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Vi Hilbert, Director, Lushootseed Research  
Dawn Bates, Arizona State University  
William Seaburg, University of Washington, Bothell Campus

Papers compiled by Dawn Bates

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### Inside and Outside the Middle

Donna B. Gerdis and Thomas E. Hukari  
Simon Fraser University University of Victoria

#### 0. Introduction<sup>1</sup>

It is not uncommon for languages to have morphemes with a wide variety of functions across different constructions. Polysynthetic languages, such as Salishan languages, seem especially prone to having multipurpose morphology. For example, the reflexive suffix *-ət* in (1a) in Həlqəmíntəm, the Island dialect of the Halkomelem language, also serves as an inchoative (1b), the reciprocal suffix *-ət* (2a) also serves as a collective (2b), and the desiderative suffix *-əlman* (3a) also serves as an inceptive (3b):

- (1) a. qəyθət 'kill self', čəyχ-θət 'dry self', laχ-əθət 'cover self', həlθət 'save self'  
 b. ʔayəmθət 'get slow', θiθət 'get big', χəχθət 'get stormy', ʔiyəsθət 'get happy'
- (2) a. čawətə 'help each other', ʔik-ətə 'separate from each other', mələq-ətə 'mix with each other', χiθətə 'scratch each other'  
 b. ʔəntəntə 'eat together', yəχstə 'work together', ʔiməštə 'walk together'
- (3) a. ličəməlman 'want to swim', tiləməlman 'want to swim', lewəlman 'want to run away', ʔəməχ-əlman 'want to stop'  
 b. q'əq-əlman 'almost got hit', θəχ-əlman 'almost fade out of sight', yəχ-əlman 'nearly came undone', ʔək-əlman 'almost got hooked'

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We use the following abbreviations in the glosses of the data: 1 = first person, 2 = second person, 3 = third person, act = activity, appl = applicative, aux = auxiliary, ben = benefactive, comp = complementizer, cont = continuative, cs = causative, desid = desiderative, cs = causative, det = determiner, erg = ergative, fut = future, int = interrogative, intr = intransitive, l.c. = limited control, m = middle, nm = nominalizer, obj = object, obl = oblique, pos = possessive, pl = plural, rec = reciprocal, ref = reflexive, sr = serial, sub = subject, ssub = subordinate subject, tr = transitive.

For a morpheme to shift into something more functional or aspectual is the normal path of development. Roots that are historically nouns or verbs lose their original core meaning as they turn into grammatical morphemes.

Nevertheless, the suffix *-m* stands out in Həlqəmíntəm as being particularly multifunctional.<sup>2</sup> It is ubiquitous both in the number of forms it occurs on and the number of different constructions it appears in. For example, in Hukari and Peter's (1995) Cowichan dictionary, 962 of the total number of 6862 entries (or 14%) have the suffix *-m*. Constructions with the suffix *-m* include reflexives with lexical suffixes (4a), logophoric reflexives (4b), antipassives (4c), main clause passives (4d):

- (4) a. laħšəħəm 'braid one's hair'  
 b. ʔiləqəčəm 'buy it for me'  
 c. q'əlam ʔə k' scə:ɬən 'cook some salmon'  
 d. k'ənətəm 'be taken'

These constructions all have transitive counterparts. Thus, *-m* appears to function as a 'demansivizer'. However, the suffix *-m* is also used on a variety of semantically intransitive verbs. Here is just a sample of the many different sorts of intransitives that take *-m*:

- (5) nəqəm 'dive', χinəm 'growl', taq-əm 'cough', yiqəm 'tip over', qəwəm 'kneel', le-wsəm 'glitter', peqəm 'bloom', piləm 'overflow', qətəm 'sweet'

In its intransitive function, it appears on a variety of categories, including nouns, verbs, and adjectives, and sometimes clearly has category-shifting properties:

- (6) a. noun to verb: wəkən 'wagon', wəkənəm 'to go by wagon'  
 b. noun to adjective: qa? 'water', qa?əm 'watery'  
 c. location to state: ʔilə?əq 'be in the stem', ʔilə?əqəm 'go to the stem'  
 d. action to inchoative: ʔitət 'sleep', ʔitətəm 'get sleepy'

It is so diverse that it defies definition. Most Salishan scholars simply give up and allow for two or even several different *-m* suffixes in their grammars, but most scholars nevertheless suspect that the different *-m*'s comprise one suffix.<sup>3</sup>

This paper contributes to the study of the suffix *-m* by presenting some of the

<sup>2</sup>For previous work on *-m* in Halkomelem, see Galloway 1993, Leslie 1979, and

<sup>3</sup>The polymorphous nature of *-m* is especially pronounced in Southern Interior Salish languages where it has taken on full aspectual status (Kroeger 1986).

discoveries we have made for Høljómíðar. In section 1, we survey the constructions taking *-m*, compare them to constructions with other morphology, and come to a preliminary conclusion about what a unified account of *-m* would entail. Given the association of *-m* with both intransitive and reflexive functions, the most obvious suggestion is that what is involved is a middle, in the sense of Kemmer (1993).<sup>4</sup> The middle is a network of constructions with overlapping properties. The key feature that these constructions share is that they are syntactically intransitive though most of them are semantically transitive, that is they have both an agent and a patient. Thus, they sit halfway between fully transitive constructions and fully intransitive ones.

A problem for the middle analysis is the occurrence of *-m* within the domain of monadic verbs, that is, verbs that are semantically intransitive and also have one NP in their argument structure. We make a more detailed analysis of these cases in section 2. We explore the question of how *-m* affects the structure of intransitive verbs. We answer this by looking at pairs of examples where a root can appear with or without *-m*. We examine the root and the root + *m* forms in terms of their categorial status and their argument structure. Very few monadic verbs with *-m* have free-standing counterparts, however. Section 2 takes a fuller list of monadic verbs consisting of root + *m*, including the free and the bound roots, and examines them from the point of view of verb class semantics. Gerds (1991, 1996) has previously discussed Høljómíðar in terms of two classes: unergatives, verbs whose sole argument is a subject, and unaccusatives, verbs whose sole argument is an object. Following Levin and Rappaport Hovav (1995), we sort the verbs with *-m* into subclasses and then discuss their status with respect to unergativity and unaccusativity.

We summarize our findings in section 3. While our results are only preliminary, we hope to have given a useful overview of the issues surrounding *-m*, to have corrected some misinformation concerning *-m*, and to have posed questions for future research.

