

A RELATIONAL ANALYSIS OF HALKOMELEM CAUSALS

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1. INTRODUCTION

In Halkomelem, a Salish language spoken in southwestern British Columbia, there are several ways of expressing psychological events. In cases involving a CAUSAL (an indirect cause), the nominal playing the role of causal can be expressed in two ways.¹ First, it can be an oblique in an intransitive clause, as exemplified in (1)–(3):²

¹ The term "causal" as used here originates with the work of Eduardo Raposo on Portuguese causatives.

² These abbreviations are used in the glosses of the Halkomelem:

advA	Marker of 3–2 Advancement
advB	Marker of Ben–2 Advancement
advC	Marker of Caus–2 Advancement
aux	Auxiliary
cs	Causative
det	Determiner
erg	Ergative
intr	Intransitive
l.c.	Limited control
lnk	Linker
obj	Objective case
obl	Oblique marker

- (1) *ni cən c'əq' ʔə k''θə scə'əm-s*
 aux 1sub astonished obl det jump-3pos
 'I was astonished at his jump.'
- (2) *ni cən s'ciwʔs ʔə k''θə ni ʔəʔ nə-syá.yʔs*
 aux 1sub tired obl det aux pst 1pos-work
 'I am tired of working.'
- (3) *ni q'élʔ ʔə k''θə šməθ'anqinəm-s*
 aux believe obl det lie-3pos
 'He believed his lies.'

Second, the causal can be the object of a verb suffixed with *-meʔ*,³ as exemplified in (4)–(6):

- (4) *ni cən q'élʔ-méʔ-t k''θə ləplít*
 aux 1sub believe-advC-tr det priest
 'I believed the priest.'
- (5) *ni cən wəʔ t'ciws-mə-t t'ə John*
 aux 1sub already tired-advC-tr det
 'I'm already tired of John.'
- (6) *ni θ'eyʔk''w-méʔ-t-əs k''θə sq''əméyʔ*
 aux startled-advC-tr-3erg det dog
 'He was startled at the dog.'

In (7), I have listed other verbs that can occur in these two constructions; there are about 30 verbs in all. They are of a consistent semantic class — psychological predicates.

- (7) *š'iʔšeʔ* 'ashamed'
hílək'' 'be happy'
síwəl 'sense'

pos	Possessive
pst	Past tense
sub	Subjective case
ssub	Subordinate clause subjective case
tr	Transitive
1	First person
2	Second person
3	Third person

³ Data from two dialects of Halkomelem are given here: In the Cowichan dialect the causal to object advancement marker is *-méʔ*, in the Musqueam dialect this marker is *-míʔ*, and in both dialects, the stressed form alternates with an unstressed variant *-mə*.

- síʔsiʔ* 'frightened'
wistánəq 'be jealous'
c'iwəlʔ 'be annoyed' (Musqueam only)
ʔályə 'dream' (Musqueam only)
həʔk'w 'remember' (Musqueam only)

In Halkomelem, causals as in (1)–(6) contrast syntactically and semantically with AGENTS. In the transitive construction in (8), the agent is the direct, purposeful inducer of the psychological state and appears as subject.

- (8) *ni cən θ'áyʔk'w-t k'wθə sq'əméyʔ ʔə k'wθə úntin*
 aux lsub startle-tr det dog obl det bell
 'I startled the dog with the bell (on purpose).'

In addition, causals (indirect causes) contrast with CAUSERS, which directly cause an event. Causers in Halkomelem are expressed in causative constructions like (9); this construction is discussed further in Section 5.2.2.

- (9) *ni cən ʔiməš-stəx'w k'wθə John*
 aux lsub walk-cs det
 'I made John walk.'

In this chapter I propose to give analyses for causal constructions. In presenting these analyses, I make use of concepts available in Relational Grammar, as outlined in Section 2. Because my arguments are based on some basic rules of Halkomelem, I discuss these rules in Section 3. In Section 4, I argue that causal constructions like those in (4)–(6) involve the advancement of the causal to object. In Section 5, I discuss causal constructions in light of the Unaccusative Hypothesis, as proposed by Perlmutter (1978) and Perlmutter and Postal (1984). I give evidence that causal constructions are initially unaccusative. In Section 6, I show that Passives of causal constructions which involve advancement to object are possible; such Passive constructions constitute a counterexample to a law proposed as a universal by Perlmutter and Postal—the 1-Advancement Exclusiveness Law.

2. OUTLINE OF RELATIONAL GRAMMAR

The following is a summary of the basic concepts of Relational Grammar (RG) needed to comprehend the analysis presented here. For a more thorough discussion and justification of these concepts, see Perlmutter and Postal (1977, 1984) and Perlmutter (1980).

The basic claim of RG is that the following information is needed in the syntactic characterization of a clause:

1. The grammatical relations that each element bears in the clause (see Section 2.1)
2. The level at which each element bears grammatical relations to the other elements

This information is represented in RG by means of a **RELATIONAL NETWORK** (see Section 2.2).

The use of relational networks (RNs) to characterize clauses has an immediate consequence: Because RNs reference grammatical relations rather than word order, case marking, etc., it is possible to compare grammatical constructions in different languages. Thus, linguistic theory can be conceived of as the task of characterizing the set of well-formed RNs for natural languages. The task of grammars of individual languages is to state which subset of the set of well-formed RNs is well-formed in that language. In addition, a grammar of a language must state various language-particular rules and generalizations (e.g., case marking, word order).

2.1. Grammatical Relations

Among the grammatical relations (GRs) used in RG are: predicate (P), subject (1), object (2), indirect object (3), oblique (locative [Loc], benefactive [Ben], instrument [Instr], etc.), and *chômeur* (Cho). The *chômeur* relation (from the French 'unemployed') is borne by nominals that bear no other nominal clause relation at that level. More precisely, a nominal N_i can bear the *chômeur* relation only in constructions in which some other nominal N_j assumes N_i 's relation (see Section 2.2).

The GRs are organized into classes; of relevance here are two classes: **NUCLEAR TERMS**, consisting of 1s and 2s, and **NON-TERMS**, consisting of *chômeurs* and obliques.

The nominal clausal GRs are conceived of as being organized hierarchically, as follows:

(10) 1 > 2 > 3 > non-terms

Although the principle for determining the assignment of GRs at initial level is not entirely justified empirically, Perlmutter and Postal (1977) say:

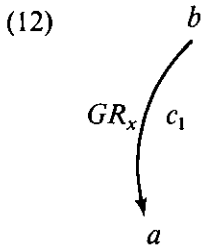
Our ultimate claim is that the justification for [the assignment of GRs at initial level] is universally determined by principles referring to the semantic role of the nominal. Thus, as traditionally recognized, agent nominals are initially 1s (although, of course not all 1s represent agents), patients 2s, etc. . . . [p. 402].

2.2. Relational Networks

The relational network involves three primitive constructions:

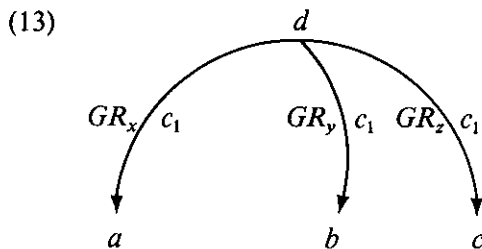
- (11) a. A set of nodes, which represent linguistic elements of all sorts, including morphemes and abstract elements such as clauses or phrases
- b. A set of R-signs, which are the names of the grammatical relations that elements bear to other elements
- c. A set of coordinates, $c_1 \dots c_n$, which indicate the level at which the elements bear grammatical relations to other elements

This information, that an element bears a grammatical relation at a certain level, can be captured by means of an ARC, as in (12).



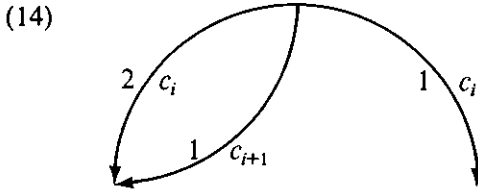
The arc in (12) is interpreted to mean that element a bears relation GR_x with respect to element b at the c_1 level.

A relational network is a set of arcs meeting certain conditions. A sentence with 3 elements (a, b, c) bearing grammatical relations (x, y, z respectively) at the c_1 level to element d can be represented by the following relational network.



In some grammatical constructions, a nominal bears different relations at different levels of the same clause. For example, in ADVANCEMENTS, a nominal bearing a GR at the c_i level bears a GR that is higher on the hierarchy given in (10) at the c_{i+1} level. For example, Passive has been

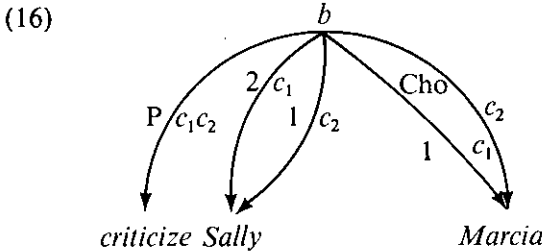
universally characterized by Perlmutter and Postal (1977) in terms of the following sub-network:



That is, a nominal bearing the 2-relation in the c_i stratum, in which there is also a nominal bearing the 1-relation, bears the 1-relation in the c_{i+1} stratum.

