
 - b. ni? cən ?iməš-stəx* t^θə swiŵləs.

 AUX 1SUB walk-CS DT young.man
 'I made the young man walk.'

In section 3, we discuss a type of causative that has previously gone undiscovered—causatives formed on transitive bases. For example, in causatives like (11b), the corresponding non-causative form (11a) is a transitive clause with a verb that has two semantic arguments.

- (11) a. ni^{9} $^{9}a\dot{t}$ -ət-əs t^{θ} ə swiwləs t^{θ} ə tə \dot{x} $^{w}a^{9}c!$ AUX stretch-TR DT bow DT young.man 'The young man bent the bow.'
 - neṁ ⁹at-stəx* b. t^θə swiwlas ?ə ˈ t^θə təx wa?c! go stretch-CS DT young.man OBL DT bow 'Go show the young man how to pull the bow!'

In section 4, we briefly contrast the causative suffix with the general transitive suffix -t. We give our summary and conclusions in section 5.

2 Causatives on intransitive bases

We start our discussion with causatives that are built on intransitive bases. We divide them into two types, those based on active verbs and those based on states.

2.1 Causatives on active verbs

When the causative suffix is added to an intransitive verb denoting an activity², the subject of the corresponding intransitive clause is the object of the causative and the causer is the subject.

- (12) a. ni⁹ yays t^θə swəÿqe⁹.

 AUX work DT man

 'The man worked.'
 - b. ni? cən yays -stəx w tθ young.man
 AUX 1SUB work-CS DT young.man
 'I put the young man to work.'
- (13) a. ni? ?əmət lə sleni?.

 AUX sit DT woman
 'The woman sat down.'
 - b. ni? cən ?əmət-stəx bara la sleni?.

 AUX ISUB sit-CS DT woman 'I had the woman sit down.'

² This is the class of verbs that we often refer to as unergative. For evidence for the unergative/unaccusative distinction in Halkomelem, see Gerdts (1991), Gerdts and Hukari (1998, 2001).

(14) a. ni? cλəm t^θə sq^wəmeỳ. AUX jump DT dog 'The dog jumped.'

b. ni^{9} cən $c\mathring{\lambda}$ əm-stəx* t^{θ} ə sq*əme \mathring{y} . AUX 1SUB jump-CS DT dog 'I made the dog jump.'

We give additional examples of verbs of this type in Table 3.

BASIC	VERB	-S	təx" CAUSATIVE
⁹ ənəx ^w	'stop'	⁹ ənəx ^w stəx ^w	'stop it', 'make him/her stop'
⁹ itət	'sleep'	⁹ itətstəx ^w	'put him/her to sleep'
ӂ ^w čenәт	'run'	x ^w čenəmstəx ^w	'make him/her run', 'run it'
łžiləš	'stand'	łžiləšstəx w	'make him/her stand'
₫ ^w əyiləš	'dance'	qْ*əyiləšstəx*	'have him/her dance'
ticəm	'swim'	łicəmstəx*	'make him/her swim'
nəqəm	'dive'	nəqəmstəx	'make him/her dive'
ťiləm	'sing'	tiləmstəx™	'have him/her sing'
yənəm	'laugh'	yənəm stəx ^w	'make him/her laugh'

Table 3. Activity verbs with causatives

In addition, there is a large class of motion verbs that form causatives.³ They behave like typical activity verbs in that the agent of motion is the causee of the causative.

- (15) ni⁹ həye⁹ k^wθə John. AUX leave DT John 'John left.'

³ See Gerdts and Hukari (2001) for a treatment of the properties of Halkomelem motion verbs.

However, the more common use of causatives of motion verbs is with an associative meaning.4 That is, the object expresses the person or thing that is taken or brought along during the performance of the motion.

- (17)ni? cən həye?-stəx^w k™θə sqwəmey. AUX 1SUB leave-CS dog DT 'I took the dog along.'
- ťa kw (18)⁹ał-stəx w-əs səŵ ⁹əšəl θəŵnił. get.on.board-CS-3ERG paddle go.home NM:LNK DT:PRO 'She put it on board and she paddled home.'
- 'nί łe:1-stax w t^{θ} ə (19)snəx "əł! come go.ashore-CS DT canoe 'Beach the canoe!'
- (20)nem fəx w-stəx w cən k™θə-nə syał. go.downhill-CS firewood 1SUB DT-1POS go 'I am going to take my firewood down.'