## 1. Constructions with *-m*

This section discusses constructions with the suffix *-m* in Høljómíðar that have corresponding transitives. First, however, we give a brief summary of Høljómíðar clause structure in section 1.1. We illustrate the basic features of intransitive and transitive clauses. These constructions are used as a point of contrast for middle constructions. Next, we turn to a survey of constructions with *-m*. For each construction, we explore the following issues: what are the properties of the bases with which *-m* combines, what are the properties of the words with the *-m* suffix, which suffixes can follow *-m*, and which affixes stand in a paradigmatic relation to *-m* and how do they contrast with *-m*? By properties we mean, what category does the form belong to, what semantic class does the form belong to, and what is the argument

<sup>4</sup>Many Salishan scholars, too numerous to cite, have previously used the term middle for all or some of the constructions we are using here.

structure and syntax of the form?

We work through the constructions starting with the two reflexive uses of *-m*, the personal reflexive (section 1.2) and the logophoric reflexive (section 1.3). Next, we discuss the antipassive (section 1.4) and the passive (section 1.5). We summarize their properties in section 1.6 and propose a middle analysis with the personal reflexive as the core category.

### 1.1. Transitives and intransitives

All constructions with *-m* are intransitive in terms of their surface inflection. Before examining the various types of *-m* constructions, we first turn to a brief discussion of the distinction between transitive and intransitive clauses. For a more detailed discussion, see Gerds (1988b). Transitive clauses contain a verb that is morphologically marked with a transitive suffix. These include, *inter alia*, the general transitive suffix *-t* (7), the limited control transitive suffix *-nax* (8), and the causative suffix *-stax* (9).

- (7) ni? q'aq'-at-es iə sieni? ?ə k'θə sǰəməl  
 aux club-tr-3erg det woman obl det paddle  
 'He clubbed the woman with the paddle (on purpose).'
- (8) ni? q'aq'-nax-es iə sieni? ?ə k'θə sǰəməl  
 aux club-l.c.tr+3obj-3erg det woman obl det paddle  
 'He accidentally clubbed the woman with the paddle.'
- (9) ni? 'iməš-stax'-es iə sieni?  
 aux walk-cs+tr+3obj-3erg det woman  
 'He made the woman walk.'

Surface transitivity is transparent in Høljómíðar. The transitive markers themselves are a test for transitivity: if the verb is morphosyntactically transitive, then it must have a transitive suffix. Furthermore, as Gerds (1988b, 1995a) notes, the transitive markers are mutually exclusive. Causatives can be formed based on an intransitive verb, as seen from the causative in (9), which is based on the intransitive clause in (10).<sup>5</sup>

- (10) ni? 'iməš iə sieni?  
 aux walk det woman  
 'The woman walked.'

<sup>5</sup>For further conditions on causatives, see Gerds 1955a.

But causatives cannot be formed on transitive clauses, as seen in (\*11), a causative based on the transitive suffix *-t*, and (\*12), a double causative:

(11) \*ni? can q'ə-l-ət-stəx? lə steni? (ʔə) k'əθə səp'lil.  
 aux 1sub bake-tr-cs+tr+3obj det woman obl det bread  
 'I had the woman bake the bread.'

(12) \*ni? can nə'əm-st(əx)-stəx? lə Mary (ʔə) k'əθə pulk'-s.  
 aux 1sub go-cs+tr-cs+(3obj)+tr+3obj det M. obl det book-3pos  
 'I had Mary take her book.'

Second, the morphosyntactic trappings in transitive and intransitive clauses differ. *Hələqmθəmh* is a split ergative language. In a main clause transitive with a third person subject, the verb will be suffixed with the third person ergative marker *-s*, as seen in the above examples. In contrast, third person subjects in main clause intransitives do not determine agreement.<sup>6</sup>

Also, only transitive verbs license a direct object NP in direct case, for example, *lə steni?* 'the woman' in examples (7) and (8) above, as opposed to oblique NPs, for example, *k'əθə səqməl* 'the paddle' in (7) and (8), which is introduced by the multi-purpose oblique preposition *ʔə*.

Relative clause formation also distinguishes direct from oblique NPs.<sup>7</sup> Subjects of intransitives (13) and objects of transitives (14) are accessible for relativization without special marking.

(13) ʔə cəjix spē'əθ ni? ʃi'ʃk'ə'əh  
 det black bear aux swimming  
 'the black bear that is swimming'

(14) ʔə sqəy'qe? ni? qəyɾ-əs k'əθə spē'əθ  
 det man aux swimming-tr-3erg det bear  
 'the man that the bear killed'

Also, subjects of transitives are extracted without special morphology; note that the third person ergative suffix *-s* is omitted.

<sup>6</sup>*Hələqmθəmh* has a split agreement system. In subordinate clauses, all third person subjects that *-s* agreement.

<sup>7</sup>These facts hold generally for extractions including Wh-questions, clefts, and focus constructions.

(15) ʔə swəy'qe? ni? qəyɾ k'əθə spē'əθ  
 det man aux kill-tr det bear  
 'the man that killed the bear'

In contrast, obliques can only be extracted via nominalization:

(16) k'əθə səqməl ni? ʃ-d'əq'-ət-s lə steni?  
 det paddle aux nm-club-tr-3pos det woman  
 'the paddle with which he clubbed the woman'

The oblique nominalizer *ʃ-* is prefixed to the verb, and the subject is represented by a possessive prefix.

We see then that intransitives differ from transitives in several ways. Intransitives lack transitive morphology, unless they are causativized. Transitives show ergative morphology for third person main clause subjects. Also, direct objects differ from obliques in terms of case marking and extraction. Thus, intransitivity versus transitivity is always surface-apparent in *Hələqmθəmh*.

## 1.2. Personal reflexives

In *Hələqmθəmh* reflexives formed with the suffix *-θət*, which is undifferentiated for person or number, the patient is semantically coreferent to a clausemate subject antecedent.

(17) ni? can ləx'ə-θət. 'I covered myself.'  
 ni? ɕ ləx'ə-θət. 'You (sg.) covered yourself.'  
 ni? cɪ ləx'ə-θət. 'We covered ourselves.'  
 ni? cɛ:p ləx'ə-θət. 'You (pl.) covered yourselves.'  
 ni? ləx'ə-θət. 'He/she/it/they covered self.'

The reflexive is a surface intransitive as seen by the lack of third person ergative agreement in the last example in (17).

As is the case with noun incorporation in many languages, heads of possessed themes can appear as lexical suffixes. This gives rise to an external possession construction. That is, the semantic possessor appears as an argument of the verb. Thus, in (18) and (19) the notional possessor is the syntactic object of the clause.

- (18) ni? tʃi-ŋq-t-əs lə steni? k-θə sq-əm dɔj.  
 aux comb-hair-tr-3erg det woman k-θə sq-əm dɔj.  
 'The woman combed the dog's hair.'

- (19) ni? ʔə ʒ θəy-eŋ-θáŋɔ?  
 aux int 2obj make-flexible.material-tr.1obj  
 'Did you make my bed?'

In cases involving the coreference of the notional possessor and the agent of the clause, clauses with lexical suffixes do not allow reflexives formed with the suffix *-θɔt* (20a, 21a); instead they use the suffix *-m* (20b, 21b).