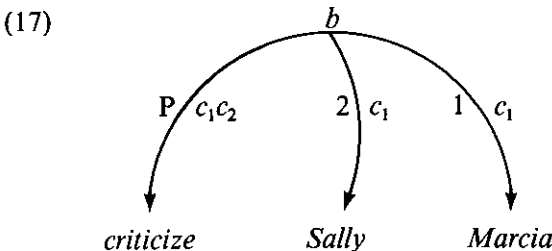
The Passive clause in (15) is represented by the relational network in (16):

(15) *Sally was criticized by Marcia.*



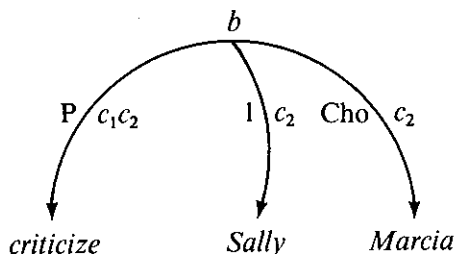
As can be observed in (16), Sentence (15) has two levels of structure (c_1 and c_2). The notion of level can be restated formally in terms of the concept of STRATUM, defined as follows: The c_i^{th} or i^{th} stratum of b , where b is a node and c_i is an arbitrary coordinate, is the set of all arcs with tail b and coordinate c_i .

Thus, in the c_1 stratum of (15), *criticize* heads a P-arc, *Marcia* heads a 1-arc, and *Sally* heads a 2-arc, as represented in (17).



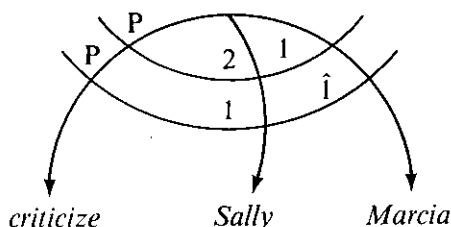
In the c_2 stratum of (15), *criticize* heads a P-arc, *Sally* heads a 1-arc, and *Marcia* heads a cho-arc, as represented in (18).

(18)



The strata are more clearly seen in an alternative representation of the relational network—the STRATAL DIAGRAM. The stratal diagram of (15) is given in (19).

(19)



In stratal diagrams, it is common to use the symbols $\hat{1}$, $\hat{2}$, and $\hat{3}$ to represent chômeurs. An *n*-chômeur in a stratum c_i is a nominal heading a cho-arc in the c_i stratum and an *n*-arc in the stratum immediately before the first stratum in which it heads a cho-arc.

2.3. Laws in Relational Grammar

Perlmutter and Postal (1977, 1983, 1984) have proposed a number of laws stated in terms of grammatical relations. These laws, based on cross-linguistic generalizations, make falsifiable empirical claims about the class of possible natural languages.

For example, in the Passive construction in (15) as represented in (16) and (19) the initial *1* bears the chômeur relation at final level. Evidence that the initial *1* of a Passive is a final chômeur in English comes from the inability of the nominal to behave as a subject with respect to rules like verb agreement and subject-to-object raising, which refer to the notion “final-stratum 1.”

A proposed universal—the Motivated Chômeur Law—claims that a nominal N_i can bear the chômeur relation only in constructions in which some other nominal N_j assumes N_i 's relation. In this case, the initial *2* assumes the *1*-relation at final level. Thus the Passive construction in English obeys the Motivated Chômeur Law.

Several other laws proposed by Perlmutter and Postal are referred to in this chapter. Statements of these laws are given as they become relevant to the discussion.

2.4. Some Defined Concepts

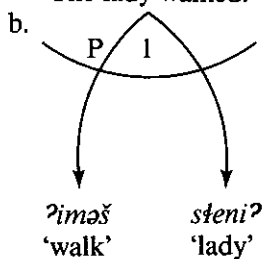
Finally, some other concepts made use of in this chapter are given formal definitions in RG. These are:

1. TRANSITIVE—A transitive stratum is one containing both a 1-arc and a 2-arc.
2. INTRANSITIVE—An intransitive stratum is one that is not transitive.
3. ERGATIVE ARC—A 1-arc in a transitive stratum is an Erg-arc in that stratum.
4. ABSOLUTIVE ARC—A 2-arc in a transitive stratum or the nuclear term-arc in an intransitive stratum is an Abs-arc in that stratum.

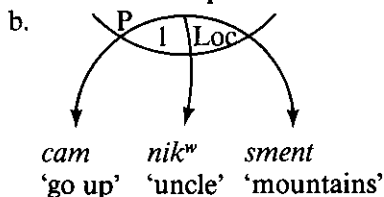
3. SOME BASIC RULES OF HALKOMELEM

Before proceeding to the analysis of causal constructions, I give some basic rules of Halkomelem, discussing these rules with respect to three types of clauses. First, there are intransitive clauses like (20)–(21).

- (20) a. *ni ʔiməʃ tə stəniʔ*
 aux walk det lady
 'The lady walked.'



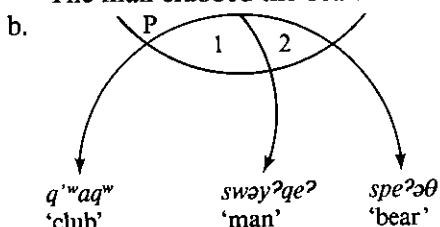
- (21) a. *ni cam kʷθə nikʷ ʔə tʰə smént*
 aux go up det uncle obl det mountains
 'Uncle went up into the mountains.'



Second, in (22)–(23), I have given examples of monostratal transitive clauses, as represented in the stratal diagram in (23b).

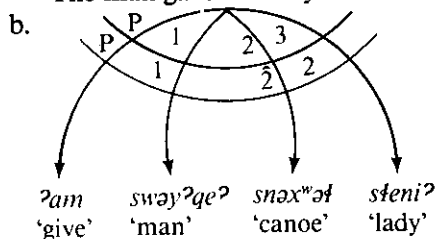
(22) *ni q'wəl-ət-əs θə sténi? t'ə scéttən*
 aux bake-tr-3erg det lady det salmon
 'The lady baked the salmon.'

(23) a. *ni q'wáqw-ət-əs t'ə swáy?qe? t'ə spē?əθ*
 aux club-tr-3erg det man det bear
 'The man clubbed the bear.'

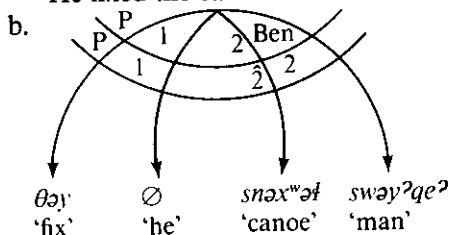


Finally, in (24) and (25) respectively, I give examples of clauses that I have analyzed elsewhere (Gerds 1981) as involving the advancement of the initial 3 (the "recipient") or the initial benefactive to 2; in advancing to 2, the initial 3 or Ben places the initial 2 en chômage, as represented in (24b)–(25b).

(24) a. *ni ?ám-əs-t-əs k'wθə swáy?qe? t'ə sténi? ?ə k'wθə snáx'wət*
 aux give-advA-tr-3erg det man det lady obl det canoe
 'The man gave the lady the canoe.'



(25) a. *ni θáy-ət-ət-əs k'wθə swáy?qe? ?ə k'wθə snáx'wət-s*
 aux fix-advB-tr-3erg det man obl det canoe-3pos
 'He fixed the canoe for the man.'



3.1. Transitive Marking

All predicates in finally transitive strata must be suffixed with a transitive marker; in the foregoing examples the relevant suffix is *-(ə)t*. Observe the presence of this marker in (22)–(25) and its absence in (20)–(21). Finally transitive clauses are ungrammatical without Transitive Marking.

3.2. Case and Agreement

Two cases are distinguished for nominals: the STRAIGHT case, in which the nominal is preceded only by a determiner, and the OBLIQUE case, in which the nominal is preceded by the oblique marker and a determiner:⁴

(26)	Straight case	Oblique case
	<i>ʔə sténiʔ</i>	<i>ʔə ʔə sténiʔ</i>
	det lady	obl det lady

The rule for Nominal Case is as follows:

- (27) a. Final nuclear terms (1s and 2s) are in the straight case.
 b. Other nominals are in the oblique case.

Thus, the final 1s in the preceding examples are in the straight case. In addition, the final 2s in (22)–(25) are in the straight case. Final obliques as in (21) and *chômeurs* as in (24)–(25) are in the oblique case.