Other examples are given in Table 4.

BA	SIC VERB	-stə	x * CAUSATIVE
ѝет	'go'	neməstəx "	'take it'
ṁ́i	'come'	mistəx *	'bring it'
cam	'go uphill'	cəmstəx ^w	'take it uphill'
⁹ eli	'go away'	⁹ eliyəstəx*	'take it away'
ťak ^w	'go home'	ťək «stəx »	'take it home'
x *ə ⁹ aləṁ	'return'	x ^w ə ⁹ aləmstəx ^w	'return it', 'make him/her return'
k̃*i ^γ	'climb'	k [™] i?stəx™	'lift/raise it', 'make him/her climb'
łeŵ	'run away, flee'	łəẃstəx *	'run away with him/her'
šaqʷəl	'cross to the other side'	šq ^w ilstəx ^w	'bring him/her/it across to the other side'
təyəl	'go upstream'	təyəlstəx*	'take it upstream'

Table 4. Motion verbs with associative causatives

⁴ In previous research, including Gerdts and Hukari (2001), we have referred to these as comitative causatives. Suttles (2004) also uses this term. However, since the objects are often inanimate, and comitative is more appropriately used for an active participant. associative may be a more appropriate term. Several other Salish languages have causatives of this type. For example, Beck (1996) and Hess and Bates (1998) note causatives on verbs of motion in Lushootseed, and Watanabe (2003) notes them in Sliammon

2.2 Causatives on states

Many verbs describing states can take the causative suffix. The subject of the intransitive clause is the object of the corresponding causative. The derived meaning is to make, get, have, keep, or find something in that condition or state.

- (21) a. '?əw həli k'vən šx v'?aq'va?-ələp.

 LNK alive DT:2POS sibling(PL)-2POS.PL
 'Your brother is alive.'
 - b. ⁹ow yo-holi-stox w con ce⁹ θo sleweł.
 LNK SER-alive-cs ISUB FUT DT herring
 'I will keep the herrings alive.'
- (22) a. təqw tə sqis-s t^θə xwiləm. tight DT knot-3POS DT rope 'The knot in the rope is tight.'
 - nem č λim ?aŵ təq"-stəx" t⁰ən s-qp=əle?c-t b. 2SUB really LNK tight-CS DT:2POS NM-tie=fibre-TR go t^θə ləq"ə. DT suitcase

'Tie the suitcase really tightly when you tie it.'

- (23) a. ...k**əw xəl pe? nə-sq**aləwən...

 COMP:LNK hurt indeed lPOS-feelings

 '...my feelings are very hurt...'
 - b. ni? cən xət-stex w.
 AUX ISUB hurt-CS
 'I felt bad for him.'

Further examples are given in Table 5.

⁵ Beck (1996) notes causatives based on statives in Lushootseed, although it is not clear that he views these as a separate category of causatives.

⁶ As Gerdts (1991) notes, stative-resultative forms of verbs are especially common in this construction. For example, the root $\sqrt{n\partial \vec{w}}$ forms the stative-resultative $s\partial \vec{n}i\vec{w}$ 'inside' and the causative $s\partial \vec{n}i\vec{w}st\partial x$ 'keep it inside'.

