

UNACCUSATIVE MISMATCHES IN HALKMELEM SALISH<sup>1</sup>

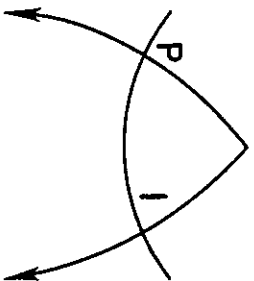
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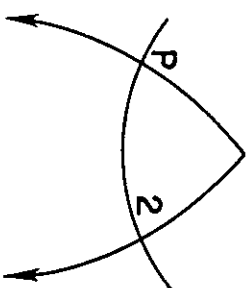
**1. Introduction.** Many linguists have distinguished two classes of intransitive verbs, agent-oriented and patient-oriented (e.g., Chafe 1970, Filmore 1968, and Sapir 1917). This distinction has played a crucial role in the development of current syntactic theory, where it is claimed that the two classes of verbs, besides having different semantic structures, also have different syntactic structures. Relational Grammar (e.g., Perlmutter 1978 and Rosen 1984), Government/Binding (e.g., Burzio 1986 and Hoekstra 1984), and several other theories (as Pullum 1988 points out) have adopted this viewpoint. Evidence for this proposal has been given in a wide variety of languages, much of which has been summarized in Grimshaw (1987) and Rosen (1984).

Within Relational Grammar, this claim is referred to as the Unaccusative Hypothesis (Perlmutter 1978). Two types of predicates are posited. Unergative predicates, which denote willful, volitional actions and involuntary bodily processes, involve only a subject nominal at the initial level of syntax. Unaccusative predicates, which denote nonvolitional actions or states, involve only an object nominal at the initial level of syntax. These are represented in the stratal diagrams in (1a) and (1b) respectively.

## (1a) Unergative

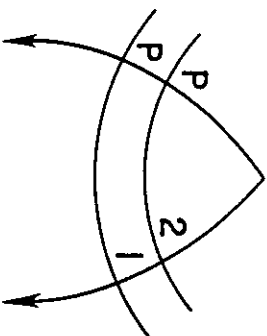


## (1b) Unaccusative



The initial object of an Unaccusative predicate can advance to final subject by means of Unaccusative Advancement, as represented in:

## (2) Unaccusative Advancement



Furthermore, Perlmutter (1978) makes the claim that the class of verbs which are Unergative versus Unaccusative can be universally predicted on the basis of semantics. A cross-linguistic study by Rosen (1984) has called this assumption into question, showing that there is a small amount of disagreement among languages about which verbs fall into each class. For example, syntactic tests show that Italian *sudare* 'sweat' is initially Unergative but Choctaw *laksha* 'sweat' is initially Unaccusative. Rosen also shows that there may be differentiation within a semantic class; for example, some motion verbs in Italian (generally those expressing manner of motion) are Unergative while others (generally those expressing directionality or result of motion) are Unaccusative. Therefore, while lexical semantics may serve to suggest the class of a verb, syntactic evidence will ultimately be responsible for its class assignment.

This paper presents evidence that the distinction between Unaccusatives and Unergatives plays a role in the organization of the grammar of Halkomelem, a Salish language of southwestern British Columbia. I

<sup>1</sup> These data are from Arnold Guerin of the Musqueam Reserve, Vancouver, British Columbia, who was a speaker of Island Halkomelem. I gratefully acknowledge his contribution to my research over the decade we worked together. However, errors in data or analysis are my own responsibility. Our research on Halkomelem was supported by a Canadian Studies Faculty Research Grant, the Canadian Ethnology Service, National

briefly show two constructions—Causatives and Desideratives—that are sensitive to the Unergative/Unaccusative distinction. Many verbs fall into one class with respect to both of these constructions. However, other verbs are MISMATCHED, that is, they behave like Unergatives in Causatives but like Unaccusatives in Desideratives or vice versa. All of these problematic verbs would be considered to be Unaccusative on semantic grounds. Thus, there are three subclasses of Unaccusative verbs in Halkomelem. One group forms Causatives, one forms Desideratives, and one forms neither. Moreover, I show that a further semantic distinction (Process vs. State) can characterize the first two subclasses. These results yield a more complicated intransitive verb system than expected given the two-way distinction predicted by the Unaccusative Hypothesis. The Halkomelem data nevertheless support this hypothesis since verbs which would be claimed to be Unergative on semantic grounds are never mismatched.

2. **Diagnostics for Unaccusativity.** This section discusses two Halkomelem constructions—Causatives and Desideratives—that distinguish Unergatives from Unaccusatives, at least in the basic cases.

2.1. **Causatives.** Morphological Causatives are formed by the causative suffix  $-st(ax^w)$ ,<sup>2</sup> as seen in:<sup>3</sup>

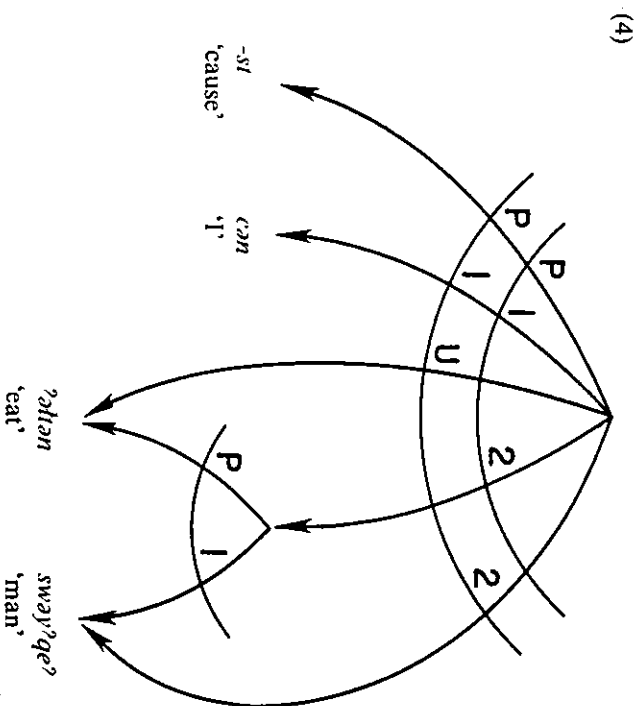
(3)	<i>ni</i>	<i>can</i>	$\left. \begin{array}{l} ?at\acute{a}n-astax^w \\ eat-cs \\ ?im\acute{a}\acute{s}-stax^w \\ walk-cs \\ ?ama\acute{t}-stax^w \\ sit\ down-cs \end{array} \right\}$	$k^w\theta a$	<i>sway?qe?</i>
	aux	1sub		det	man

'I made the man eat/walk/sit down.'