In contrast to nominals, pronominals distinguish four cases; a partial paradigm is given in (28):

(28)		Subjective	Objective	Oblique	Possessive
	1st person sg	<i>cən</i>	<i>-amʔʃ</i>	<i>ʔə-ʔ, ʔenθə</i>	<i>nə-</i>
	2nd person sg	<i>č</i>	<i>-am ə</i>	<i>ʔə-ʔ nəwə</i>	<i>ʔən-</i>

The subjective set are clitics and follow the first element of the clause. The objective set are verbal suffixes. The oblique set consists of independent pronouns preceded by the oblique marker and a determiner. The possessive set are affixes.

As can be seen in (29)–(31), final 1s are expressed in subjective case and final 2s in objective case.

- (29) *ni cən ʔiməʃ*
 aux 1sub walk
 'I walked.'

⁴ The determiners used in these data are:

<i>ʔə</i>	Plain visible definite
<i>kʰθə</i>	Plain visible definite
<i>θə</i>	Feminine visible definite
<i>ʔə</i>	Feminine invisible definite
<i>ʔ</i>	Oblique pronominals and proper nouns

- (30) *ni č kʷən-əθ-ámʔš*
 aux 2sub grab-tr-1obj
 'You grabbed me.'
- (31) *ni cən ʔam-əs-θ-ámə*
 aux 1sub give-advA-tr-2obj
 'I gave it to you.'

Final obliques, like the locative in (32), are in the oblique case.

- (32) *ni cən némʔ ʔə-ĭ nəwə*
 aux 1sub go obl-det 2
 'I went to you.'

For third person, nonemphatic final 1s and 2s are \emptyset . However, third person nominals and pronominals determine agreement, which is expressed as the verbal suffix *-əs*, as exemplified in (33).

- (33) *ni kʷən-əθ-ámʔš-əs*
 aux grab-tr-1obj-3erg
 'He grabbed me.'

As can be observed by contrasting the finally intransitive clauses in (20)–(21) with the finally transitive clauses in (22)–(25) and (33), only final 1s in transitive clauses determine third person agreement. Since a 1 in a transitive stratum is an ergative, Third Person Agreement is formulated as follows:

- (34) Third person nominals heading a final Erg-arc determine agreement.

Thus, agreement provides a test for final transitivity in Halkomelem.

3.3. Quantifier Extraction

Quantifiers, like other modifiers, appear preceding the nominal they modify, as exemplified in (35).

- (35) *mák'w k'wθə qáʔ*
 all det water
 'all the water'

In addition, the quantifier *mák'w* 'all' can appear in sentence-initial position followed by an embedded clause, as exemplified in the (b) sentences of (36) and (37). I refer to this construction as Quantifier Extraction.

- (36) a. *ni ʃwələnčénəm mák'w k'wθə sʔəlʔiqəʔ*
 aux run(pl) all det children
 'All the children ran.'

- b. *mák'w niw ʃwələnčénəm kʷθə sʰəlʔiqəʔ*
 all aux:lnk run(pl) det children
 'All the children ran.'

- (37) a. *ni wəwáʔəs mák'w kʷθə sqʷəmɔqʷəméyʔ*
 aux bark all det dogs
 'All the dogs barked.'

- b. *mák'w niw wəwáʔəs kʷθə sqʷəmɔqʷəméyʔ*
 all aux:lnk bark det dogs
 'All the dogs barked.'

This construction is discussed in Gerdts (1981); relevant here is a condition on Quantifier Extraction.

As can be seen in (36)–(37), it is possible to extract quantifiers that modify nominals that are final 1s in intransitive clauses. It is also possible to extract quantifiers that modify nominals that are the final 2s in transitive clauses, as shown in (38)–(40).

- (38) a. *ni qáʔqaʔ-t-əs kʷθə səwwáyʔqeʔ mək'w kʷθə qáʔ*
 aux drink-tr-3erg det men all det water
 'The men drank all the water.'

- b. *mák'w niw qáʔqaʔ-t-əs kʷθə səwwáyʔqeʔ kʷθə qáʔ*
 all aux:lnk drink-tr-3ssub det men det water
 'The men drank all the water.'
 *'All the men drank the water.'

- (39) a. *ni ʃáyʃ-t-əs tʰə stənʔéniʔ mák'w kʷθə scé.ʃtən*
 aux eat-tr-3erg det women all det salmon
 'The women ate all the salmon.'

- b. *mák'w niw ʃáyʃ-t-əs tʰə stənʔéniʔ kʷθə scé.ʃtən*
 all aux:lnk eat-tr-3ssub det women det salmon
 'The women ate all the salmon.'
 *'All the women ate the salmon.'

- (40) a. *ni ʔiləq-əʔc-t-əs mák'w kʷθə məʔnə-s*
 aux buy-advB-tr-3erg all det offspring-3pos
 ʔə kʷθə qʷʔáyʔʃən
 obl det shoe
 'He bought shoes for all his kids.'

- b. *mák'w niw ʔiləq-əʔc-t-əs kʷθə məʔnə-s*
 all aux:lnk buy-dvB-tr-3ssub det offspring-3pos
 ʔə kʷθə qʷʔáyʔʃən
 obl det shoe
 'He bought shoes for all his kids.'
 *'He bought all the shoes for his kids.'

In contrast, it is not possible to extract quantifiers that modify nominals that are final 1s in transitive clauses, as seen in (41)–(42).

- (41) a. *ni q'wəl-ət-əs mək'w tʰə sʰəlʔiqəʔ k'θə səplil*
 aux bake-tr-3erg all det children det bread
 'All the children baked the bread.'
 b. *mək'w niw q'wəl-ət-əs tʰə sʰəlʔiqəʔ k'θə səplil*
 all aux:lnk bake-tr-3ssub det children det bread
 *'All the children baked the bread.'
 'The children baked all the bread.'
- (42) a. *ni qáʔqaʔ-t-əs mək'w k'θə səwwáyʔqeʔ k'θə qáʔ*
 aux drink-tr-3erg all det men det water
 'All the men drank the water.'
 b. *mək'w niw qáʔqaʔ-t-əs k'θə səwwáyʔqeʔ k'θə qáʔ*
 all aux:lnk drink-tr-3ssub det men det water
 *'All the men drank the water.'
 'The men drank all the water.'

In light of the preceding examples, I propose that the relevant distinction for formulating a condition on Quantifier Extraction is absolutive versus ergative; that is, the quantifier can be extracted from a final 1 in an intransitive stratum or a final 2 in a transitive stratum but not from a final 1 in a transitive stratum. Thus, the condition on Quantifier Extraction is as follows:

- (43) Quantifiers can only be extracted from nominals heading a final Abs-arc.

4. CAUSALS IN HALKOMELEM

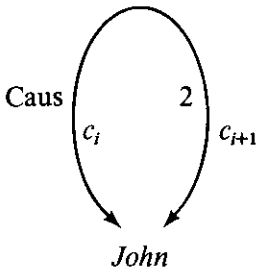
Returning now to causal constructions, I claim that in clauses like those that were given in (1)–(3)—for example, (44) [= (1)]—the causal is an oblique in a finally intransitive clause.

- (44) *ni cən c'əq' ʔə k'θə scʰəm-s*
 aux 1sub astonished obl det jump-3pos
 'I was astonished at his jump.'

In contrast, clauses like those given in (4)–(6)—for example, (45) [= (5)]—involve the advancement of the causal (an oblique) to 2 (Caus-2 Advancement), as represented in the sub-network in (46):

- (45) *ni cən wəʔ tciws-mə-t tʰə John*
 aux 1sub already tired-advC-tr det
 'I'm already tired of John.'

(46)



This advancement is marked by the verbal suffix *-me?*

Notice that the analysis proposed here accounts for both the semantic and syntactic behavior of causals in Halkomelem: All nominals with the semantic role of causal are initial obliques, but only those causals that behave syntactically as final objects are advanced to 2 via Caus–2 Advancement.

After providing evidence for the two causal constructions (Sections 4.1 and 4.2), I propose an animacy constraint on Caus–2 Advancement in Halkomelem (Section 4.3). Finally, I consider an alternative analysis in Section 4.4.

4.1. Intransitive Causal Clauses

In this section, I provide evidence that in clauses like (47)–(48) the causal is a final oblique and the clause is finally intransitive.

(47) *ni c'əq' ʔə kʷθə sʃt'ək'w-s*
 aux astonished obl det carving-3pos
 'He was astonished at his carving.'

(48) *ni cən siʔsiʔ ʔə kʷθə tɪntɪn*
 aux lsub frightened obl det bell
 'I was frightened at the bell/telephone.'

First, there is no Transitive Marking in (47)–(48). As pointed out in Section 3.1, all finally transitive clauses exhibit transitive suffixes; thus, the absence of Transitive Marking in (47)–(48) provides evidence for final intransitivity. Second, there is no Third Person Agreement in (47) even though the final 1 is third person. Since only a third person nominal heading a final Erg-arc determines agreement [cf. (34)], the absence of agreement in (47) provides evidence for final intransitivity. Third, according to the rule for nominal case given in (27), final obliques are in the oblique case. That the causals in (47)–(48) are in the oblique case follows from an analysis positing them to be final obliques.