- (20) a. \*ni? cən ʔəx-ʒən-θət  
 aux 1sub wash-foot-trrefl  
 'I washed my feet.'  
 b. ni? cən ʔəx-ʒən-əm.  
 aux 1sub wash-foot-intr  
 'I washed my feet.'
- (21) a. \*ni? ʔəx-əy-θi-θət<sup>8</sup>  
 aux scrape-com.mouth-trrefl  
 'He shaved.'  
 b. ni? ʔəx-əy-θi-əm.  
 aux scrape-com.mouth-intr  
 'He shaved.'

We see a contrast between the transitive suffix *-t* and the reflexive *-m* in the context of external possession.

- (22) ʔeŋp-ʒə-t 'wiping his/her feet' ʔeŋp-ʒən-əŋ 'wiping one's feet'  
 ʒk-əyət-t 'bathe his/her baby' ʒk-əyət-əm 'bathe one's baby'  
 təmɔ-əŋə-t 'braid his/her hair' təmɔ-əŋə-m 'braid one's hair'

Non-coreferent (third person) external possessors are signalled by *-t* while coreferent external possessors are signalled by *-m*.

<sup>8</sup>The final *n* of a lexical suffix deletes before the *-t* transitive.

The reflexive external possession construction is extremely common in Həŋəm. We give some additional examples in (23):

- (23) seŋ-ʒən-əm 'raise one's foot'  
 seŋ-əs-əm 'raise one's hand'  
 ʔəx-əs-əm 'wash one's hands'  
 hi-ɛŋq-əm 'get a haircut'  
 tɔ-ŋq-əm 'comb one's hair'  
 iŋ-e-ɛ-əm 'cut one's hair'  
 x-ʔəŋ-qŋ-əm 'quench one's thirst'  
 ʔəx-əŋnəs-əm 'brush one's teeth'  
 x-ŋəp-əŋqən-əm 'wipe one's nose'

The use of *-m* in a reflexive sense is very productive with somatic (body-part) lexical suffixes. But the *-m* 'own'/'-t 'other' distinction also occurs with non-somatic suffixes.

- (24) seŋq-əwtɔ-t 'looking for a house seŋq-əwtɔ-əŋ 'looking for a house  
 for him/her' for oneself'  
 k-ax-əwtɔ-ət 'knock on his/her house' k-ax-əwtɔ-əm 'knock on own house'  
 θq-i-ŋe-t 'put many layers of θq-i-ŋe-əm 'put many layers of  
 clothes on him/her' clothes on self'

The data in (25) show additional examples of reflexive *-m* following non-somatic lexical suffixes.

- (25) θəy-eŋ-əm 'make one's own bed'  
 k-əŋé-wət-əm 'take one's own car or boat'  
 θəy-əwtɔ-əm 'build a house for oneself'  
 ləw-ŋe-əm 'undress, take off one's clothes'

We see then that the *-əm* reflexive is used when the lexical suffix refers to a part of a person or to a personal belonging. Thus, we refer to this as the personal reflexive.

That the *-m* refers specifically to 'one's own' can be seen by comparing the personal reflexive to forms without *-m*. In the first column in (26), we see verbs and lexical suffixes with simply an intransitive patient-oriented meaning. These contrast with the personal reflexives in the second column and the non-coreferent external possession examples in the third column.

- (26) a. meʔ-ʂən meʔ-ʂən-əm meʔ-ʂə-t  
 'shoe comes off' 'take off one's shoes' 'take off his/her shoes'  
 b. qəq-cəs qəq-cəs-əm qəq-cəs-t  
 'bandaged hand' 'bandage one's hand' 'bandage his/her hand'  
 c. ʂ-ʂə-as ʂ-ʂə-as-əm ʂ-ʂə-as-t  
 'washed face' 'wash one's face' 'wash his/her face'

The majority of our examples of personal reflexives involve lexical suffixes. We have found a few examples of *-m* 'own' / *-t* 'other' without lexical suffixes.

- (27) a. ʂək-əm ʂək-ət  
 'bathe (self)' 'bathe him/her'  
 b. hiwəs-əm<sup>9</sup> hiwəs-t  
 'bring oneself to people's attention' 'bring him/her to people's attention'  
 c. c-məq-mət-əm məq-ət  
 'fill oneself until bloated' 'fill him/her with food'

In addition, the *-m* 'own' / *-t* 'other' alternation appears on many denominal verbs based on clothing names.

- (28) a. kəpɨ kəpɨʔ-əm kəpɨʔ-ət  
 'coat' (from French *capote* via Chinook Jargon) 'put one's coat on' 'put his/her coat on'  
 b. ləʂən ləʂənəm ləʂən-t  
 'shawl' (from French *le châle*) 'put one's shawl on' 'put a shawl on him/her'  
 c. stəkən təkənəm təkən-t  
 'sock' (from English *stocking*) 'put one's socks on' 'put his/her socks on'

<sup>9</sup> This may contain the lexical suffix *-as* 'face', which is also the goal applicative. Cf. ?iwas-t 'point it out, to show it'.

- d. yasəʔ-qʷ 'bat'<sup>10</sup>  
 yasəʔ-qʷ-əm 'put one's bat on'  
 yasəʔ-qʷ-t 'put his/her bat on'  
 e. qʷiɛʂən 'shoe'<sup>11</sup>  
 qʷiɛʂənəm 'put one's shoes on'  
 qʷiɛʂət 'put his/her shoes on'

The personal reflexive is an intransitive construction, as seen by the lack of ergative agreement in the case of a third person subject.

- (29) ʔeʔət yəʂəʂən-ʂən-əm ʔəh mən ʔə ʔə qʷiɛʂən.  
 aux ser-try+stative-foot-m det+2pos father obl det shoes  
 'Your father has tried on all the shoes.'

- (30) niʔ neh̄ xʷəʔ-əlqən-əm kʷəh̄ məh̄a.  
 aux go wipe-nose-m det+2pos child  
 'Your child went to wipe his nose.'

Also, personal reflexives can be causativized, and since causatives must have intransitive bases in Həłqəmfiən, this provides additional evidence for their surface intransitivity.

- (31) a. ɔp-as-əm-stəx 'make them assemble'  
 gather-face-m-CS  
 b. yəi-aʔ-qʷ-əm-stəx 'make him/her shampoo'  
 rub-head-m-CS  
 c. ʂək-əm-stəx 'make him/her bathe'  
 bathe-m-CS  
 d. tələləs-əm-stəx 'make him/her wear glasses'  
 glasses-m-CS  
 e. ʔiʔ-əm-stəx 'dress him/her'  
 dress-m-CS

<sup>10</sup> The word for bat contains the lexical suffix for head *-aʔ*.

<sup>11</sup> This literally means 'log foot' probably from the wooden shoes of the early settlers.