According to Gerdts (1988a), such sentences may be analyzed as Clause Union Causatives that involve the revaluation of the downstairs subject as the upstairs object, as represented in:

2 The causative is  $-stax^w$  with a third-person object and  $-sr-$  elsewhere.

3 Data are given in standard northwest transcription with the following exceptions:  $\acute{x}$  represents the uvular fricative,  $\theta'$  represents the glottalized interdental affricate, and glottalized resonants are represented as resonant glottal stop sequences (e.g.,  $m^?$ ). See Gerdts (1988a) for discussion. Primary stress frequently falls on the first syllable of Halkomelem words; I only indicate stress if it falls on a syllable other than the initial one. The following abbreviations are used in glossing the Halkomelem data: aux auxiliary; cont continuative; cs causative; det determiner; erg ergative; intr intransitive; neg negative; obl oblique; refl reflexive; st stative; sub subject; sub subordinate subject; tr transitive; 1 first person; 3 third person.



Causative Clause Union in Halkomelem is highly constrained. Gerdts (1988a) gives two conditions:

(5a) The downstairs clause must be finally intransitive.

(5b) The downstairs initial subject must also be the downstairs final subject.<sup>4</sup>

Condition (5a) is irrelevant to the discussion, since both Unergative and Unaccusative clauses are finally intransitive, as (1a) and (2) show. However, condition (5b), which requires that the clause have an initial subject, distinguishes initially Unergative clauses from initially Unaccusative clauses, since Unergatives have initial subjects while Unaccusatives do not. As predicted, Causatives based on Unergative predicates are possible, as (3) illustrates. Causatives based on Unaccusative predicates, however, are not generally allowed, as (6) shows:<sup>5</sup>

<sup>4</sup> For a similar "freeze" on downstairs subjects, see Rosen (1983) on Italian Causatives.

<sup>5</sup> As Hukari (1976) notes, while the causative  $-st-$  is used to derive transitive forms from unergatives,  $-r-$  is generally used to derive transitive forms from unaccusatives. For example:

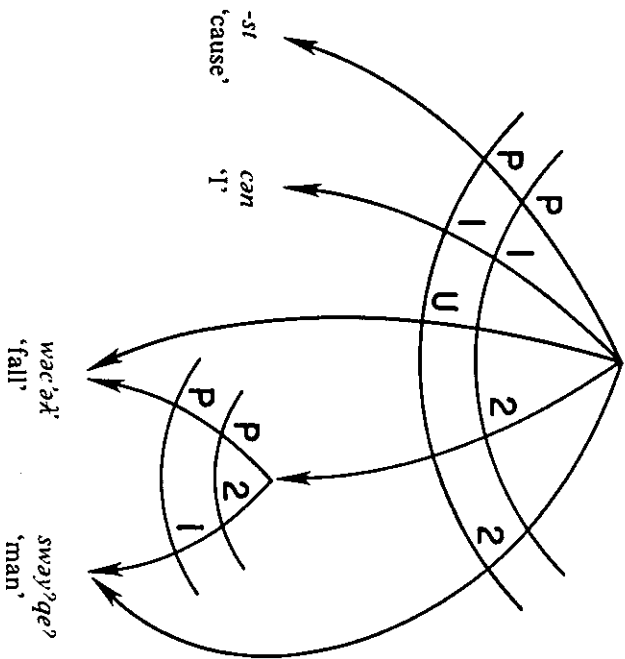
(1)	<i>majv?</i>	'get cheaper'	<i>majv?</i>	'lower its price'
	$q^w\acute{a}q^w$	'get clubbed'	$q^w\acute{a}q^w\acute{a}t$	'club him'

- (6) \**ni* can  $\left\{ \begin{array}{l} \text{wac}^{\text{a}}\text{x}^{\text{w}}\text{-stax}^{\text{w}} \\ \text{fall-CS} \\ \text{?ik}^{\text{w}}\text{-stax}^{\text{w}} \\ \text{get lost-CS} \\ \text{hic}^{\text{a}}\text{-stax}^{\text{w}} \\ \text{get cut-CS} \end{array} \right\} k^{\text{w}}\theta a \text{ sway}^{\text{?}}\text{qe}^{\text{?}}$  det man

'I made the man fall/get lost/get cut.'

We may posit the analysis in (7a) (with Unaccusative advancement in the downstairs clause) or (7b) (without Unaccusative advancement) for Causatives like (6); in either case, (5b) is violated since there is NO downstairs initial subject.<sup>6</sup>

(7a) \*

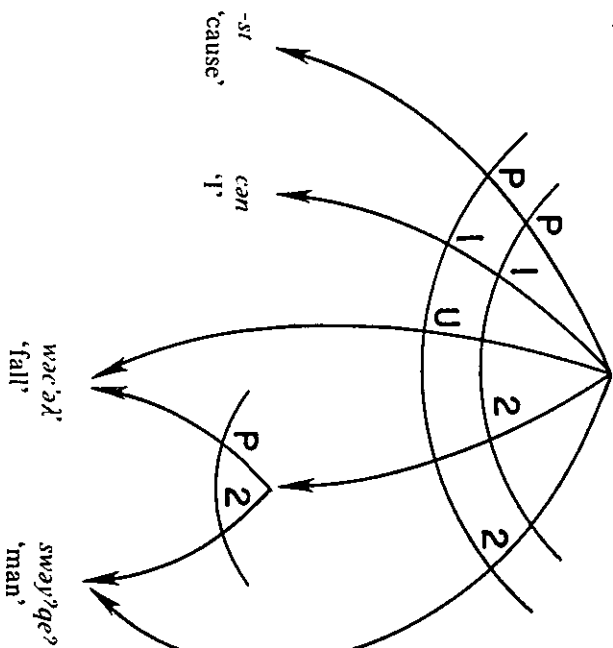


- hic* 'get cut' *hic* 'cut it'  
*q<sup>w</sup>al* 'bake' *q<sup>w</sup>al* 'bake it'

I take this to be a lexical process, since the objects in this construction test to be initial objects (see Gerdts 1988a).