Finally, as seen in (49b), quantifiers can be extracted from the final 1 in clauses like (47)–(48).

- (49) a. *ni c'áq' mák'w k^wθə sʔəlʔiqəʔ ʔə k^wθə sʔt'ék'w-s*
 aux astonished all det children obl det carving-3pos
 'All the children were astonished at his carving.'
 b. *mák'w niw c'áq'-əs k^wθə sʔəlʔiqəʔ ʔə k^wθə*
 all aux :lnk astonish-3ssub det children obl det
sʔt'ék'w-s
 carving-3pos
 'All the children were astonished at his carving.'

Since quantifiers can only be extracted from nominals heading a final Abs-arc [cf. (43)], that the quantifier can be extracted from the final 1 in (49b) provides evidence for final intransitivity.

4.2. Causal-to-Object Advancement

Clauses like (50)–(52), I claim, involve Caus–2 Advancement and are finally transitive.

- (50) *ni ʔiʔxeʔ-méʔ-t-əs t^əə swáyʔqeʔ θə sténiʔ*
 aux ashamed-advC-tr-3erg det man det lady
 'The man was ashamed in front of the lady.'
 (51) *ni c'áq'-miʔ-θ-ámʔs-əs t^əə sténiʔ*
 aux astonished-advC-tr-1obj-3erg det woman
 'The lady was astonished at me.'
 (52) *ni cən wəʔ tciws-mə-θ-ámə*
 aux 1sub already tired-advC-tr-2obj
 'I'm already tired of you.'

First, there is transitive marking in (50)–(52); this follows from an analysis positing final transitivity for these clauses, since finally transitive clauses must exhibit Transitive Marking (Section 3.1). In (50)–(51), where the final 1 is third person, there is Third Person Agreement. Since only final Ergs determine agreement, the final 1 in (50)–(51) is a final Erg, thus indicating final transitivity.

Second, note that the causal in (50) is in the straight case. This follows from an analysis positing that the causal is a final 2, since only final nuclear terms appear in the straight case [cf. (27)]. The causals in (51)–(52) are pronominal and appear in the objective case. Since only final 2s appear in this case (see Section 3.2), this provides evidence that the causal is a final 2.

Finally, as seen in (53b), quantifiers can be extracted from the causal nominal.

- (53) a. *ni q'el²-mé²-t-as k^wθə stənténi[?] mák^{'w} k^wθə x^wələnítəm*
 aux believe-advC-tr-3erg det women all det white men
 'The women believed all the white men.'
- b. *mák^{'w} niw q'el²-mé²-t-as k^wθə stənténi[?]*
 all aux :lnk believe-advC-tr-3ssub det women
k^wθə x^wələnítəm
 det white men
 'The women believed all the white men.'
 *'All the women believed the white men.'

This provides evidence that the causal in (53b) is the final 2, since quantifiers can only be extracted from nominals heading a final Abs-arc [cf. (43)].

4.3. An Animacy Constraint on Causal-to-Object Advancement

I have shown in (1)–(6) two ways of expressing a causal in Halkomelem. First, in (1)–(3) it is an oblique in an intransitive clause. Second, in (4)–(6) the causal advances to 2 and the verb is suffixed with *me²*. I maintain here that the distribution of these two patterns is regular and predictable.

Observe the following clauses:

- (54) a. *ni cən c'əq' ʔə k^wθə sxt'ék^{'w}-s*
 aux 1sub astonished obl det carving-3pos
 'I was astonished at his carving.'
- b. *?*ni cən c'əq'-mí²-t k^wθə sxt'ék^{'w}-s*
 aux 1sub astonished-advC-tr det carving-3pos
 'I was astonished at his carving.'
- (55) a. *ni cən c'əq' ʔə k^wθə sq^wəméy[?]*
 aux 1sub astonish obl det dog
 'I was astonished at the dog.'
- b. *ni cən c'əq'-mí²-t k^wθə sq^wəméy[?]*
 aux 1sub astonished-advC-tr det dog
 'I was astonished at the dog.'

In (54a) the causal is an oblique and the sentence is grammatical. However, in (54b) the causal is a 2 in a Caus-2 Advancement construction and the sentence is ungrammatical. The opposite pattern holds for (55a)–(55b). In (55a), the causal is an oblique; in (55b) it is a 2 in an advancement construction. The latter is much preferred. This pattern is paralleled in (56) and (57):

- (56) a. *ni cən q'élʔ ʔə kʷθə sqʷáqʷəlʔ-s kʷθə ləplít*
 aux 1sub believe obl det words-3pos det priest
 'I believed the words of the priest.'
- b. *ʔni cən q'élʔ-méʔ-t kʷθə sqʷáqʷəlʔ-s kʷθə ləplít*
 aux 1sub believe-advC-tr det words-3pos det priest
 'I believed the words of the priest.'
- (57) a. *ʔni cən q'élʔ ʔə kʷθə ləplít*
 aux 1sub believe obl det priest
 'I believed the priest.'
- b. *ni cən q'élʔ-méʔ-t kʷθə ləplít*
 aux 1sub believe-advC-tr det priest
 'I believed the priest.'

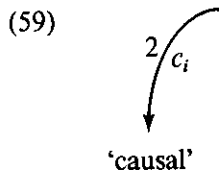
I propose that these differences in grammaticality can be captured by an animacy constraint on Caus-2 Advancement as follows:⁵

- (58) a. Causals that are animate preferably advance to 2.
 b. Causals that are inanimate preferably do not advance to 2.

4.4. An Alternative to an Advancement Analysis

In the preceding sections, I have shown that there are two causal constructions: The causal can be an oblique in an intransitive clause or it can be a 2 in a transitive clause. To account for the semantic similarities of these constructions, I have posited that the causal is an initial oblique in both constructions and that in the second construction the causal advances to 2.

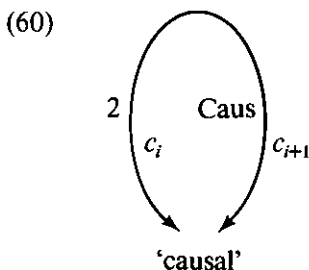
However, an alternative analysis that would also capture the semantic similarities of the two constructions could be posited. Under such an analysis, causals would be assigned the initial grammatical relation of 2, as represented in (59):



This analysis makes it possible to account for the object properties of causals in clauses like (4)–(6) without having to posit advancement for these

⁵ Other advancements in Halkomelem are governed by animacy constraints; for example, 3s and Bens are always animate and they obligatorily advance to 2 (see Gerdts 1981).

clauses. Such an analysis, however, would require an explanation for clauses like (1)–(3), where the causal is an oblique. To handle such clauses, this analysis could posit that the causal is an initial 2 that RETREATS to oblique, as represented in (60):⁶



In the following sections, I give two arguments, based on Reflexives and Limited Control Marking, supporting an advancement analysis over a retreat analysis.

4.4.1. REFLEXIVES

In Reflexives, used for clauses involving the coreference of the 1 and the 2, only the 1 is expressed; the reflexive suffix *-θət* is suffixed to the verb, as seen in (61)–(62).

(61) *ni cən ləx^w-əθət*
 aux 1sub blanket-self
 ‘I covered myself with a blanket.’

(62) *ni cən xiq[’]-əθət*
 aux 1sub scratch-self
 ‘I scratched myself.’

In Gerdts (1981), I give a condition on Halkomelem Reflexives as follows:

(63) In Reflexives, the 1 must be coreferential to the initial 2.

This condition accounts for the fact that Reflexives are possible in clauses where a 2 is the initial 2 [e.g., (61)–(62)] but impossible in clauses where the 2 is an initial 3 or Ben [e.g., (64)–(66)].

(64) **ni cən ʔám-əs-θət*
 aux 1sub give-advA-self
 ‘I gave it to myself.’

⁶ This analysis violates the Oblique Law, which, informally stated, specifies that any nominal bearing an oblique relation must do so in the initial stratum (Perlmutter and Postal 1983).

- (65) *ni q'wəl-ət-c-θət ʔə k'θə səplil
 aux bake-advB-self obl det bread
 'He baked the bread for himself.'
- (66) *ni cən θəy-ət-c-θət ʔə k'θə snəx'wət
 aux lsub make-advB-self obl det canoe
 'I made myself a canoe.'

In the case of clauses like (4)–(6), in which the causal is the final 2, Reflexives are not possible, as seen in (67)–(69):

- (67) *ni cən tciws-mə-θət
 aux lsub tired-advC-self
 'I'm tired of myself.'
- (68) *ni cən c'əq'-méʔ-θət
 aux lsub astonished-advC-self
 'I am astonished at myself.'
- (69) *ni cən q'el-méʔ-θət
 aux lsub believe-advC-self
 'I believe myself.'