We see then that the personal reflexive, like the plain reflexive, is an intransitive construction. It is not unusual for a language to have two reflexives and to split the reflexive and ancillary functions across the two constructions. It is somewhat rare for a language to have two reflexives that are both syntactically intransitive. This point is discussed further in section 1.6.4.

### 1.3. Logophoric reflexives

As discussed in Gerdts (1988b), *Halq'emšən* benefactives are expressed in applicative constructions formed by the addition of the verbal suffix *-lc*, which appears before the transitive suffix. The goal is the object and hence is cross-referenced by the object agreement suffix, while the theme is an oblique nominal introduced by the all-purpose preposition *ʔa*.

(32) niʔ ʔa ʔə qʷəl-əlc-θəməš-əs ʔa kʷθə se:ʔin.  
aux bake-ben-tr:lobj-3erg obl det salmon  
'He baked the salmon for me.'

(33) niʔ ʔa ʔə kʷən-əlc-θəməš ʔa kʷ səpʷil.  
aux int 2sub take-ben-tr+lobj obl det bread  
'Did you get me some bread?'

The benefactive is fully productive. Any verb that takes *-t* can also take *-lc*, as long as there is a logically possible benefactive or malefactive reading. Additional examples of the benefactive are given in (34):

(34) qʷələt 'bake it' qʷələlcət 'bake it for him/her'  
θəyt 'fix it' θəyylcət 'fix it for him/her'  
xəllt 'write it' xəlɬlcət 'write it for/to him/her'  
kʷənət 'take it' kʷənəlcət 'take it for him/her'  
pəʔət 'sew it' pəʔəlcət 'sew it for him/her'

The applicative suffix *-lc* typically occurs with transitive *-t*, although it is also possible with *-m*, in which case the construction is a logophoric reflexive, where the beneficiary/goal is coreferent to the speaker.<sup>12</sup>

<sup>12</sup>Stultes (in preparation) also notes this construction. We are not aware of its existence in other Salishan languages. Gerdts (1989b) failed to notice the logophoric nature of the construction. Some of our data suggest that this construction can be used with applicatives other than the benefactive.

(35) ne:m ʔə ʔileq-əlc-əm ʔa kʷ səpʷil.  
go 2sub buy-ben-intr obl det bread  
'Go buy some bread for me/yourself/him!'

(36) ne:m ʔə ceʔ ʔələx-əlc-əm ʔa kʷ qəxʷmʷn.  
go 2sub fut gather-ben-intr obl det consumption seed  
'Go and gather some consumption seed for me!'

(37) niʔ ʔa ʔə kʷən-əlc-əm ʔa kʷ te:ʔə?  
aux int you get-appl-m obl det money  
'Did you get me some money?'

(38) niʔ ʔa ʔə wəl ya:kʷ-əlc-əm ʔa kʷ təməʔ?  
aux int you already smash-appl-m obl det ochre  
'Did you already break up the ochre for me?'

(39) niʔ cən qʷəl-əlc-əm.  
aux 1sub bake-ben-intr  
'I cooked it for myself.'<sup>13</sup>

As seen in the translation in (36), *-m* signals a first person object. A translation involving another person, including the second person subject, is not possible.<sup>14</sup> Thus, it is not a true reflexive, but rather a logophoric construction that refers back to the speaker, not the subject. Additional examples of the logophoric construction and its transitive counterpart are given below:

<sup>13</sup>The reflexive suffix *-θm* cannot follow an applicative suffix:

(i) \*niʔ cən qʷəl-əlc-θət.  
aux 1sub bake-ben-refl  
'I cooked it for myself.'

Gerdts (1988a, to appear) accounts for this by limiting reflexives to themes.

<sup>14</sup>Gerdts elicited materials in the 1980's which the referent is the third person subject of a higher verb of speaking, but data from current speakers indicate that it is limited to the speaker (i.e. first person). See further discussion in section 1.6.1.

- (40) *iax ʔalcam* 'take downhill for me' *iax ʔalcat* 'take downhill for him/her'  
*pqʔalcam* 'break a piece off for me' *pqʔalcat* 'break a piece off for him/her'  
*qiwʔalcam* 'hang it for me' *qiwʔalcat* 'hang it for him/her'  
*θəyʔalcam* 'fix it for me' *θəyʔalcat* 'fix it for him/her'  
*iqʔalcam* 'break it for me' *iqʔalcat* 'break it for him/her'  
*pʔalcam* 'wash it for me' *pʔalcat* 'wash it for him/her'  
*ʔa:lcəm* 'ask for for me' *ʔa:lcət* 'ask for for him/her'

A second property of this construction is also suggestive of logophoricity. In usual contexts the subject of the constructions is second person. In fact, the most common use is in the imperative as in (35) and (36). However, a third person subject is possible in the domain of a speech act verb used to expressed an indirect imperative, as in the following example:

- (41) *cse-t cən ce?* *lə sieni?* *ʔəw* *qʔal-ʔic-əm-əs*  
 tell-tr 1sub fut det woman comp bake-ben-intr-3ssub  
*ʔə k-θə sce:ɬtən.*  
 obl det salmon  
 'I'm telling the woman to bake the salmon for me.'

Since the logophoric reflexive and the personal reflexive are both marked with *-m*, it is tempting to try to reduce them to one construction. The personal reflexive, however, does not have limitations as to person. It allows reference to all persons, not just first persons. Also, like the plain reflexive, it is strictly clause-bounded. Thus the reflexive in the embedded clause refers only to its clausemate subject, not to the speaker.

- (42) *cse-t cən ce?* *lə sieni?* *ʔəw* *tʂ-ɪʔqʔ-as*  
 tell-tr 1sub fut det woman comp comb-hair-intr-3ssub  
 'I'm telling the woman to comb her own hair.'  
 \*I'm telling the woman to comb my hair (for me).'

It is difficult to establish the final transitivity of the logophoric reflexive construction. Since we have no data with a third person main clause subject, we cannot test it for ergative agreement. Furthermore, causatives seem to be impossible. So forms like \**k-ən-ɬc-əm-st-ɬ-m* 'you were made to get it for me' were rejected. However, causatives are never formed on applicatives. So these may be blocked on independent grounds.

One possible clue that the logophoric reflexive is intransitive comes from the suffix *-namət*. This suffix is the limited control reflexive, but as discussed in section 2, it takes on the meaning of 'manage to' when suffixed to an active intransitive verb. As seen in (43), this suffix

can co-occur with a logophoric reflexive.

- (43) *ni?* *ʔə ʔ* *kʔən-ʔic-əm-namət?*  
 aux int you get-appl-m-1.c.ref  
 'Did you manage to get it for me?'

On the basis of these data and the lack of overt transitive morphology, we surmise that the logophoric reflexive is an intransitive construction.