<sup>6</sup> I know of no evidence to distinguish these analyses for Halkomelem.

(7b) \*



In sum, given condition (5b) and the Clause Union analysis above, Unergatives and Unaccusatives are predicted to behave differently with respect to morphological Causatives: Unergatives form them while Unaccusatives do not.

2.2. Desideratives. Desideratives, illustrated in (8) and (9), are formed with the suffix *-alman* (*-al<sup>?</sup>man<sup>?</sup>* in the continuative):

- (8) *?i* can  $\left\{ \begin{array}{l} \text{han}^{\text{?}}\text{am}^{\text{?}}\text{-al}^{\text{?}}\text{man}^{\text{?}} \\ \text{go(cnt)-went} \\ \text{he}^{\text{y}^{\text{?}}}\text{-al}^{\text{?}}\text{man}^{\text{?}} \\ \text{build canoe(cnt)-went} \\ \text{?i}^{\text{?}}\text{tan}^{\text{?}}\text{-al}^{\text{?}}\text{man}^{\text{?}} \\ \text{eat(cnt)-want} \end{array} \right\}$

'I want to go/build a canoe/eat.'

- (9) *?i*  $k^{\text{w}}\text{an}^{\text{?}}\text{-al}^{\text{?}}\text{man}^{\text{?}}\text{-as}$   $\text{t}^{\theta}\text{a}$   $\text{sway}^{\text{?}}\text{qe}^{\text{?}}$   $\text{t}^{\theta}\text{a}$   $\text{ʃap}^{\text{an}}$   
 aux take(cnt)-tr-want-3erg det man det knife

'The man wants to take the knife.'

Gerdts (1988c) posits an analysis of such clauses that makes use of the notion of multipredicate clauses, as proposed by Davies and Rosen



TABLE 1  
UNERGATIVE VERBS

<i>ʔa-m</i>	'call'
<i>can</i>	'go up to the house', 'go inland', 'go up into the mountains'
<i>canʔam</i>	'carry (on back or shoulders)'
<i>cʔam</i>	'jump'
<i>cʔlamʔ</i>	'hear'
<i>cʔem</i>	'crawl'
<i>ʔalan</i>	'eat' (intransitive)
<i>ʔamal</i>	'sit down', 'rise out of bed'
<i>ʔamʔmaš</i>	'hunt'
<i>ʔanax<sup>w</sup></i>	'stop'
<i>ʔašal</i>	'paddle'
<i>ʔai ʔinʔa</i>	'carry (with arms extended)'
<i>hesam</i>	'sneeze'
<i>hedʔam</i>	'breathe'
<i>heyʔ</i>	'build a canoe'
<i>ʔimaš</i>	'walk'
<i>ʔilal</i>	'sleep'
<i>ʔʔ<sup>w</sup>as</i>	'point', 'instruct'
<i>k<sup>w</sup>ʔʔ</i>	'climb'
<i>lak<sup>w</sup></i>	'fly'
<i>lawʔ</i>	'flee'
<i>kʔilas</i>	'stand'
<i>ʔnil</i>	'go down'
<i>neumʔ</i>	'go'
<i>neqam</i>	'dive down'
<i>pʔak<sup>w</sup></i>	'come to the surface of the water'
<i>q<sup>w</sup>al</i>	'speak'
<i>q ʔp</i>	'assemble', 'gather'
<i>q<sup>w</sup> ʔyiflāš</i>	'dance'
<i>saw<sup>w</sup>ʔq</i>	'seek'
<i>siš<sup>w</sup>am</i>	'wade'
<i>šaq<sup>w</sup> ʔl</i>	'go across to the other side'
<i>taq<sup>w</sup>am</i>	'cough'
<i>te-m</i>	'call out', 'yell'
<i>tʔam</i>	'swim'
<i>tʔlam</i>	'sing'
<i>waw<sup>w</sup>ʔʔs</i>	'bark'
<i>ʔʔl</i>	'ache'
<i>ʔ<sup>w</sup>ʔenam</i>	'run'
<i>ʔʔ-ʔʔs</i>	'work'
<i>ʔe ʔal</i>	'vomit'
<i>ʔanam</i>	'laugh'

TABLE 2  
UNACCUSATIVE VERBS

<i>ʔik<sup>w</sup></i>	'get lost'
<i>ʔix</i>	'get scratched on surface'
<i>ʔyeʔq</i>	'change'
<i>k<sup>w</sup>an</i>	'be born'
<i>k<sup>w</sup>ʔs</i>	'get burnt'
<i>lic</i>	'get cut'
<i>mas</i>	'decrease in size'
<i>mayəʔ</i>	'get smaller', 'get cheaper'
<i>pas</i>	'get hit (by a thrown object)'
<i>pan</i>	'get hurted'
<i>q<sup>w</sup>ix<sup>w</sup></i>	'miss', 'fail to hit'
<i>q ʔq ʔʔ</i>	'be ill'
<i>q<sup>w</sup> ʔp</i>	'get wrinkled'
<i>sci ʔel</i>	'be adept, clever'
<i>šiq<sup>w</sup> ʔl</i>	'be calm (weather)'
<i>tecal</i>	'arrive here'
<i>ʔas</i>	'be bumped'
<i>wagʔl</i>	'arrive after a long crossing'
<i>x<sup>w</sup>amiʔ</i>	'get there'
<i>ʔe ʔ</i>	'be stormy'
<i>ʔiq</i>	'scratch (an itch)'
<i>ʔak<sup>w</sup>am</i>	'smash up'

meanings (Causatives = 'make him V'; Desideratives = 'want to V').<sup>9</sup> Thus these verbs test to be Unergative on syntactic grounds. Moreover, all of these forty-two verbs would be predicted on semantic grounds to be Unergative, since they denote willed, volitional actions or involuntary bodily processes.