Mar edsak	STATE		CAUSATIVE
ləx	'spaced apart'	ləžstəx *	'space it apart'
neč	'different, strange'	neċstəx w	'find it strange'
p ̇̀əł	'sober up'	p̂əłstəx™	'sober him/her up'
qəl	'bad'	qəlstəx	'dislike it'
qəž	'much, lots'	qəžste x "	'get lots of it'
₫ʷaṗ	'wrinkled, pleated'	qwapstəx w	'put pleats in it'
təq ^w	'tight'	təq"stəx"	'get it tight'
хэł	'hurt, ache'	žəłstex™	'feel bad for him/her'
⁹ əsəp	'finished'	⁹ əsəpstəx "	'get it finished'
[?] əwk*	'finished'	[?] əŵk [*] stəx*	'get it finished'
łec	'dark'	łecstəx w	'make it dark'
ləq	'sold'	ləqstəx*	'get it sold'
χ̈́əẍ́ ^w	'hard'	λ̂əxॅ™stex™	'make it hard'
łəqʷ	'wet'	łəq*stəx*	'wet it'
ċәq	'astonished'	ċəqstəx™	'astonish him/her'
nas	'fat'	nasstəx	'put fat in it'
χ́a ^γ	'soothed'	ጰa ^γ stəx™	'get him/her soothed'
х́эċ	'close together'	хэсstəх "	'get them close together'
Х́әḱ™әǹ	'extinguished'	ጰek "əṅstəx "	'extinguish it'
хэр	'deep'	хื∂pstəx™	'get it deep'
θi	'big'	θistəx "	'make it big'
⁹ əx∗iả	'little'	[?] əx "i nstəx "	'make it a little bit', 'add a little bit'

Table 5. Causatives based on states

In sum, we have noted three types of causatives formed on intransitive bases: 1) those in which the base is an activity and the causative object is the causee; 2) those in which the base is a motion verb and the object is associative (brought along); 3) those in which the base is a state and the construction denotes getting or keeping the object in that state.

3 Causatives on transitive bases

Next we turn to examples of causatives where the corresponding non-causative clause is transitive.⁷ For example, the verb root $\sqrt{m} \partial \vec{k}$ has a transitive form $m \partial \vec{k}$ " ∂t " 'pick it up off the ground, gather' and a causative form $m \partial \vec{k}$ "st ∂x " 'have him/her pick it up off the ground, gather', and the root $\sqrt{2il} \partial q$ has a transitive form $2il\partial q\partial t$ 'buy it' and a causative form $2il\partial q\partial t$ 'have him/her buy it', as illustrated in the following:⁸

(24) məkw-ət č ce⁹ t⁰ə syal. pick.up-TR 2SUB FUT DT firewood 'You will gather firewood.'

'I had the woman bake the bread.'

We show here that some transitive bases do form causatives, and in this case, the transitive suffix does not appear inside the causative suffix.

Watanabe (2003) notes causatives of transitives in Sliammon. The causative suffix stacks on the transitive suffix. However, they are used only as imperatives and the object of the corresponding transitive clause remains a direct argument in the causative.

An in-depth discussion of our current thinking about underlying transitivity in Halkomelem is beyond the scope of this paper, but we assume that Halkomelem exhibits the usual range of verb types—unergative, unaccusative, and transitive, represented in standard argument-structure notation as follows: Unergatives NP, Unaccusatives <NP>, Transitives NP <NP>.

Most roots in Halkomelem may appear in a more than one argument structure frame. Some of the roots on which causatives are based appear not only as transitives, but also as unaccusatives or unergatives with an oblique patient. However, in other cases, such as \sqrt{mak} or $\sqrt{2ilaq}$, the root is not possible as a free-standing word and thus we posit it to be a transitive root.

⁷ Previously, we have claimed that causatives in Halkomelem are formed only on intransitive bases (Gerdts 1988, 2004). Evidence for that claim came from the fact that a transitive form such as (ia) cannot serve as a base for a causative. This is true regardless of the presence or absence of the transitive suffix, the word order, or the case marking of the nominals:

⁽i) ni? å™əl-ət-əs a. łэ sleni? səplil. AUX bake-TR-3ERG DT bread woman 'The woman baked the bread.' b. *ni? d"əl(-ət)-stəx" (?a)łə bake-TR-CS AUX 1SUB OBL DT słeni? (?a)k ™θa saplil. woman OBL. DT bread

(25)nem cən mək "-stəx " t^θə sᢜi?ᢜaəł ?ə ťθə 1SUB pick.up-CS DT child OBL go DT tθa kwa x kwa 22 dəyemən, nem cəwmən. shell salt.water go OBL DT seashore

'I'm going to get the boy to pick up sea shells by the seashore.'

- (26) ni: č ?iləq-ət kw skwaws?