Under an advancement analysis, the ungrammaticality of (67)–(69) follows from Condition (63); since the causal in these clauses is an initial causal that advances to 2, Condition (63) is not met.

Under the retreat analysis, however, there is no apparent account of the ungrammaticality of (67)–(69), as under this analysis the causal in clauses like (67)–(69) is the initial as well as final 2 [see (59)]. Thus, the retreat analysis incorrectly predicts that Condition (63) should be met.

4.4.2. LIMITED CONTROL MARKING

A second argument that causals are not initial 2s is based on Limited Control Marking. In Section 3.1, it was pointed out that verbs in finally transitive clauses have transitive marking; I gave examples involving *-(ə)t*, the general transitive suffix. A second suffix marking transitivity is *-n(əx'w)*, which marks limited control—that is, the action was performed accidentally, unintentionally, or with great difficulty. The contrast between the two suffixes can be seen in (70)–(71).

- (70) a. ni q'wəq'w-ət-əs tə sténiʔ ʔə k'θə sqəməlʔ
 aux club-tr-3erg det woman obl det paddle
 'He clubbed the woman with the paddle [on purpose].'
 b. ni q'wəq'w-nəx'w-əs tə sténiʔ ʔə k'θə sqəməlʔ
 aux club-l.c. : tr-3erg det woman obl det paddle
 'He clubbed the woman with the paddle [accidentally].'

- (71) a. *ni lé̄m-ət-əs θə sté̄ni?*
 aux see-tr-3erg det woman
 'He looked at the woman.'
 b. *ni lám-nəx^w-əs θə sté̄ni?*
 aux see-1.c. : tr-3erg det woman
 'He saw the woman.'

In Gerdts (1981), I formulated the following condition on Limited Control Marking:

- (72) Limited Control Marking is possible only if the final 2 is also the initial 2 of the clause.

This condition accounts for the fact that 3-2 and Ben-2 Advancement clauses cannot be marked for limited control, as seen in (73)–(75).

- (73) a. *ni ʔám-əs-t-əs k^wθə sq^wəméy[?] ʔə k^wθə sθ[?]ám[?]*
 aux give-advA-tr-3erg det dog obl det bone
 'He gave the dog the bone.'
 b. **ni ʔám-əs-nəx^w-əs k^wθə sq^wəméy[?] ʔə k^wθə sθ[?]ám[?]*
 aux give-advA-1.c. : tr-3erg det dog obl det bone
 'He managed to give the dog the bone.'
- (74) a. *ni yáθ-əs-t-əs*
 aux tell-advA-tr-3erg
 'He told her about it.'
 b. **ni yáθ-əs-nəx^w-əs*
 aux tell-advA-1.c. : tr-3erg
 'He happened to tell her about it.'
- (75) a. *ni θáy-ətC-ət-əs k^wθə swáy[?]qe[?] ʔə k^wθə snáx^wət-s*
 aux fix-advB-tr-3erg det man obl det canoe-3pos
 'He fixed the canoe for the man.'
 b. **ni θáy-ətC-nəx^w-əs k^wθə swáy[?]qe[?] ʔə k^wθə snáx^wət-s*
 aux fix-advB-1.c. : tr-3erg det man obl det canoe-3pos
 'He managed to fix the canoe for the man.'

In clauses like (4)–(6), in which the causal is the final 2, Limited Control Marking is not possible, as seen in (76)–(78).

- (76) **ni cən q'el[?]-mé[?]-nəx^w k^wθə læplít*
 aux 1sub believe-advC-1.c. : tr det priest
 'I happened to believe the priest.'
- (77) **ni θ'əy[?]k^w-mé[?]-nəx^w k^wθə sq^wəméy[?]*
 aux startled-advC-1.c. : tr det dog
 'I was accidentally startled at the dog.'

- (78) **ni cən wət tciws-mə-nəx* ^{θə} John
 aux 1sub already tired-advC-1.c. : tr det
 'I already happen to be tired of John.'

The ungrammaticality of (76)–(78) follows from an advancement analysis. Although the causals are final 2s, they are not initial 2s but rather initial causals. Therefore, Condition (72) is not met and Limited Control Marking is not possible.

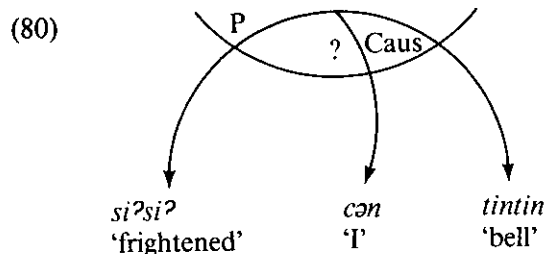
In contrast, the retreat analysis incorrectly predicts that Limited Control Marking should be possible in (76)–(78). Under the retreat analysis, the causal is both the initial and final 2, as seen in the stratal diagram in (59). Therefore, Condition (72) is met and Limited Control Marking should be possible.

Thus, the retreat analysis, because it posits that causals are initials 2s, makes the wrong predictions with respect to the conditions on Reflexives and Limited Control Marking.

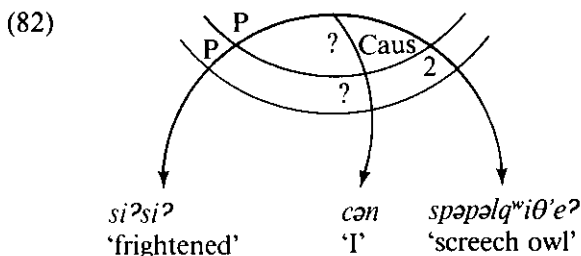
5. CAUSAL CONSTRUCTIONS AND THE UNACCUSATIVE HYPOTHESIS

In the previous section, I presented evidence for two types of causal constructions: In those like (79) the causal is both an initial and a final oblique, as represented in (80); in those like (81) the causal is an initial oblique that advances to 2, as represented in (82).

- (79) *ni cən siʔsiʔ ʔə k^wθə tintin*
 aux 1sub frightened obl det bell
 'I was frightened at the bell/telephone.'



- (81) *ni cən siʔsiʔ-meʔ-t k^wθə spəpəʔq^wiθ'eʔ*
 aux 1sub frightened-advC-tr det screech owl
 'I was frightened at the screech owl.'

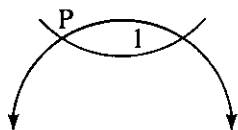


In this section, I deal with the issue of the assignment of a grammatical relation to the other nominal in causal constructions—the “experiencer,” represented in (80) and (82) by “?” I discuss causal constructions in light of the Unaccusative Hypothesis, proposed by Perlmutter (1978) and Perlmutter and Postal (1984).

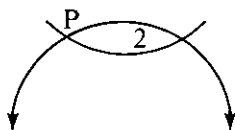
5.1. The Unaccusative Hypothesis

According to the Unaccusative Hypothesis, initially intransitive clauses are of two types: those whose initial stratum is **UNERGATIVE**, which contain a 1-arc but no 2-arc, and those whose initial stratum is **UNACCUSATIVE**, which contain a 2-arc but no 1-arc. These are represented in (83) and (84) respectively.

(83) Unergative



(84) Unaccusative



Perlmutter and Postal assert that initial unergativity versus unaccusativity is largely predictable from the semantics of the clause. Verbs in unergative clauses are active, often willed and volitional actions, for example, *speak*, *walk*, *dance*, and *knock*. In contrast, verbs in unaccusative clauses are verbs of existing, happening, or undergoing, for example, *melt*, *fall*, *drown*, and *die*. This semantic contrast can be seen clearly in an intransitive verb such as *fall*, which appears in either initially unergative clauses, as in (85), or initially unaccusative clauses, as in (86).

(85) *John fell right on cue in the third act.*

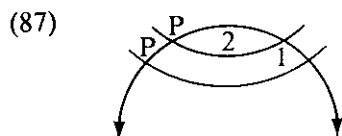
(86) *John fell from the second-story window.*

Whereas *fell* is a volitional in (85), it is not volitional in (86).

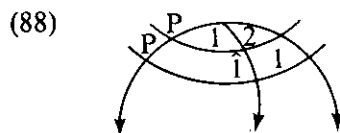
The unaccusative stratum in (84) is not a well-formed FINAL stratum,

because it violates the Final 1 Law (Perlmutter and Postal 1983). Informally stated, the Final 1 Law requires every basic clause to have a final 1. Thus, in unaccusative clauses, some nominal must advance to 1.

It is possible for the initial 2 to advance to final 1, as represented in (87); this is what Perlmutter (1978) calls Unaccusative Advancement.



Notice that there is a crucial difference between Unaccusative Advancement and Passive, given in (88).

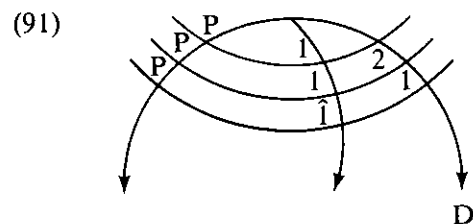


Although they both involve advancements of a 2 to 1, in the case of Passive, the 2 is in a transitive stratum, whereas, in the case of Unaccusative Advancement, the 2 is in an intransitive stratum.