In contrast, the twenty-two verbs in table 2 form neither Causatives nor Desideratives and thus test to be Unaccusatives. Furthermore, they could be considered on semantic grounds to be Unaccusative, since they denote patient-oriented action, results, motion emphasizing the endpoint, or description.

The remaining thirty-six verbs, all of which have Unaccusative semantics, divide evenly into two groups: those which allow Desideratives but not Causatives are given in table 3, and those which allow Causatives but not Desideratives are given in table 4. These two groups split semantically: the verbs in table 3 denote patient-oriented action and results, while the verbs in table 4 denote location and description; following Chafe (1970) I use PROCESS as a cover term for the former and STATE for the latter.

<sup>9</sup> Causatives of motion verbs are often translated with English transitive verbs; for example, the causative of *šaq<sup>w</sup> ʔl* 'go across to the other side' would be 'take it across to the other side'; the causative of *ʔpʔil* 'go down' would be 'take it down'.

TABLE 3  
PROCESS VERBS

<i>ʔak<sup>w</sup></i>	'get hooked', 'get snagged'
<i>cʔaq<sup>ʔ</sup></i>	'be surprised', 'be astonished'
<i>cʔisam</i>	'grow'
<i>hɪlam</i>	'tumble', 'topple', 'fall', 'roll'
<i>k<sup>w</sup>ʔal</i>	'spill'
<i>lak<sup>w</sup></i>	'break'
<i>ham<sup>ʔc</sup></i>	'chip'
<i>maq<sup>ʔ</sup></i>	'get full of food'
<i>q<sup>w</sup>ʔaq<sup>w</sup></i>	'get clubbed', 'get hit by something suspended'
<i>q<sup>w</sup>ʔal</i>	'cook', 'ripen'
<i>saq<sup>ʔ</sup></i>	'tear'
<i>ʔax<sup>w</sup></i>	'fade away'
<i>ʔal</i>	'lose everything gambling', 'be broke'
<i>ʔajk<sup>w</sup></i>	'start', 'be startled'
<i>wacʔax<sup>ʔ</sup></i>	'fall', 'stumble'
<i>x<sup>w</sup>iwal</i>	'go upriver' (salmon)
<i>yaq<sup>w</sup></i>	'catch fire'
<i>yaʔ<sup>w</sup></i>	'come undone'

TABLE 4  
STATES

<i>ʔayam</i>	'be slow'
<i>ʔaydʔθ</i>	'be sharp'
<i>halʔ<sup>ʔ</sup></i>	'be alive', 'live'
<i>ʔileʔaq</i>	'be aft'
<i>ʔiyas</i>	'be happy'
<i>k<sup>w</sup>ʔʔlas</i>	'be hot'
<i>ʔaq<sup>w</sup></i>	'be wet'
<i>ʔax<sup>w</sup></i>	'be hard'
<i>ne<sup>ʔ</sup></i>	'be different, strange'
<i>qaʔ</i>	'be lots'
<i>q<sup>ʔ</sup>ʔe<sup>ʔ</sup></i>	'be soft'
<i>q<sup>ʔ</sup>ʔan</i>	'be forward'
<i>scʔcʔʔ</i>	'be on top of'
<i>si<sup>ʔ</sup>q</i>	'be underneath a house, or table, etc.'
<i>ʔelʔp<sup>ʔ</sup></i>	'be floppy'
<i>ʔkpa<sup>ʔ</sup>w<sup>e</sup>ʔl</i>	'be underneath something whose weight is bearing down'
<i>ʔna<sup>ʔ</sup>ʔa<sup>ʔ</sup>θ</i>	'be across the way'
<i>θi</i>	'be big'

If we leave aside the Unaccusative verbs in table 2, which include Process, State, and Motion verbs, there are plausible explanations for the patterning of Causatives and Desideratives with respect to the verbs in tables 3 and 4. The verbs in table 3 all form Desideratives but not with the meaning that the subject 'desires' or 'wants' to perform the action; rather glosses such as 'almost', 'on the verge of', 'beginning to', or 'ready to' are given in every case, for example:<sup>10</sup>

(14) *ʔi can tu wal maq<sup>ʔ</sup>-alman*  
aux 1sub just already full-want

'I'm getting rather full.'

(15) *ʔi q<sup>w</sup>ʔaq<sup>w</sup>ʔal<sup>ʔ</sup>-al<sup>ʔ</sup>man<sup>ʔ</sup> ʔ<sup>ʔ</sup>a sθu.m<sup>ʔ</sup>*  
aux ripe(cnt)-want det berry

'The (last of the) berries are almost ripe.'

Thus, the Desiderative in Halkomelem has the meaning of a NEAR OR UNAVOIDABLE FUTURE when it is used with a verb lacking a cognizer capable of 'wanting'. It makes sense that Processes rather than States should allow this meaning: Processes, since the action is spread across time, can be almost or just started, but the point of entering or leaving a State is less relevant than being in or out of it. Thus, 'to be ready to be sharp', 'to be on the verge of being different', or 'to be beginning to be aft' are in some sense anomalous.

On the other hand, States are more compatible with the Causative suffix than are Processes. The Causative forms for the verbs in table 4 are not glossed as 'make X V' but rather 'have it V', 'keep it V', and 'find it V', as in (16) and (17); that is, the meaning is a RESULTATIVE rather than a causative one.<sup>11</sup>

(16) *ʔi can ʔaydʔθ-stax<sup>w</sup>*  
aux 1sub sharp-cs

'I have it sharp.'

(17) *ʔalim<sup>ʔ</sup> can k<sup>w</sup>ʔʔlas-stax<sup>w</sup>*  
very 1sub warm-cs

'I find it rather hot.'

Since the result of the action is being stressed and States and not Processes are logical results of actions, only States appear with the Causative suffix.

<sup>10</sup> The reanalysis of 'want' to future is a commonly occurring cross-linguistic process; see Bybee and Pagliuca (1987) and references therein.

<sup>11</sup> I am assuming that the central meaning of the causative suffix is one of causation, since most causatives (e.g., those formed on unergatives, antipassives, reflexives/reciprocals) have this meaning. The resultative meaning of the causative suffix is limited to a subclass of unaccusatives.