#### 1.4. Antipassives

The class of verbs with *-m* which we call antipassives has been discussed elsewhere (Gerdts 1988a, Hukari 1979). Compare the patient-oriented intransitive in the (a) examples in (44) and (45) with the transitive clauses in (b) and the antipassive in (c).

- (44) a. *ni?* *qʔəl* *fʔə sce:ɬtən.*  
 aux bake det salmon  
 'The salmon cooked/barbecued.'
- b. *ni?* *qʔəl-ə-təs* *fʔə sce:ɬtən.*  
 aux bake-tr-3erg det salmon  
 'He cooked/barbecued the salmon.'
- c. *ni?* *qʔəl-əm* *ʔə fʔə sce:ɬtən.*  
 aux bake-m obl det salmon  
 'He cooked/barbecued/bake the salmon.'
- (45) a. *kʔəl* *kʔəθə* *ʂtihéɬə* *nə-s-nəw-xʔkʔs-éiə.*  
 spill det teapot 1poss-nm-aux+comp-burn-car  
 'The kettle spilled and I got a burnt car/side of head.'
- b. *ni?* *kʔəje-t-as* *fʔə qaʔ.*  
 aux spill-tr-3rd det water  
 'He poured the water.'



- c. cse-t    fə swiʃlas    ʔəw    nil-əs    nem    kʔi-eʔəm  
 tell-tr    det young-man    comp    be-he-3ssub    go    spill-m  
 ʔə  
 obl    det water

'Tell the young man to go and pour some water for the people.'

The verbs in (44b) and (45b) take the transitive suffix -t while the verbs in (44c) and (45c) are suffixed with -m. Only a small group of verbs in our data (approximately 25) show alternation between -t and -m of this sort. Additional examples are given in (46):

- | (46) | Base | Transitive    | Antipassive                                   |
|------|------|---------------|---|
|      | pən  | 'get buried'  | pənət    pənəm    'plant, sow'                |
|      | qap  | 'gathered'    | qəpət    qəpət    'gather'                    |
|      | kʔes | 'get hot'     | kʔesət    kʔesət    'heat over flames, singe' |
|      | miʃ  | 'get mashed'  | miʃət    miʃət    'mash'                      |
|      | pəq  | 'break'       | pəqət    pəqət    'break some off'            |
|      | səq  | 'split, tear' | səqət    səqət    'tear off a piece'          |

Several types of evidence point to the surface intransitivity of antipassive clauses. First, in comparing (44b) and (44c), we see that the transitive clause in (44b) takes the third person ergative agreement while the antipassive in (44c) does not. Furthermore, while transitives such as (44b) cannot serve as bases for causatives, antipassives like (44c) can.

- (47) \*niʔ    cən    qʔə-l-ət-stəx    ʔə    θə    sce:ltən.  
 aux    1sub    barbecue-tr-cs    obl    det salmon  
 'I made him cook/barbecue/bake the salmon.'
- (48) niʔ    cən    qʔə-l-əm-stəx    ʔə    fə    sce:ltən.  
 aux    1sub    barbecue-m-cs    obl    det salmon  
 'I made him cook/barbecue/bake the salmon.'

As mentioned previously, causatives are only formed on intransitive bases.

The case marking of the patient NP provides a third indication that (44b) is transitive and (44c) is intransitive. The optional patient NP in (44c) is introduced by the oblique marker ʔə. Oblique object NPs are not distinguishable from other non-direct NPs on the basis of their case marking. Passive agents, instruments, temporals and any other NPs are also introduced by the oblique marker. However oblique objects are the only ones which can be extracted in relative clause formation by registering this with an s-nominal prefix on the verb. (See, *inter alia*,

Hinkari 1997.) Compare the following set of sentences based on the transactional verb ʔamast 'give', which contains the applicative suffix noted above and transitive -t.

- (49) niʔ    ʔə    č    ceʔ    ʔam-əs-t    fəñ    sqeʔəq    ʔə    kʔ    te:əʔ  
 aux    int 2sub    fut    give-appl-tr    det+2pos    brother    obl    det money  
 'Are you going to give your younger brother some money?'
- (50) ste m    kʔə    ʔi    ʔəñs    ʔam-əs-t    fəñ    sqeʔəq  
 what    det    aux    2pos    give-appl-tr    det+2pos    brother  
 'What are you going to give your younger brother?'
- (51) nil    lwet    kʔəθə    niʔ    ʔam-əs-t-əs    fəñ    sqeʔəq    ʔə    fə    skʔələsʔ  
 focus    who    det    det    give-appl-tr-3erg    det+2pos    brother    obl    det gun  
 'Who is your younger brother going to give the gun to?'
- (52) lem-staňš    ʔə    fə    skʔələsʔ    niʔ    s-ʔam-əs-θaňš-s    ceʔ    fəñ    sqeʔəq  
 look-cs+1obj    obl    det gun    aux    nm-give-appl-tr+1obj-3pos    fut    det+2pos    brother  
 'Show me the gun that your younger brother is going to give me.'

Notice that the extraction of a direct object is permitted but is not registered by special marking on the relative clause verb, as in (50). But if an oblique object is extracted, s-nominalization is used, as in (52).

The oblique NPs in antipassives pattern in precisely the same way. When they are extracted, this is registered without exception on the verb by s-nominalization.

- (53) niʔ    ʔə    č    ceʔ    he:yəm    ʔə    kʔ    sqe:wʔ  
 aux    obl 2sub    fut    bake-m    obl    det fry.bread  
 'Are you going to make fry bread?'
- (54) stem    kʔ    niʔ    ʔəñ-s-he:yə-mʔ  
 what    det    aux    2pos-nm-bake-m  
 'What did you bake?'

Thus the direct object/oblique-object distinction is realized not only in the presence or absence of the oblique marker, but in extraction by the presence of the s-nominalizer.

Extraction further distinguishes between oblique objects and any other obliques. Instrumentals (and some locatives) extract by registration on the verb with the instrumental prefix s-ʔ.

- (55)  $\text{h}^{\text{e}}\text{ik}^{\text{-}}\text{-}\text{at}$   $\text{h}^{\text{e}}\text{}$   $\text{sce:it}^{\text{en}}$   $\text{?}\text{a}$   $\text{h}^{\text{e}}\text{}$   $\text{h}^{\text{e}}\text{ik}^{\text{-}}\text{t}^{\text{en}}$ .  
hook-tr det salmon obl det gaff hook  
'Hook the fish with a gaff.'
- (56)  $\text{?e?at}$   $\text{h}^{\text{e}}\text{}$   $\text{h}^{\text{e}}\text{ik}^{\text{-}}\text{t}^{\text{en}}$   $\text{?}\text{en-}\text{h}^{\text{e}}\text{-}\text{h}^{\text{e}}\text{ik}^{\text{-}}\text{-}\text{at}$   $\text{h}^{\text{e}}\text{}$   $\text{sce:it}^{\text{en}}$ .  
here det gaff hook 2pos-nm-hook-tr det salmon  
'Here is the gaff you hook the salmon with.'