 AUX:Q 2SUB buy-TR DT bucket
 'Did you buy a bucket?'
- t^θə sλi^γλαəł (27)?iləastəx * ⁷a k°aŵ stem ?aĺ ?ə child buy-CS DT OBL DT:LNK what iust OBL θэ tela ni? k wane-t-as. DT AUX take(STA)-TR-3ERG money

In these causatives, the agent of the transitive verb corresponds to the object of the causative and the patient of the transitive verb corresponds to an oblique object in the causative. Cross-linguistically, a causative based on a transitive replicates the structure of a ditransitive clause in a language (Gerdts 1992). In Halkomelem ditransitive clauses, the goal NP is the direct object and the patient/theme is an oblique object.

'The boy gave the dog the bone.'

As we have noted elsewhere (Gerdts 1988, Gerdts and Hukari 1998), oblique objects can be differentiated from other oblique-marked NPs by the way they extract, for example in WH-questions. The predicate is nominalized with the prefix s- and the subject of the nominalization appears as a possessor:

'What did the boy give the dog?'

The oblique-marked NP in a causative formed on a transitive tests to be an oblique object, since it extracts with *s*-nominalization:

^{&#}x27;Have the boy buy something with the money he has.'

- sẳi?ẳqəł? ⁷a lə к^wə (30)stem ni? ⁹ən s-məkw-stəxw t^θə AUX 2POS NM-pick.up-CS what INOU DT DT child 'What did you have the child pick up?'
- (31) stem 'alə kwə ni' 'ən s-'iləq-stəxw tho ski'kqəl? what INQU DT AUX 2POS NM-buy-CS DT child 'What did you have the child buy?'

Causatives formed on transitives get a range of translations including to get, have, make, show, or teach someone to do the transitive action. Often the causative verb is chained with the verb x^{w} ? $\partial \dot{w} c \partial s t$ 'show someone how to do something (with the hands)'.

- (32) ?i:č wəł səl-ət k wθə s-tšelqən ?ən ləmətulqən?
 AUX:Q:2SUB then spin-TR DT STA-card(RES) 2POS wool
 'Have you spun your carded wool?'
- (33) x w 2 ew cos-t θ e de mi? səl-stəx w 2 e tθ ləmətulqən. teach-TR DT young.woman spin-CS OBL DT wool. 'Teach the girl how to spin the wool.'

Additional verbs that show this sort of transitive/causative alternation are given in Table 6.

	TRANSITIVE		CAUSATIVE
k wuk wt	'cook it'	k wuk wstəx w	'teach him/her to cook'
łe ⁹ žt	'dish it up'	łe ⁹ žstəx w	'have him/her dish it up'
łqət	'baste it on'	łəqstəx*	'show him/her how to baste it on'
łłet	'flip it'	łəłstəx*	'show him/her how to flip it'
łəňət	'weave it'	łəṅstəx™	'show him/her how to weave it'
х́іс́әt	'sneak up on it'	х́әċstәх™	'show him/her how to sneak up on it'
maťət	'splay/prop it'	maistəx	'show him/her how to splay/prop it'
məlct	'roll it'	məlcstəx "	'have him/her roll it'
pkwət	'dust/sprinkle it'	pək ^w stəx ^w	'show him/her how to dust/sprinkle it'
pšət	'spit it'	pəšstəx ^w	'show him/her how/where to spit it'
qi wət	'hang it'	₫iŵstəx™	'have him/her hang it'
ła?t	'pull it apart'	ta ⁹ stəx "	'teach him/her to pull it apart'
łəṁət	'pound/beat on it'	ťəṁstəx™	'show him/her how to pound/beat on it'
ť ⁰ a?t	'pull it off'	ťθa?stəx w	'show him/her how to pull it off'
ử ^θ e k ™ət	'shine a light on it'	ť ⁰ e k "stəx "	'have him/her shine a light on it'

Table 6. Causatives based on transitives

All of the above examples have the standard causative meaning of the causer causing the causee (i.e. the agent of the corresponding non-causative cause) to do something. However, there are also cases in which the object of the causative construction is not a causee. Rather it plays some kind of oblique role such as dative, benefactive, or comitative. We refer to these as applicative causatives. Thus, we see that the agent of the transitive clause in (34) is also the agent in the applicative causative in (35) and the object in (35) has the semantics of a benefactive, not a causee.