The resultative forms of a Process, 'find it spill', 'keep it fade away', and 'have him astonished', seem anomalous.<sup>12</sup>

4. **Unaccusativity and verb derivation.** The previous section proposes that the Process/State distinction is relevant for the subcategorization of Unaccusative predicates. In order to form a Causative, an Unaccusative predicate must be a State, and in order to form a Desiderative, it must be a Process. Support for this claim comes from the fact that the distinction between State and Process is often morphologically expressed in Halkomelem.

For most verb roots denoting Processes, a derived Stative form is possible, which can, in turn, serve as the base for a Causative, as seen in (18) and (19); such Causatives, as expected, are generally glossed as 'find/keep/have it X' and not 'make it X'.

(18a) *ni qiq' k<sup>w</sup>θa John*  
aux tie up det John

'John got tied up/detained/arrested/bandaged'.

(18b) *ni sqiqaq' k<sup>w</sup>θa John*  
aux tie up(st) det John

'John is bound up'.

(18c) *ni can sqiqaq'-stax<sup>w</sup> k<sup>w</sup>θa John*  
aux lsub tie up(st)-cs det John

'I had John bound up'.

(19a) *ni can maq'*  
aux lsub full

'I got full (of food)'.

(19b) *ʔi can samʔiq'*  
aux lsub full(st)

'I'm full'.

(19c) *ʔi can samʔiq'-stax<sup>w</sup> lθa John*  
aux lsub full(st)-cs det John

'I got John full (of food, liquor, etc.)'.

Table 5 illustrates some of the numerous roots which have this derivational pattern.

TABLE 5  
DERIVED STATES

Verb Stem	Stative		Causative	
<i>ʔak'<sup>w</sup></i>	<i>sʔaʔk'<sup>w</sup></i>	'be hooked'	<i>sʔaʔk'<sup>w</sup>stax<sup>w</sup></i>	'get it hooked'
<i>lic'</i>	<i>stilac'</i>	'be cut'	<i>stilac'stax<sup>w</sup></i>	'have it cut'
<i>maɣaʔ</i>	<i>samyáʔ</i>	'be cheaper'	<i>samyáʔstax<sup>w</sup></i>	'have it cheaper'
<i>məq'</i>	<i>səmʔiq'</i>	'be full'	<i>səmʔiq'stax<sup>w</sup></i>	'get someone full'
<i>p'əl</i>	<i>sp'əp'it</i>	'be sobered up'	<i>sp'əp'itstax<sup>w</sup></i>	'get him sobered up'
<i>qiq'</i>	<i>sqiqaq'</i>	'be detained'	<i>sqiqaq'stax<sup>w</sup></i>	'have him detained'
<i>q'aʔ</i>	<i>sq'əq'aʔ</i>	'to be with them', 'to be together'	<i>sq'əq'aʔstax<sup>w</sup></i>	'put it with them'
<i>q'ep'</i>	<i>sq'eq'əp'</i>	'be tied'	<i>sq'eq'əp'stax<sup>w</sup></i>	'have it tied up'
<i>q'ik'<sup>w</sup></i>	<i>sq'iq'ək'<sup>w</sup></i>	'be bitten'	<i>sq'iq'ək'<sup>w</sup>stax<sup>w</sup></i>	'have teeth closed on it'
<i>q'is</i>	<i>sq'iq'əs</i>	'be knotted'	<i>sq'iq'əsstax<sup>w</sup></i>	'have it tied with a knot'
<i>q'<sup>w</sup>ap'</i>	<i>sq'<sup>w</sup>aq'<sup>w</sup>əp'</i>	'be wrinkled'	<i>sq'<sup>w</sup>aq'<sup>w</sup>əp'stax<sup>w</sup></i>	'got it wrinkled'
<i>θek'<sup>w</sup></i>	<i>sθeθək'<sup>w</sup></i>	'to be lit'	<i>sθeθək'<sup>w</sup>stax<sup>w</sup></i>	'focus a light on him'
<i>θ'əx'<sup>w</sup></i>	<i>sθ'əθ'ix'<sup>w</sup></i>	'be washed'	<i>sθ'əθ'ix'<sup>w</sup>stax<sup>w</sup></i>	'have it washed'

<sup>12</sup> A causative based on a Process, e.g. 'make it spill/break' or 'spill/break it', is not anomalous (see n. 5); however, such translations are not available for unaccusatives suffixed with *-stax<sup>w</sup>* which consistently have a resultative meaning.

It is also possible to derive a Process from a State, most commonly by means of an Inchoative formed with the suffix *-θai*.<sup>13</sup> Such Inchoatives can then frequently serve as bases for Desideratives, as (20) and (21) show:

(20a) *kəlm?* *qi?qe?*  
really soft  
'It's really soft.'

(20b) *ni* *qe?qe?-θai*  
aux soft-ref  
'It got soft.'

(20c) *ni* *wəf* *tu* *qe?qe?-θai-əlman*  
aux already much soft-ref-want  
'It is starting to get a little softer.'

(21a) *ʔi* *taqʷ* *tʰə* *ʃwʔlam?*  
aux tight det rope  
'The rope is tight.'

(21b) *ni* *taqʷ-θai* *tʰə* *ʃwʔlam?*  
aux tight-ref det rope  
'The rope tightened up.'

(21c) *ni* *taqʷ-θai-əlman*  
aux tight-ref-want  
'The rope wants to tighten up.'

Roots that allow derivations of this sort are given in table 6.

Such data support the claim that, in the case of Unaccusatives, the semantics of the VERB BASE determine whether or not a Causative or Desiderative is allowed. It is clear from the data in (22) and (23) that neither the semantics of the verb root nor the semantics of the subject nominal is adequate for stating the condition on further derivation.

(22a) \**ni* *can* *θəkʷ-staxʷ* *tʰə* *John*  
aux 1sub light up-cs det John  
'I threw a light on John.'

<sup>13</sup> In Halkomelem, Inchoatives are formed with the Reflexive suffix *-θai/-θai*, which is composed of the transitive marker *-i* and a suffix meaning 'self'. Because so many Unaccusatives form transitive verbs (see n. 5), which can then form Reflexives, I limited the data in table 6 to only those roots that do not otherwise form transitives or to those that have an Inchoative meaning clearly distinguishable from the Reflexive one.