The above evidence points to two facts about antipassives. First, they are surface intransitives: they inflect as intransitives and can serve as bases for further derivations for forms like causatives where intransitivity is required. Second, they nevertheless have a patient, though the patient can be optionally omitted, so they are semantically transitive.

#### 1.4.1. Agent-oriented antipassives

We noted above that antipassives frequently correspond to patient-oriented verb roots. However, some antipassives correspond to roots which are agent-oriented. Thus an argument, namely the agent, is held constant in the transitive (57a), the  $\emptyset$ -marked antipassive in (57b), and the antipassive with *m* in (57c).

- (57) a.  $\text{?i}$   $\text{c}^{\text{en}}$   $\text{w}^{\text{el}}$   $\text{c}^{\text{ek}}^{\text{-}}\text{?}\text{it}$   $\text{h}^{\text{e}}\text{}$   $\text{s}^{\text{m}}\text{a}^{\text{y}}\text{a}^{\text{b}}$ .  
aux 1subj now fry+imperf-tr det deer  
'I am frying the deer meat.'
- a.  $\text{n}^{\text{e}}\text{h}$   $\text{c}^{\text{ek}}^{\text{-}}\text{?}\text{}$   $\text{?}\text{a}$   $\text{k}^{\text{-}}\text{t}^{\text{e}}$   $\text{sce:it}^{\text{en}}$ .  
go fry obl det salmon  
'Go fry some salmon!'
- c.  $\text{n}^{\text{e}}\text{h}$   $\text{c}^{\text{ek}}^{\text{-}}\text{?}\text{e?}\text{am}$   $\text{?}\text{a}$   $\text{k}^{\text{-}}\text{sqaw}$   $\text{sep}^{\text{il}}$ .  
go fry-m obl det fry bread  
'Go fry some fry bread.'

Here are three more verbs of this type:

- (58) Base Antipassive Transitive  
 $\text{h}^{\text{e}}\text{h}$  'weave  $\text{h}^{\text{e}}\text{h}^{\text{em}}$  'weave'  
 $\text{saw}^{\text{q}}$  'look for'  $\text{saw}^{\text{qem}}$  <sup>15</sup> 'look for'  
 $\text{h}^{\text{e}}\text{?}$  'do'  $\text{h}^{\text{e}}\text{?em}$  'make'

<sup>15</sup>Not all speakers accept this form. Suttles (in preparation) notes it for Musqueam.

Our data contain very few verbs of this type, that is verbs that alternate between a  $\emptyset$  and an *m* antipassive. There are quite a few verbs, however, of the  $\emptyset$  antipassive type that regularly appear either with or without an oblique object. These include verbs like  $\text{q}^{\text{e}}\text{?}\text{q}^{\text{e}}\text{?}$  'drink',  $\text{q}^{\text{e}}\text{?}\text{al}$  'speak', and  $\text{?}\text{ait}^{\text{em}}\text{/}\text{e}$  'eat'. For example, 'eat' makes an oblique-marked patient in (59) which tests to be an oblique object as (60) shows.

- (59)  $\text{?}\text{ait}^{\text{en}}$   $\text{?}\text{a}$   $\text{c}^{\text{e}}\text{?}$   $\text{?}\text{a}$   $\text{k}^{\text{-}}\text{sqew?}$   
eat int 2sub fut obl det fry bread  
'Will you eat some fry bread?'
- (60) stem  $\text{k}^{\text{-}}$   $\text{ni?}$   $\text{?}\text{a}^{\text{h}}\text{-s-?}\text{ait}^{\text{en}}\text{?}$   
what det aux 2pos-nm-eat-m  
'What did you eat?'

The implications of these data will be discussed further below.

#### 1.4.2. Antipassives and ditransitives

We note in passing a small additional class of antipassives whose roots do not occur as free forms and for which we see an interesting applicative-like semantic shift in the transitive.

- (61) Antipassive Transitive  
 $\text{?}\text{a:m}$  'ask/call for'  $\text{?}\text{at}$  'call/ask him for'  
 $\text{i:t}^{\text{em}}$  'be-g/ask for'  $\text{i:t}$  'beg/ask him for'  
 $\text{y}\text{a:m}$  'place an order for'  $\text{y}\text{a:t}$  'warn him about'

The antipassive entails a theme patient, while the transitive takes, instead, a goal (addressee) direct object.

- (62)  $\text{?e?at}$   $\text{?}\text{a:m}$   $\text{h}^{\text{e}}\text{h}^{\text{-}}\text{s}^{\text{ilb}}$   $\text{?}\text{a}$   $\text{k}^{\text{-}}\text{q}^{\text{a}}\text{?}$ .  
aux call-m det+2pos-grandparent obl det water  
'Your grandfather is calling for water.'

- (63)  $\text{n}^{\text{e}}\text{h}$   $\text{?}\text{at}$   $\text{h}^{\text{e}}\text{h}^{\text{-}}\text{m}^{\text{en}}$ .  
go call-tr det+2pos-father  
'Go call your father.'

<sup>16</sup>There are several verbs of 'eat'. This only has no -t transitive counterpart.

These data are interesting since they show that the oblique object in the antipassive and the direct object of the transitive equivalent do not always have the same semantic roles.

Notably the transitive forms are not marked with an applicative suffix. See for example, the example in (49) above. Goal applicatives are usually signalled by the suffix *-as*, which is the lexical suffix for face. Goal applicatives take the goal as direct object and the theme as oblique object. Some applicatives with this morphology have antipassive counterparts with themes as oblique objects:

- (64) Antipassive Transitive  
 'e'əmə 'give' 'am-as-t 'give it to him/her'  
 x'ayəm 'sell' x'ayəm-as-t 'sell it to him/her'
- (65) a. 'e'əmə 'ə' r'ə sce:ɬən  
 give-m obl det salmon'  
 'give the salmon'
- b. x'ay-əm 'ə k'θəñ snəx'ət  
 sell-m obl det+2pos canoe  
 'sell your car'

So in examples like these, the theme is the constant argument across the antipassive and transitive; it is an oblique object in both types of clauses.<sup>17</sup>

#### 1.4.3. Antipassives in *-els*

As in the case of antipassive with *-m*, the *-els* construction is surface intransitive but entails a patient, which can optionally be included as an oblique object.<sup>18</sup>

- (66) na'ət q'əs-əls 'ə' r'ə x'eləñ sce:ɬən.  
 aux pour+cont-act obl det salted salmon  
 'She is soaking the salted fish.'

<sup>17</sup> These examples are of additional interest because the *-m* suffix is retained in the ditransitive.

<sup>18</sup> Many languages of the world have more than one antipassive. Take for example the Mayan languages and Philippine languages under the ergative analysis (Cerdas 1987).