Ail-t (34) t^{θ} ə słewan yəwen ?i veł ?an-s spread-TR 2SUB first 2POS-NM DT mat CONI next łəxwtən. łed-ət tə lie-TR blanket DT

'Put the mat down first, then spread out the blanket on top.'

(35) nem č ce^γ θil-stəx w θən silə γ θəγi ləx wtən. go 2SUB FUT spread-CS DT:2POS grandparent OBL this blanket 'You will go and open this blanket for your grandma.'

T	RANSITIVE		CAUSATIVE
lemət	'look at it'	ləmstəx*	'show it to him/her'
θəyt	'fix it'	θəystəx ^w	'fix it for him/her'
ťaľə <u>x</u> *ət	'chase it away'	ťaĺəx*stəx*	'chase it away for him/her'
θələqt	'divide it'	θələqstəx w	'divide it with him/her'

Table 7. Applicative causatives

In other cases, there seems to be no accumulative relationship between the transitive and the causative constructions. The agent in (36) and (37) remains constant, but the object in the transitive construction in (36) is a source, while the object in the causative construction in (37) is a benefactive.

t⁰ən silə nił **l**wet k «э ni? ge?ən-t ?a (36)3PRO who DT AUX steal-TR DT:2POS grandparent OBL k ^wθə sewən-s? lunch-3POS DT

'Who stole your grandfather's lunch from him?'

⁹ Gerdts and Hukari (to appear) note that the causative suffix added to a denominal verb yields a benefactive reading: tx^{w} -saplil 'buy bread', tx^{w} -saplil- $stax^{w}$ 'buy bread for him/her'.

(37) nem č ce? qən-stəx tθən səlsilə ? k vθə go 2SUB FUT steal-CS DT:2POS grandparent(PL) OBL DT sci yə.

'You're going to steal some strawberries for your grandparents.'

The agent in (38) and (39) remains constant, but the object in the transitive construction in (38) is a goal, while the object in the causative construction in (39) is a benefactive.

- (38) cala? 1 -t č 0 -ði men 9 -ði snəx w -ði. borrow/lend-TR 2SUB DT:2POS father OBL DT:2POS canoe/car 'Lend your father your car.'
- 22 (39)ni? cala?ł-stəx w k ™θə John ?a tela? AUX 2SUB borrow/lend-CS John DT OBL DT money 'Did you borrow some money for John?'

4 Contrasting transitives and causatives

Our research has shown that the causative suffix gets added to several types of bases, resulting in causative constructions with a wide variety of functions. In fact, the causative suffix can be attached to over half of the verb roots in our corpus. This brings up the question: why do some verb roots not take the causative suffix? We leave a precise answer for future research, though we can make some preliminary remarks here.

First, 22 roots (5%) do not transitivize at all. That is, they take neither the general transitive suffix -t nor the causative suffix -stax. Some examples are given in Table 8.¹⁰

¹⁰ The roots marked with $\sqrt{}$ in fact do not occur as free-standing forms. Most require the middle suffix in their simplest forms. See Gerdts and Hukari (1998).

k wan	'be born'
wəネsċ	'stumble'
ť ^θ e m	'go out (tide)'
čal	'turn'
√cətă™	'bewilder'
√łəṫġʷ	'snore'
√pah	'swell up'
√pax≀	'smoke'
√ ⁹ aŵ	'be quick'
√t ^θ e x ^w	'purple'
√łiĭw	'slippery'
√ləmx™	'rumble'
qal	'put water in a container'
heỷ	'build a canoe, make bread'

Table 8. Verbs that do not take the transitive or the causative suffix

Second, it is useful to examine the roots that take the general transitive suffix -t but not the causative. One major class of verbs of this type shows an "inchoative/causative" alternation. In Halkomelem, the inchoative alternant is the bare root while the causative alternate is suffixed with -t. Around 125 (25%) of verbs show this sort of alternation, though the actual degree of external force implied in the case of the intransitive alternate varies. Some examples are given in Table 9.