Perlmutter (1978) provides syntactic evidence for unergativity versus unaccusativity from Impersonal Passives in Dutch. In an Impersonal Passive, a dummy inserted as a 2 advances to 1. Impersonal Passives of initial unergatives are possible in Dutch. Perlmutter gives examples like (89) and (90), as represented in (91).

(89) *Er wordt hier veel geskied.*
'It is skied here a lot.'

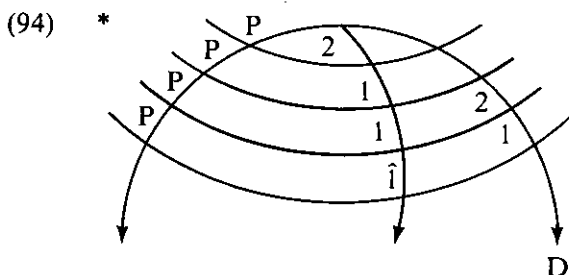
(90) *Er wordt hier door de jonge lui veel gedanst.*
'It is danced here a lot by the young people.'



However, Perlmutter claims that Impersonal Passives of initial unaccusatives are not possible. The ungrammatical sentences in (92) and (93) are represented by the stratal diagram in (94).

(92) **Er werd door de bloemen binnen een paar dagen verflenst.*
 'The flowers had wilted in a few days.'

(93) **Er werd door het water uit de rots gedrippeld.*
 'The water dripped out of the rock.'



Perlmutter attributes the impossibility of Impersonal Passives in the case of initial unaccusatives to the fact that they would violate the 1-Advancement Exclusiveness Law. (Perlmutter and Postal 1984). The 1-AEX is stated informally in (95).

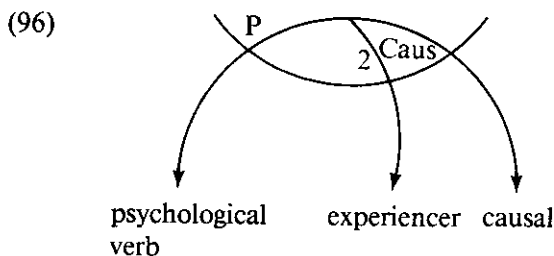
(95) No clause can involve more than one advancement to 1.

As can be seen in the stratal diagram in (94), Impersonal Passives of initial unaccusatives involve both Unaccusative Advancement and Passive. Hence the violation of the 1-AEX.

Thus, Perlmutter motivates the distinction between two types of initially intransitive clauses on semantic and syntactic grounds.⁷

5.2. Arguments for the Initial Unaccusativity of Causal Constructions

Returning to Halkomelem, I present evidence that causal constructions are initially unaccusative, as represented in (96).



⁷ For further research on the Unaccusative Hypothesis, see Davies (1981), Hubbard (1979), Özkaragöz (1980), Perlmutter (to appear), Postal (1982), Rosen (1981), and Williamson (1979).

I give two arguments, one semantic and one syntactic, for the initial unaccusativity of causal constructions.

5.2.1. UNACCUSATIVES AND 2S OF TRANSITIVES

It has been claimed that the assignment of initial grammatical relations is determined by the semantic role of the nominals (see the quote from Perlmutter and Postal 1977 in Section 2.1).

One of the facets of the Unaccusative Hypothesis is that it would allow *the butter* in (97) and (98) to have the same initial grammatical relation.

(97) *The butter melted.*

(98) *John melted the butter.*

In each case *the butter* is semantically the patient, undergoing the act of melting. The Unaccusative Hypothesis allows *the butter* in (97) to be initial 2, bearing the same initial grammatical relation as *the butter* in (98), the 2 of a transitive.

By positing initial unaccusativity for causal constructions, a similar parallelism in semantic roles can be captured. Contrast the Caus-2 Advancement construction in (99) with the transitive clause involving an agent and an experiencer in (100).

(99) *ni c'əq'-meʔ-θ-ámʔʒ-əs kʷθə John*
 aux surprised-advC-tr-obj-3erg det
 'John was surprised at me.' (but I was unaware of John)

(100) *ni cən c'əq-t kʷθə John*
 aux 1sub surprise-tr det
 'I surprised John.' (intentionally)

In (100), the experiencer *John* is the initial 2 in a transitive. By positing (99) as an initially unaccusative stratum, the experiencer in causal constructions is also a 2. Thus, nominals having the *same* semantic role with respect to the *same* verb would be assigned the *same* initial grammatical relation.

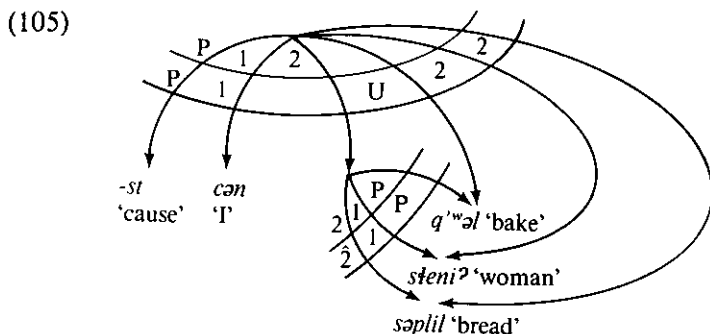
5.2.2. CAUSATIVE CLAUSE UNION AND UNACCUSATIVITY IN HALKOMELEM

Syntactic evidence for the initial unaccusativity of causal constructions comes from Causative Clause Union (CCU) in Halkomelem. First, I will briefly discuss the analysis of CCU proposed in RG. The analysis of Clause Union constructions has two basic ideas:

1. Clause Union constructions are bi-clausal in their initial strata.
2. Every initial dependent of the complement has a grammatical relation in the main clause.

- (104) *ni cən q'wəl-əm-stəx^w θə stēni? ʔə k^wθə səplil*
 aux 1sub bake-intr-cs det woman obl det bread
 'I had the woman bake the bread.'

I have represented (104) in the stratal diagram in (105).



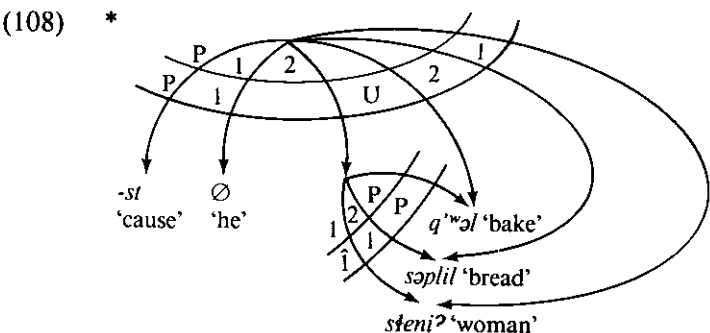
On the basis of the impossibility of CCU in (102), where the complement is a final transitive, and the possibility of CCU in (104), where the complement is a final intransitive, I formulate a constraint on CCU, given in (106).

- (106) Causative Clause Union in Halkomelem is possible only if the complement is intransitive in the final stratum.

However, such a constraint could not account for the ungrammaticality of (107). Here, the complement is a Passive construction (see Section 6.1). Following the verb root *q'wəl* is the transitive marker *-(ə)t* and the intransitive suffix *-əm*, which mark Passive in Halkomelem. Although the complement in (107) is intransitive via Passive, CCU is not possible.

- (107) **ni q'wəl-ət-əm-stəx^w-əs k^wθə səplil ʔə tə stēni?*
 aux bake-tr-intr-cs-3erg det bread obl det woman
 'He had the bread baked by the woman.'

I have represented (107) in the stratal diagram in (108).



On the basis of the impossibility of CCU in (107) and the possibility of CCU in (104), I formulate a constraint on CCU given in (109).

- (109) Causative Clause Union in Halkomelem is possible only if the final 1 of the complement is the initial 1 of the complement.

Thus, in a sentence like (107), where the initial 2 of the complement is advanced to 1 via Passive, CCU is not possible.

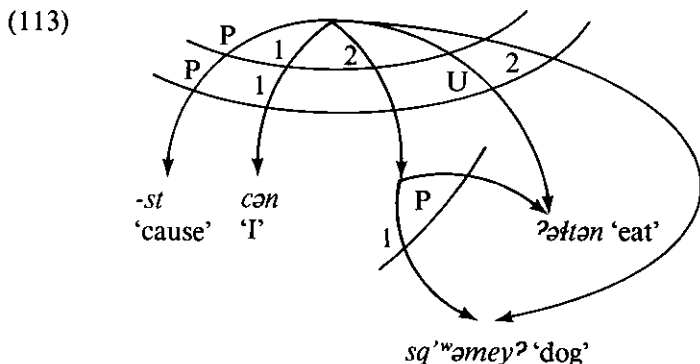
This constraint on CCU in Halkomelem taken together with the Unaccusative Hypothesis accounts for the contrast between (110)–(112), in which CCU is possible, and (114)–(116), in which CCU is not possible.