- (67) neñ 'ə' ɬə sɬe:ls k'θəñ mən 'ə' k'v scəleχəχəns.  
 go int. evid. split+act det+2pos father obl det fence.post  
 'Is your father going to split logs for posts?'

Antipassives formed with *-els* are more productive than those with *-m*. We have found, with only a couple of exceptions, that if the transitive verb exists, then an antipassive with *-els* is also possible. Often when an *-m* antipassive is possible, so is one with *-els*. The following data show examples of verbs that take antipassive with either *-m* or *els*.

- (68) Base *-m* *-els* Transitive  
 k'ət k'1e'əm k'1e:ls k'1et  
 'spill' 'pour' 'pour' 'pour it'  
 q'əs q'se'əm q'se:ls q'set  
 'fall in water' 'soak' 'soak' 'put in water'  
 ɬəq' ɬə'e'əm ɬə'e:ls ɬə'ət  
 'pierced' 'poke through' 'poke through' 'pierce it'  
 qəp qpe'əm qpe:ls qpət  
 'gather' 'gather sticks or' 'gather it'  
 small objects' gather something'

There is a semantic difference between the two types of antipassive. The antipassive with *-m* provides a means of de-emphasizing the object, hence it only focuses on the agent subject indirectly. In some examples, the clauses with *-m* have a sense that the object is there but it is not individualized. The object is usually inanimate. It is frequently preceded by the indefinite article *k'*, which is given a partitive reading, and furthermore, the objects are frequently plural or collective. Also, especially when the suffix appears as *-e'əm*, there is a sense of the agent bringing about a change of state in the object, sometimes without full control. It is clear in these cases why the antipassive is used instead of its transitive counterpart.

In contrast, the *-els* antipassive brings the activity itself into focus. Often the activity is job-like in that it will take some effort and some time. In many instances, *-els* is used when the person is playing a role in a social situation. So *qpe:ls* 'collect' is appropriate when the person is going around collecting money for a collection, *k'1e:ls* 'pour' is appropriate when one is pouring the tea, coffee, or juice at a gathering, *wəñe:ls* 'throw' is used when one is throwing out money or blankets in the bighouse, *nəw'e:ls* 'show' is used when someone is bringing a picture for ceremonial purposes in the bighouse, or *l'e:ls* 'lay (it) down' is used when making a down payment or donating blankets. Often, the object is fully understood due to the nature of the activity and is omitted. Also, because *-els* gives an activity reading to the verb, it is often appropriate to mention an instrument. In fact, many names of instruments are nominalizations

formed with the prefix *šx*-'instrument/locative' and the *-els* antipassive.

- (69) *šcatq'əls* 'grinder', *šək'xəls* 'frying pan', *šx'i'qəls* 'baking pan', *šlernčəls* 'picker, picking machine', *šscqəls* 'shake splinter', *šx'ax'əš'əls* 'sander', *šx'w'ə'qəls* 'eraser', *šx'w'i'xwəls* 'back-hoe'.

In contrast, we have no clear examples of an instrumental nominal based on the *-m* antipassive. We also see a contrast in the use of the two antipassives following lexical suffixes. The suffix *-m*, at least in the sense of antipassive, is blocked in this case. Recall the *-m* following a lexical suffix frequently takes on the personal reflexive meaning, or, as discussed in section 2 below, a motion meaning. In contrast, *-els* appears after lexical suffixes:

- (70) *yə-k'ən-ds-əls* 'steer horses, drive car' [hold face]  
*šəšm-a'q'-əls* 'smoking fish heads' [smoke-dry head]  
*k'x-as-əls* 'count money' [count round objects]  
*x'-pəq'-s-əls* 'punch in face' [punch face]  
*ʔəš-(w)s-əls* 'scrape ducks' [scrape body/fowl]  
*k'ax'-əwix'-əls* 'knock on houses' [knock building]  
*pəš'-əp'-əls* 'washing clothes' [wash garment]

Perhaps the *-m* antipassive is incompatible with lexical suffixation because both serve a similar function of backgrounding and de-individualizing the object.

Given that *-m* and *-els* have different semantic functions, it is not surprising that we see cases of stacking. In the follow examples, *-els* follows *-m*.

- (71) *q'əl-əm-els can ce?* *ʔə k' sec:itən ʔəw k'eyəl-əs*  
 bake-m-act 1sub fut obl det salmon comp day-3sub  
 'I am going to barbeque fish tomorrow.'

- (72) *ʔi ct pəpəntəls ʔə k'əθə sqewə.*  
 aux 1plsub plant+cont-m-act obl det potato  
 'We are doing the planting of the potatoes.'

- (73) *k'x-e'əm-els ʔə p'ə mə ʔəq'i*  
 burn-m-act obl det water fowl  
 'Do the job of singeing the water fowl!'

Note that the semantics of both types of antipassives are represented in the glosses. There is a lack of individualization of the object and the verb involves an activity that will take some effort and time.

#### 1.4.4. The structure of antipassives

Antipassives are surface intransitives that are nevertheless semantically transitive. Thus, antipassives share properties with both intransitive and transitive forms. If the antipassive is viewed from a derivational perspective, then there are two possible paths of derivation. First, it can be claimed that the antipassive morphology is added to the base intransitive with two concomitant effects: the agent is added and the patient is denied argument status. This analysis would leave the data in section 1.4.1, where the base form is already agent-oriented, unexplained. Second, it can be claimed that the transitive verb serves as the base. In this case, the *-is* replaced by antipassive morphology and the patient is denied argument status. The data with goal applicatives verbs in section 1.4.2 are a problem for this analysis. The total suppression of the goal in the antipassive is left unexplained. Furthermore, we regard both of these scenarios as unnecessarily complicated. Rather than proposing a derivation for the antipassive based upon another verb form, we think of all three verb valences as standing in a lexical relation to each other.<sup>19</sup> This does not strike us as an unreasonable way of thinking about them from the viewpoint of the speaker/hearer, who we believe has them in the mental lexicon. Not all verbs have all the slots in their paradigms filled, but enough do so that the relationship between the forms is clear.

What is less clear is the function of *-m* in the antipassive construction. If it is regarded as having solely a dextranitivizing function, then its presence on antipassives with agent-oriented intransitive counterparts in section 1.4.1 and on examples with the stacking of *-m* and *-els* is unexplained. However, if we adopt the analysis above, that the *-m* signals an object that is defocused or de-individualized, then its appearance in these cases is unproblematical.

#### 1.5. Passives

The *-m* suffix appears in passive constructions, which is a normal pattern in Salishan languages. The fact that the antipassive and passive forms are homophonous leads to speculation about a relationship between the two. We note some similarities and differences between them in Halq'emjén.

Unlike *-m* in other constructions, passive *-m* follows the transitive suffix, as seen by comparing the active transitive clause in (74) with the passive in (75).<sup>20</sup>

<sup>19</sup>This is the approach taken in Gerdts 1993.