TABLE 6  
DERIVED PROCESSES

Verb Stem	Inchoative	Desiderative
<i>ʔəyáʔθ</i> 'be sharp'	<i>ʔəyáʔθθai</i> 'got sharp'	<i>ʔəyáʔθθaiəlman</i> 'starting to get sharp'
<i>lewʔ</i> 'be cured'	<i>laʔwəθai</i> 'get cured'	<i>laʔwəθaiəlman</i> 'felt like getting cured'
<i>ʃəʃʷ</i> 'be hard'	<i>ʃəʃʷθai</i> 'got hard'	<i>ʃəʃʷθaiəlman</i> 'wants to get hard'
<i>qi?qe?</i> 'be soft'	<i>qi?qe?θai</i> 'got soft'	<i>qi?qe?θaiəlman</i> 'starting to get a little softer'
<i>qʔiʔlam</i> 'be old'	<i>qʔiʔlamθai</i> 'got old'	<i>qʔiʔlamθaiəlman</i> 'wants to get old'
<i>scuʔéi</i> 'be clever'	<i>scuʔáiθai</i> 'got clever'	<i>scəwʔaiθaiəlʔmənʔ</i> 'trying to become clever'
<i>sləlʔpʔ</i> 'be floppy', 'be flat' (e.g., a tire)	<i>ləlʔpʔθai</i> 'got floppy'	<i>ləlʔpʔθaiəlman</i> 'starting to get a little flat'
<i>taqʷ</i> 'be tight' (e.g., a rope)	<i>tqʷəθai</i> 'tighten up'	<i>tqʷəθaiəlman</i> 'wants to tighten up'
<i>ʃəʃʷ</i> 'be stormy'	<i>ʃəʃʷθai</i> 'got stormy'	<i>ʃəʃʷθaiəlʔmənʔ</i> 'wanting to get stormy'



(22b) *ʔi can sʔeʔak<sup>w</sup>-stax<sup>w</sup> ʔa John*

aux Isub light up(st)-cs det John  
 'I am holding the light on John.'

(23a) \**ʔi ʔeʔax<sup>w</sup>-aʔ<sup>w</sup>man<sup>ʔ</sup>*  
 aux stormy-want

('It's starting to be stormy'.)

(23b) *ʔi ʔa-ʔeʔax<sup>w</sup>-ʔaʔ<sup>w</sup>man<sup>ʔ</sup>*  
 aux cnt-stormy-ref-want

'It's wanting to get stormy'.

The condition must refer to the base to which the Causative or Desiderative suffix is added.

5. **Unaccusativity: syntax or semantics?** The discussion of Unaccusative predicates above has resulted in apparently contradictory conclusions. Section 2 claimed that there are necessary conditions on morphological Causatives (cf. 24b) and Desideratives (cf. 25) that refer to the notion of initial subject and thus differentiate initial Unergatives and Unaccusatives.

(24) Condition on Halkomelem Causative Clause Union:

The downstairs initial subject must also be the downstairs final subject.

(25) Condition on Halkomelem Desideratives:

The initial subject must be the cognizer.

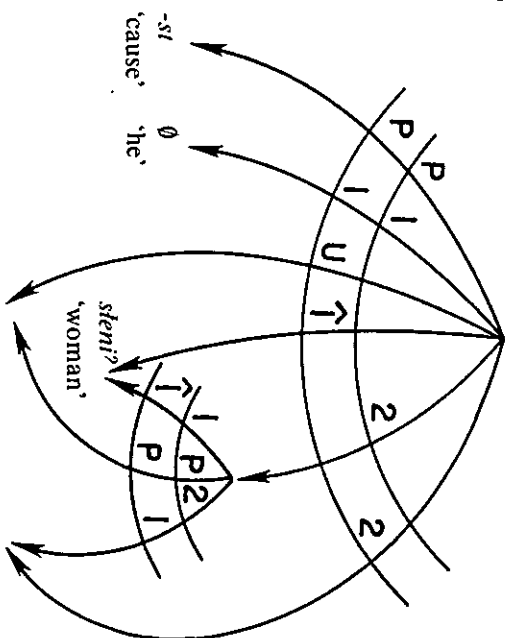
However, 3 gave a closer examination of Unaccusative predicates with respect to these tests. Some Unaccusatives were found to form either Causatives or Desideratives. These Unaccusatives are problematic: because they lack an initial subject, they violate conditions (24) and (25). It has been shown that the semantic distinction Process/State is relevant for the subclassification of Unaccusative predicates. These results raise the question: should the conditions on Causatives and Desideratives in Halkomelem be stated solely in semantic rather than syntactic terms?

There are two reasons for positing that conditions (24) and (25) are stated, at least in part, in syntactic terms. First, these conditions are relevant not only to initially Unaccusative and Unergative clauses but to a variety of clause types in Halkomelem, as discussed in Gerdts (1988a; 1988c). The downstairs "freeze" in (24), for example, also blocks Passives from forming Causatives (cf. 26), since the downstairs initial subject is not the final subject, as seen in (27).

(26) \**ʔi q<sup>w</sup>-aʔ<sup>w</sup>-aʔ<sup>w</sup>man<sup>ʔ</sup>-as k<sup>w</sup>ʔa sapaʔi ʔa ʔa steni<sup>ʔ</sup>*  
 aux bake-tr-intr-cs-3erg det bread obl det woman

('He had the bread baked by the woman'.)

(27)



Condition (25) accounts for the fact that while Passive Desideratives are possible, the initial rather than the final subject is interpreted to be the cognizer. Thus, in the Passive Desiderative in (28), as represented in (29), the initial subject *John*—not the final subject *Mary*—is the 'desirer'.