- (110) *ni cən ʔəttən-əstəx^w k^wθə sq^wəməy^ʔ*
 aux lsub eat-cs det dog
 'I let the dog eat.'/'I fed the dog.'

- (111) *ni cən ʔiməš-stəx^w k^wθə John*
 aux lsub walk-cs det
 'I made John walk.'

- (112) *ni cən ʔəmət-st-ámə*
 aux lsub sit-cs-2obj
 'I had you sit down.'

In (110)–(112), the predicates would be classed on semantic grounds as unergative. In the complement, the final 1 is initial 1 and CCU is possible. I have represented (110) in the stratal diagram in (113).



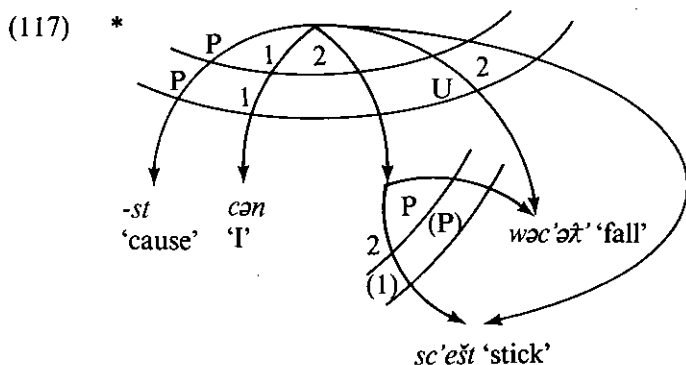
However, if the predicate would be classed on semantic grounds as unaccusative, CCU is not possible, as shown by (114)–(116).

- (114) **ni cən wəc'əš-stəx^w k^wθə sc'əšt*
 aux lsub fall-cs det stick
 'I made the stick fall.'

(115) *ni cən kʷət-stəxʷ kʷθə ti
 aux lsub spill-cs det tea
 'I made the tea spill.'

(116) *ni cən qʷəl-stəxʷ kʷθə səplil
 aux lsub bake-cs det bread
 'I made the bread bake.'

I have represented (114) in the stratal diagram in (117).



By positing initially unaccusative strata for the complements in (114)–(116), the impossibility of CCU is accounted for by Constraint (109). The complement is unaccusative; thus the nominal participating in CCU is the initial 2.

Thus, CCU in Halkomelem provides a test for distinguishing initially unaccusative from initially unergative clauses. Applying this test to the psychological predicates that can appear with causals, we find that CCU is NOT possible, as shown by (118)–(121).

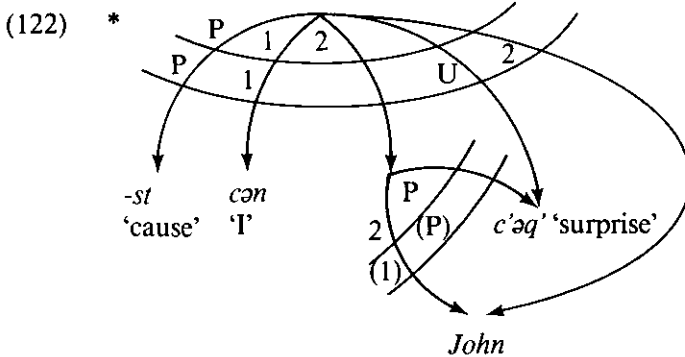
(118) *ni cən c'əq'-əstəxʷ tʰə John
 aux lsub surprise-cs det
 'I caused John to be astonished.'

(119) *ni cən hiləkʷ-stəxʷ tʰə John
 aux lsub happy-cs det
 'I made John happy.'

(120) *ni cən c'iwəlʔ-stəxʷ tʰə John
 aux lsub annoy-cs det
 'I caused John to be annoyed.'

(121) *ni cən θ'əyʔk'ʷ-stəxʷ tʰə John
 aux lsub startle-cs det
 'I caused John to be startled.'

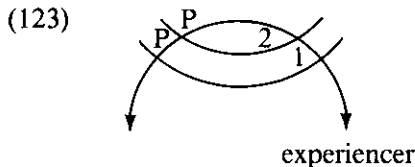
This follows automatically from Constraint (109) if the initial intransitive strata in (118)–(121) are unaccusative.⁸ I have represented (118) in the stratal diagram in (122).



Thus, assuming that the constraint in (109) is correct, evidence from CCU provides an argument for the initial unaccusativity of causal constructions.

5.3. 2–1 Advancement

I argued that the experiencer in causal constructions is an initial 2 in an unaccusative stratum. Here, I shall briefly give evidence that the initial 2 advances to 1 via Unaccusative Advancement, as represented in (123).



First, observe that the experiencer in the causal constructions in (124)–(125) is in the subjective case.

(124) *ni cən siʔsiʔ ʔə kʷθə tɪntin*
 aux lsub frightened obl det bell
 'I was frightened at the bell.'

(125) *ni cən siʔsiʔ-məʔ-t kʷθə spəpəlqʷiθəʔ*
 aux lsub frightened-advC-tr det screech owl
 'I was frightened at the screech owl.'

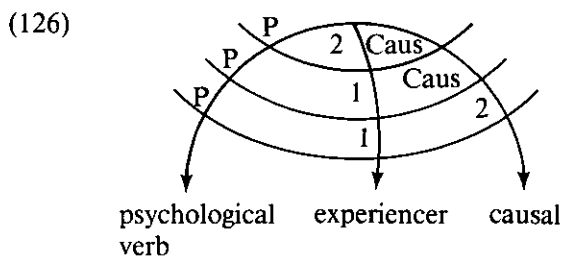
⁸ Since Antipassives participate in CCU but causal constructions do not, it is not possible to analyze the latter as Antipassives.

As discussed in Section 3.2, the subjective case is used for final 1s. If the experiencer were a final 2 we would expect it to be in the objective case. That the experiencer is in the subjective case follows from an analysis involving 2-1 Advancement.

Second, as was pointed out in Section 4.2, in Caus-2 Advancement clauses where the experiencer is a third person, there is ergative agreement. Since Third Person Agreement is determined by final 1s in transitive clauses, the experiencer is a final 1.

6. PASSIVES OF CAUS-2 CONSTRUCTIONS AND THE 1-AEX

In the preceding sections, I have given evidence for the grammatical relations of the causal and the experiencer in causal constructions. The analysis I posit for clauses like (4)–(6) where the causal is the 2 in a transitive clause and the verb is suffixed with *-meʔ* can be represented in the following stratal diagram:



At the initial level, the experiencer is a 2 and the causal is an oblique; at the final level, the experiencer is a final 1 via Unaccusative Advancement and the causal is a final 2 via Caus-2 Advancement and the construction is finally transitive.

In this section, I discuss the Passive counterpart of (126). First, I briefly illustrate Passives in Halkomelem; second, I give examples of Passives of Caus-2 Advancement constructions showing that such Passives constitute a violation to a law proposed as a universal by Perlmutter and Postal—the 1-Advancement Exclusiveness Law.

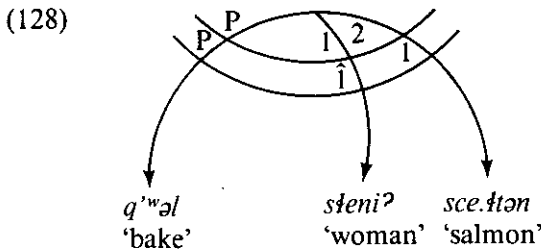
6.1. Passives in Halkomelem

In Halkomelem, there are Passive constructions like that given in (127b) which involve the advancement of a 2 to 1; the 2 in advancing to 1 places the

initial 1 en chômage, as represented in the stratal diagram for (127b), given in (128). I argued for an analysis involving Passive in Gerdts (1981).

Contrast the active transitive clause in (127a) and the Passive clause in (127b):

- (127) a. *ni q'wəl-at-əs θə sténi? tə scé.tən*
 aux bake-tr-3erg det woman det salmon
 'The woman baked the salmon.'
 b. *ni q'wəl-at-əm tə scé.tən ?ə θə sténi?*
 aux bake-tr-intr det salmon obl det woman
 'The salmon was baked by the woman.'



Active transitive clauses and Passive clauses differ with respect to Transitive Marking, Nominal Case, and Third Person Agreement.

In the active transitive clause in (127a), the final 1 precedes the final 2 and both are marked in the straight case, the case used for final nuclear terms. Because the clause is finally transitive, the verb is suffixed with the transitive marker *-(ə)t*. Because the final 1 is third person, the verb is suffixed with the ergative marker *-əs*.