BASIC VERB		-t TRANSITIVE		
⁹ ak*	'get hooked'	[?] ak⁴*ət	'hook it'	
ċəx™	'increase'	ċx wat	'add more to it'	
k°∂ł	'spill'	k*let	'pour it'	
lək "	'break in two'	lək *at	'break it in two'	
ċəỷ x "	'get dry'	ċəỷx™t	'dry it'	
ləċ	'(container) get full'	ləčət	'fill it'	
łəqʷ	'get wet'	łqʷət	'wet it'	
ċəq̂*	'get pierced'	ċq̇̃*at	'pierce it'	
səq	'get torn'	sģet	'tear it'	
х́эх ^w	'get covered'	ጰx™at	'cover it'	
k⁴es	'burn', 'get hot'	ử∾esət	'burn it', 'singe it' 'scorch it'	

Table 9. Some verb roots that take -t

These process roots thus contrast with the active roots and the stative roots discussed in section 2 above, which take the causative suffix, and usually not the transitive suffix. We have found 50 roots (11%) to be of this type.

Roots that take just the transitive or just the causative suffix, or neither, account for around half of the roots of the language. In fact, 221 roots (48%) can take either suffix. See Table 10 for an overall summary of the occurrence of verbs roots and the transitive suffixes.

	-stəx " YES	-stəx" NO	TOTAL
-t YES	221(48%)	170 (36%)	391 (84%)
-t NO	50 (11%)	22 (5%)	72 (16%)
TOTAL	271 (59%)	192 (41%)	463 (100%)

Table 10. Occurrence of roots with the transitive suffixes –t and –stax w

In the vast majority of roots that can appear with either the transitive or the causative (cf. section 3), the transitive construction usually indicates a simple event involving an agent and a patient, while the causative construction involves an extra NP associated with the event—usually the causer.

5 Conclusion

We have discussed two types of causatives: those based on intransitives, which yield transitive constructions (40), and those based on transitives, which yield ditransitive constructions (41):

- (40) ni? cən ?iməš-stəx* t^θə swiwləs.

 AUX 1SUB walk-CS DT young.man
 'I made the young man walk.'
- nem ⁹at-stəx ^w t^{θ} ə swiwlas ?a t^{θ} ə təx wa?c! (41)stretch-CS DT young.man OBL bow go DT 'Go show the young man how to pull the bow!'

However, it is also useful to summarize the properties that are common to these two types.

We can look at causative constructions along two dimensions based on the role of the NPs that occupy the subject and object positions in the surface structure. First, in a classic causative, e.g. (40) and (41), one where the causative means 'make/have/show/teach someone to do something', the subject of the causative is the causer that instigates the event described by the base verb. The object of the causative is a causee and actually serves as the agent of the event under the supervision or direction of the causer. The agent is a higher animate (or sentient) nominal. Thus, this nominal plays a dual function in the clause—it is both the causee of the causative event and the agent of the event described by the base. Of course, the degree of participation in the event on the part of the causer and causee varies along a continuum. With the 'make' meaning, the causee may be the sole participant in the event, but in the case of 'teach' and

'show', the causer may be the more active participant, with the causee simply observing the action.

At the far end of the dimension of object participation, we encounter a second type of causative robustly attested in our data—the ones we label associative (e.g. tak^wstax^w 'take/bring home', cf. tak^w 'go home') or applicative (e.g. $talax^wstax^w$ 'chase it away for him/her', cf. $talax^wat$ 'chase it away'). In this construction, the subject of the causative plays a dual role—as the initiator of the causation and also the agent of the event described by the base verb. The object lacks agency but rather takes the role of something associated with the event. In the case of a motion verb, it refers to the thing moved, and in the case of a transitive verb, it refers to someone to whom, for whom, or with whom the action is done.

We also find causatives based on states. Here the subject advances or fosters the state or finds the object in the state along a continuum of participation, translated as 'make', 'get', 'have', 'keep', or 'find' depending on the base and the context. For example, we have $q \ni x \text{ 'find' } \text{ depending } \text{ or } q \ni x \text{ 'much, lots' } \text{ versus } n \in c \text{ state} x \text{ ''find } \text{ it strange' } \text{ from } n \in c \text{ 'different, strange.}$ The object is whatever animate or inanimate nominal can appropriately be in that state.

So we see that the Halkomelem causative suffix appears in a wide range of constructions, which nevertheless seem to radiate from the properties of a classic causative. In future research, we hope to elucidate more precisely how these constructions relate to each other and also how they differ from constructions marked by other transitive suffixes.

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