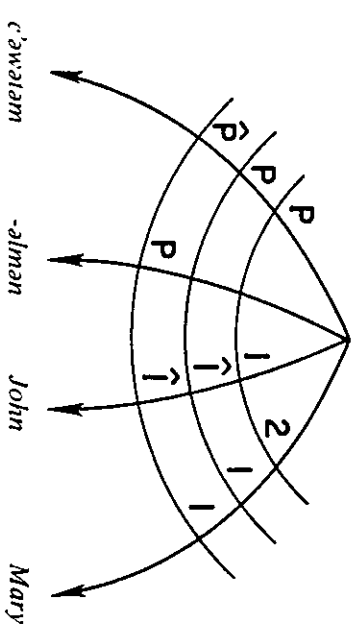
(28) *ʔi c<sup>w</sup>-ʔw<sup>w</sup>-aʔ<sup>w</sup>am<sup>ʔ</sup>-aʔ<sup>w</sup>man<sup>ʔ</sup> ʔa Mary ʔa-ʔi John*  
 aux help(cnt)-tr-intr-want det Mary obl-det John

'John was wanting to help Mary.'

(Literally: 'Mary was want-helped by John'.)

\*\*'Mary was wanting to be helped by John.'

(29)

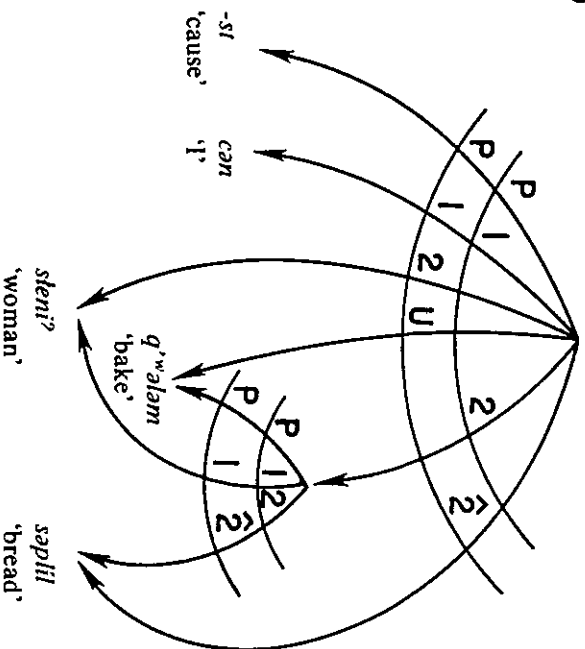


Second, stating the conditions in semantic terms is not a straightforward matter. For example, the notionally transitive clauses in (30)

below, unlike those in (26), can form Causatives. As seen in the representation in (31), downstairs Antipassive (placing the initial 2 en chomage) is posited for Causatives like (30), as argued for in Gerdts (1988a).

- (30) *ni can q'walam-stax' θa steni? ʔa t'θa sapili*  
 aux 1sub bake-intr-cs det woman obl det bread  
 'I made the woman bake the bread.'

(31)



That Antipassives but not Passives can form Causatives follows from (24). Although they are both notionally transitive and finally intransitive, in an Antipassive the initial subject is the final subject, but in a Passive it is not.<sup>14</sup>

This suggests that the conditions in (24) and (25)—instead of being abandoned—should be restated in order to allow Unaccusatives having the appropriate semantics to form Causatives or Desideratives. The revised conditions, stated in (32) and (33), invoke semantic conditions in the case of structures without initial subjects, i.e., Unaccusatives:

(32) Halkomelem Causative Clause Union:

A. Syntactic conditions:

- i. The downstairs clause must be finally intransitive.
- ii. The downstairs initial subject, if there is one, must also be the downstairs final subject.

<sup>14</sup> Antipassives are not the only constructions which are logically transitive but syntactically finally intransitive. Lexical suffix constructions and Reflexives (Gerdts 1988a) have this characteristic; both also form causatives.

B. Semantic conditions:

If there is no downstairs initial subject, then:

- i. the verb base must denote a State;
- ii. the derived form will have resultative (not causative) meaning.

(33) Halkomelem Desideratives:

Semantic conditions:

- i. The initial subject, if there is one, must be the cognizer.
- ii. If there is no initial subject, then:
  - a. the verb base must denote a Process;
  - b. the derived form will have aspectual (not desiderative) meaning.

Thus the conditions make reference to both syntactic and semantic factors.

6. Conclusion. We have seen that applying the diagnostics for Unaccusativity given in 2 to a sampling of Halkomelem intransitive verbs yields what seem at first glance to be problematic results. However, further study shows that although the individual tests are insufficient to classify a predicate, the two tests together provide a means for distinguishing Unergative from Unaccusative predicates. Unergative predicates faithfully allow both Causatives and Desideratives with the expected meanings, but Unaccusative verbs allow either Causatives, or Desideratives, or neither, but never both. Furthermore, Unaccusative Desideratives (limited to Processes) have a future rather than a desiderative meaning and to Unaccusative Causatives (limited to States) have a resultative rather than a causative meaning. I have no explanation for why some verbs denoting Processes or States, namely those in table 2, block Desideratives and Causatives altogether. I can only surmise that the use of the Desiderative as a future and the Causative as a resultative has not yet spread to all Unaccusative verbs in Halkomelem.

The Halkomelem verb derivation system, according to my analysis, makes use of the semantic notions Process and State for the subcategorization of Unaccusatives. In this respect, the results for Halkomelem parallel the studies of other languages with Unaccusative mismatches. For example, Knecht and Levin (1985), Levin (1985), Levin and Rappaport (1988), and Zaenen (1987), discussing data in Dutch, German, Italian, and Turkish, conclude that semantic distinctions such as TELIC/ATELIC and ACHIEVEMENT/ACCOMPLISHMENT (developed by Vendler 1967 and Dowty 1979) are relevant in the classification of intransitive predicates.

Furthermore, this study shows that a combination of syntactic and semantic conditions best captures the distribution of Causatives and

Desideratives in Halkomelem. Insofar as those conditions make reference to initial subjecthood, Halkomelem provides support for the syntactic basis of Unaccusativity.