In the Passive clause in (127b), the final 1 (semantically the patient) precedes the 1 chômeur (semantically the agent). The final 1 is in the straight case while the chômeur is in the oblique case, the case used for final non-terms. The verb in Passive clauses is suffixed with both the transitive marker *-(ə)t* and an intransitive marker, *-əm*.⁹ Because Passive clauses are finally intransitive, there is no ergative marker.

Passive, as universally characterized by Perlmutter and Postal (1977), advances the 2 of a transitive stratum to 1. Passive in Halkomelem follows this characterization: Only 2s advance to 1 in Passive; obliques cannot advance directly to 1 via Passive as seen in (129)–(130).

⁹ In Passives in Halkomelem, both the initial transitive stratum and the final intransitive stratum are marked. A rule for Transitive Marking, stated more precisely, would be: a clause has Transitive Marking if a nominal heading a 2-arc in a transitive stratum heads a final nuclear term-arc in that clause.

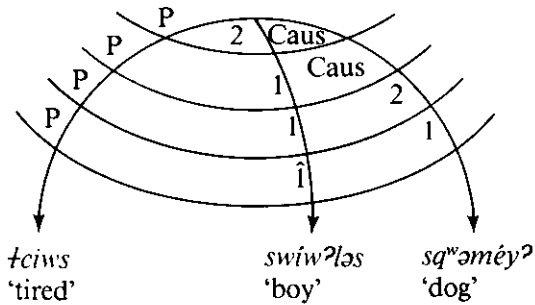
- (129) a. *ni cáṃ kʷθə níkʷ ʔə tʰə smént*
 aux go up det uncle obl det mountains
 'Uncle went up into the mountains.'
 b. **ni cam-əm tʰə smént ʔə kʷθə níkʷ*
 aux go up-intr det mountains obl det uncle
 'The mountains were gone up into by Uncle.'
- (130) a. *ni pán-ət-əs kʷθə sqéwθ ʔə kʷθə šápəl*
 aux plant-tr-3erg det potato obl det shovel
 'He planted potatoes with the shovel.'
 b. **ni pán-ət-əm kʷθə šápəl kʷθə sqéwθ*
 aux plant-tr-intr det shovel det potato
 'The shovel was planted potatoes with.'

6.2. Passives of Caus-2 Constructions

In Caus-2 Advancement constructions we find that the causal can be final 1 in a Passive construction, as exemplified in (131)–(133). The (a) sentences are active transitive—the causal is a 2. In the (b) sentences, the causal is advanced to 2 and from 2 to 1 via Passive, as represented in the stratal diagram for (131b) given in (134).

- (131) a. *ni tciws-mə-t-əs kʷθə swíwʔləs kʷθə sqʷəméyʔ*
 aux tired-advC-tr-3erg det boy det dog
 'The boy is tired of the dog.'
 b. *ni tciws-mə-t-əm kʷθə sqʷəméyʔ ʔə kʷθə swíwʔləs*
 aux tired-advC-tr-intr det dog obl det boy
 Literally: 'The dog was gotten tired of by the boy.'
- (132) a. *ni xiʔxeʔ-méʔ-t-əs tʰə swáyʔqeʔ θə sténiʔ*
 aux ashamed-advC-tr-3erg det man det woman
 'The man was ashamed in front of the woman.'
 b. *ni xiʔxeʔ-méʔ-t-əm θə sténiʔ ʔə tʰə swáyʔqeʔ*
 aux ashamed-advC-tr-intr det woman obl det man
 Literally: 'The woman was gotten ashamed in front of by the man.'
- (133) a. *ni siʔsiʔ-méʔ-t-əs kʷθə spéʔəθ*
 aux frightened-advC-tr-3erg det bear
 'He was frightened of the bear.'
 b. *ni siʔsiʔ-méʔ-t-əm kʷθə spéʔəθ*
 aux frightened-advC-tr-intr det bear
 Literally: 'The bear was frightened of.'

(134) [(= (131b))]



That the (b) sentences of (131)–(133) are Passives can be seen by the use of Nominal Case and Transitive Marking. The final 1 (the causal), immediately following the verb, is in the straight case, while the 1 *chômeur* (the experiencer), following the final 1, is in the oblique case. The verbs in (131b)–(133b) are suffixed with both the transitive marker and the intransitive marker, as was the verb in the Passive clause in (127b).¹⁰

Notice that in the stratal diagram for Passives of Caus–2 Advancement constructions given in (134) there are two advancements to 1. First, the initial 2 advances to 1 via Unaccusative Advancement. Second, the 2, the initial oblique, advances to 1 via Passive. Thus, such constructions constitute a counterexample to the 1-Advancement Exclusiveness Law, given in (95).¹¹

By contrasting the representation of the Passives of Caus–2 Advancement constructions in (134) with the analysis of Impersonal Passives of unaccusatives proposed for Dutch by Perlmutter in (94), it becomes clear that the Halkomelem example is exactly the kind of structure that the 1-AEX is supposed to rule out. Furthermore, if the 1-AEX as a universal constraint is invalid, as the Halkomelem data suggest, then the syntactic arguments from Dutch for the Unaccusative Hypothesis must be reexamined.

7. CONCLUSION

From the discussion of causal constructions, several interesting conclusions can be drawn concerning the grammar of Halkomelem. First, the nominal having the semantic role of causal is an initial oblique. Second, the

¹⁰ Transitive Marking, which occurs only in clauses with a transitive stratum, gives evidence against an analysis in which the causal advances directly to 1.

¹¹ Notice that Passives of Caus–2 Advancement constructions also violate various alternative formulations of the 1-AEX, for example, the 1-Advantee Preservation Law (Wachtel 1979).

initial causal can advance to object. In this case, the verb is suffixed with the advancement marker *-me*². Third, Caus-to-2 Advancement in Halkomelem is subject to an animacy constraint. Whereas inanimate causals are preferably oblique, animate causals preferably advance to 2. Fourth, initially intransitive strata with psychological predicates behave as unaccusatives.

In addition, the discussion of causal constructions has led to several conclusions for universal grammar. First, there exist languages, such as Halkomelem, in which agent and causal differ semantically and syntactically. Whereas agents are initial 1s, causals are initial obliques. Second, I have argued here that the behavior of some causal constructions is best analyzed as involving an initial unaccusative stratum and Caus-to-2 Advancement. Because Passives of Caus-2 Advancement constructions are possible, they constitute a counterexample to a law proposed as a universal — the 1-Advancement Exclusiveness Law.

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REFERENCES

- Davies, W. D. (1981). *Choctaw Clause Structure*. Doctoral dissertation, University of California, San Diego.
- Gerds, D. B. (1981). *Object and Absolute in Halkomelem Salish*. Doctoral dissertation, University of California, San Diego.
- Hubbard, P. L. (1979). Albanian Neapolitan morphology: Passive, multiattachment, and the unaccusative hypothesis. *Linguistic Notes from La Jolla*, 6.
- Özkaragöz, I. Z. (1980). Evidence from Turkish for the unaccusative hypothesis. *Proceedings of the Sixth Annual Meeting of the Berkeley Linguistics Society*. Pp. 411–422.
- Perlmutter, D. M. (1978). Impersonal passives and the unaccusative hypothesis. *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*. Pp. 157–189.
- Perlmutter, D. M. (1980). Relational grammar. In E. A. Moravcsik and J. R. Wirth (Eds.), *Syntax and Semantics: Current Approaches to Syntax* (Vol. 13). New York: Academic Press. Pp. 195–229.
- Perlmutter, D. M. (to appear). Multiattachment and the unaccusative hypothesis: The perfect auxiliary in Italian.

- Perlmutter, D. M., and Postal, P. M. (1977). Toward a universal characterization of passivization. *Proceedings of the Third Annual Meeting of the Berkeley Linguistics Society*. Pp. 394–417.
- Perlmutter, D. M., and Postal, P. M. (1983). Some proposed laws of basic clause structure. In D. M. Perlmutter (Ed.), *Studies in Relational Grammar 1*. Chicago: University of Chicago Press. Pp. 81–128.
- Perlmutter, D. M., and Postal, P. M. (1984). The 1-Advancement Exclusiveness Law. In D. M. Perlmutter and C. Rosen (Eds.) *Studies in Relational Grammar 2*. Chicago: University of Chicago Press.
- Postal, P. M. (1982). Some arc pair grammar descriptions. In P. Jacobsen and G. Pullum (Eds.), *The Nature of Syntactic Representation* (Synthese Language Library, Vol. 15). Dordrecht: D. Reidel. Pp. 283–340.
- Rosen, C. (1981). *The Relational Structure of Reflexive Clauses: Evidence from Italian*. Doctoral dissertation, Harvard University.
- Wachtel, T. (1979). The demotion analysis of initially unaccusative impersonal passives. *Papers from the Fifteenth Regional Meeting of the Chicago Linguistic Society*. Pp. 321–330.
- Williamson, J. S. (1979). Patient marking in Lakhota and the unaccusative hypothesis. *Papers from the Fifteenth Regional Meeting of the Chicago Linguistic Society*. Pp. 353–365.