## REFERENCES

- BURZIO, LUIGI. 1986. Italian Syntax: A Government-Binding Approach. Dordrecht: D. Reidel.
- BREBE, JOAN, AND WILLIAM PAGLIUCA. 1987. The evolution of future meaning. Papers from the Seventh International Conference on Historical Linguistics. Amsterdam: Benjamins.
- CHAFE, WALLACE L. 1970. Meaning and the Structure of Language. Chicago: University of Chicago Press.
- DAVIES, WILLIAM, AND CAROL ROSEN. 1988. Unions as multipredicate clauses. *Language* 64:52-88.
- DOWTY, DAVID. 1979. Word Meaning and Montague Grammar. Dordrecht: D. Reidel.
- FILLMORE, CHARLES J. 1968. The case for case. *Universals in Linguistic Theory*, ed. Emmon Bach and Robert T. Harms, pp. 1-88. New York: Holt, Rinehart & Winston.
- GERDTS, DONNA B. 1988a. Object and Absolute in Halkomelem Salish. New York: Garland.
- \_\_\_\_\_. 1988b. Relational parameters of reflexives: the Halkomelem evidence. *Theoretical Perspectives on Native American Languages*, ed. Donna B. Gerdts and Karin Michelson, pp. 259-80. Albany: State University of New York Press.
- \_\_\_\_\_. 1988c. Semantic linking and the relational structure of desideratives. *Linguistics* 26:843-72.
- GRIMSHAW, JANE. 1987. Unaccusatives—an overview. *Proceedings of NELS 17*, 1986, vol. 1, pp. 255-58.
- HOEKSTRA, TEUN. 1984. Transitive: Grammatical Relations in Government-Binding Theory. Dordrecht: Foris.
- HUKARI, THOMAS E. 1976. Transitivity in Halkomelem. Working Papers for the Eleventh International Conference on Salishan Languages, Seattle, Washington.
- KNECHT, LAURA, AND LORI LEVIN. 1984. Unaccusative mismatches. Paper presented at the Symposium on Grammatical Relations, State University of New York, Buffalo.
- LEVIN, BETTI, AND MALKA RAPPAPORT. 1988. Towards an explanatory theory of unaccusative mismatches. Paper presented at NELS 19, Cornell University, Ithaca, New York.
- LEVIN, LORRAINE S. 1985. Operations on lexical forms: unaccusative rules in Germanic languages. Ph.D. dissertation, Massachusetts Institute of Technology.
- PERLMUTTER, DAVID. 1978. Impersonal passives and the unaccusative hypothesis. *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*, pp. 157-89.
- PULLUM, GEOFFREY K. 1988. Topic... Comment: citation etiquette beyond Thunderdome. *Natural Language and Linguistic Theory* 6:579-88.
- ROSEN, CAROL. 1983. Universals of causative union: a co-proposal to the Gibson-Raposo typology. *Proceedings of the Chicago Linguistic Society* 19:338-52.
- \_\_\_\_\_. 1984. The interface between semantic roles and initial grammatical relations. *Studies in Relational Grammar 2*, ed. David M. Perlmutter and Carol G. Rosen, pp. 38-77. Chicago: University of Chicago Press.
- SAPIR, EDWARD. 1917. Review of C. C. Uhlenbeck, "Het Passieve Karakter van het Verbum Transitivum of van het Verbum Activum in Talen van Noord-Amerika." *IJAL* 1:82-86.
- VENDLER, ZENO. 1967. *Linguistics in Philosophy*. Ithaca, N.Y.: Cornell University Press.
- ZAENEN, ANNIE. 1987. Are there unaccusative verbs in Dutch? *Proceedings of NELS 17*, 1986, vol. 1, pp. 255-58.

## USES OF BEARLAKE AND Mescalero (ATHAPASKAN) CLASSIFICATORY VERBS

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**1. Introduction.** This paper focuses on a description of Bearlake and Mescalero Apache classificatory verb stems.<sup>1</sup> It documents some of the uses of classificatory verbs in these two languages, rather than concentrating on semantic features of the relevant categories. Section 2 reviews the uses of these forms in Bearlake and Mescalero and includes some discussion of Navajo as well. Section 3 summarizes the data and considers certain questions that it raises.

Interest in classificatory verbs has a long history in Athapaskan linguistics. Sapir (1932), Hoijer (1945), Davidson, Elford, and Hoijer (1963), Landar (1967), Basso (1968), Haas (1968), Garrison (1974), Carter (1976), Rushforth and Tatti (1980), Young and Morgan (1980:367-79, 394-407), and Jones (1988) are among the linguists and anthropologists who have recorded, for various Athapaskan languages, the existence of "verb stems which refer to a class of objects participating in an event,

<sup>1</sup> The orthography I use is standard for Athapaskan languages. Tone is distinctive:  $\acute{v}$  = high tone;  $v$  = low tone. Vowel nasalization is distinctive:  $v$  = oral vowel;  $\tilde{v}$  = nasal vowel.  $l$  is a voiceless alveolar lateral,  $rl$  is a voiceless lateral affricate,  $x$  is a voiceless velar fricative.  $h$  is a high-tone syllabic nasal. Low-tone syllabic nasals are unmarked.  $gh$  =  $\{y\}$ ;  $ch$  =  $\{t\}$ ;  $sh$  =  $\{s\}$ ;  $wh$  =  $\{w\}$ ;  $j$  =  $\{j\}$ . ' is a glottal stop. Glottalized consonants are distinctive (= C').

Bearlake People, *Sahitai'ine*, reside primarily in Fort Franklin, which is located on the Great Bear Lake near the headwaters of the Bear River in the Mackenzie District of Canada's Northwest Territories. Bearlakers are most closely related linguistically and culturally to other Athapaskan-speaking people, *Dene*, of the Northwest Territories—Dogrib, Hare, Mountain, and Slave(y) peoples. Taken together, the Athapaskan dialects spoken by Hare, Bearlake, Mountain, and Slave(y) are sometimes considered a single language labeled Slave (for example, Rice 1985: 1989).

Mescalero Apache is a Southern Athapaskan language most closely related to other Apache languages and to Navajo. Speakers of Mescalero Apache reside primarily on the Mescalero Apache Reservation in south central New Mexico. Two other Athapaskan languages are or were also spoken on the reservation—Chiricahua and Lipan Apache. Mescalero is persisting more strongly than these other two Apache languages.

I express my gratitude to Evelyn Breuninger and Ellys Hugar from the Mescalero Apache Tribe. They interpreted the Hoijer text for me.

*IJAL*, vol. 57, no. 2, April 1991, pp. 251-66j

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0020-7071/91/5702-0005\$01.00