<sup>20</sup>This and other differences between the passive and antipassive have led Farrell

(74) ni? pas-ət-əs ʔə swəyʔqe? ʔə speʔəθ.  
 aux hit-tr-3erg det man det bear  
 'The man hit the bear (with a thrown object).'

(75) ni? pas-ət-əm ʔə ʔə swəyʔqe? ʔə speʔəθ.  
 aux hit-tr-m obl det man det bear  
 'The man hit the bear/The bear was hit by the man.'

Like antipassives and reflexives, the *Həłqəm fənm* passive seems to have one less direct argument than their transitive counterparts, hence we might think of them as a type of detransitivization. But unlike antipassives, the suppressed argument is the agent, the classic pattern of passive constructions. As noted in Gerdts (1988), passive agents are not accessible in relative clause constructions either directly (76) or through nominalization (77).

(76) \*nił θə steni? ni? lem-ət-əm ʔə xʔon fənm.  
 3-enph det woman aux look-tr-m ʔə xʔon fənm  
 'It's the woman who the white man was looked at by.'

(77) \*steni? ni? (s/s)-pən-ət-əm(-s) kʔə sqewθ.  
 woman aux (nom)-plant-tr-m(-3pos) det potato  
 'The woman is the one who the potatoes were planted by.'

Thus they differ from oblique objects, which are extracted via nominalization with the prefix *s-*, and obliques such as instruments, which are extracted via nominalization with the prefix *sr-*. In the case of passives with first and second person patients, the patient is represented by what are historically object suffixes, which appear before *-m*.<sup>21</sup>

(78)

first person	pasəθəłəm	'I was hit'	plural	pasətəłəm	'We were hit'
second person	pasəθəłəm	'You were hit.'		pasətəłəm	'You people were hit.'
third person				pasətəm	'hit her/him/it/them'

See Gerdts (1988b, 1988c, 1989a) for further discussion on the status of passive clauses. Suffice it to say that it is not altogether clear whether the one direct NP licensed by a passive verb is a (1992, 1994) to the view that passive in *Həłqəm fənm* syntactic while the antipassive is lexical. See also the remarks on difference between the two in Davis (to appear).

<sup>21</sup>See Gerdts (1995b) for a Mapping Theory analysis of this phenomena.

surface object (paralleling the object agreement marking on passive verbs) or a surface subject. There are two situations when the passive pattern must be used. The first is when the agent is mentioned and not the patient. Compare the following sentences.

(79) ni? pas-ət-əs ʔə swəyʔqe?  
 aux hit-tr-3erg det man  
 'He hit the man.'

(80) ni? pas-ət-əm ʔə ʔə swəyʔqe?  
 aux hit-tr-m obl det man  
 'The man hit him/he was hit by the man.'

Example (79) shows the transitive verb sentence pattern with the *-s* ergative marker on the verb indicating the subject (third person) and the direct noun phrase *ʔə swəyʔqe?* 'the man' as the object. In the passive (80), the verb no longer has the ergative suffix *-s*. Instead, it has the passive suffix *-m* and the agent is oblique. Passive verbs license one direct NP, which is the patient/undergoer.

The second situation when the passive pattern must be used is when the object (the patient) is second person and the subject would be third person. Compare the following two sentences—the first being transitive and the second passive.

(81) ni? cən pas-əθəłəm.  
 aux 1sub throw-tr+2obj  
 'I hit you.'

(82) ni? pas-əθəłəm ʔə ʔə swəyʔqe?  
 aux throw-tr+2obj+tr obl det man  
 'The man hit you/You were hit by the man.'

Further, many speakers must use the passive when the agent is signalled by a proper name.<sup>22</sup> These restrictions thus provide many situations in which the passive has no corresponding active form. Given this asymmetry and the fact that speakers do not generally associate the construction with English passives when translating may lead one to question whether this is passive at all.

The sorts of person/animacy hierarchies exhibited in *Həłqəm fənm* are reminiscent of Inverse systems found in many languages of North America (Jelinek 1990). In an Inverse system, the NPs determine morphology based on their rank in the hierarchy rather than on their grammatical relations. In addition, there is often an inverse morpheme that signals the reversal of the thematic relations and the agreement morphology. Under an Inverse analysis of the

<sup>22</sup>See Gerdts (1988a) for illustration of this and other constraints on passive.

Halqem'inañ passive, -m would be such a morpheme. The Inverse analysis fails to explain the presence of object morphology for first and second person "patients", however. Furthermore, we would expect a third person agent to look or act like an object in the presence of a higher ranked nominal. As noted above, passive agents, unlike oblique objects, do not relativize. So, although Halqem'inañ does not have a typical passive, it does seem to be amenable to an Inverse analysis either.

It should be noted that there is a second passive construction in which a -i component appears.

- (83)
- |               |            |                                     |
|---------------|------------|-------------------------------------|
|               | singular   | plural                              |
| first person  | čə wəθé:lt | čə wə:á:lt 'we were helped'         |
| second person | čə wəθámət | čə wə:á:lt 'you-people were helped' |
| third person  | čə wətéwət | 'He/she/it they were helped'        |
- (84) ?i con pət-əñ ?əw čə w-əθé:lt  
 aux 1sub ask+cont-m comp help-tr+1obj+pas  
 'I asked if I would be helped.'

The dependent passive morphology is used in subordinate clauses, obligatorily so for many speakers if the verb of the subordinate clause carries the subordinate clause morphology (the ?əw complementizer proclitic or the s-nominalizer). This -i may derive historically from the reflexive, as in reflexive-θət and the limited control reflexive -nəmət. The reflexive -i might also be a frozen morpheme in such intransitives as ?i:ət 'sleep' and ?əmət 'sit down, get up'. In this case, we can make the observation that passive morphology in the language has evolved from both types of reflexives: the plain reflexive, -θət, and the personal reflexive, -m. It should be noted that reflexive passives are quite common in languages of the world and that in many languages with reflexive passive, the same morphology is also used for reflexives and intransitive middles.

#### 1.6. The middle

So far, we have seen four types of constructions that make use of the suffix -m: the personal reflexive (85a), the logophoric reflexive (85b), the antipassive (85c), and the passive (85d).

- (85)
- |    |                         |                    |
|----|-------------------------|--------------------|
| a. | čəmá-əñə-m              | 'braid one's hair' |
| b. | ?iləq-əlc-əm            | 'buy it for me'    |
| c. | č'ə:l-əm ?ə k' sče:ltən | 'cook some salmon' |
| d. | k'ən-ət-əm              | 'be taken'         |

We have explored the meaning and structure of each construction paying close attention to what comes inside the -m and what comes outside the -m. The chart in (86) reviews our findings.

- (86)
- |             |                    |                      |             |            |
|-------------|--------------------|----------------------|-------------|------------|
|             | personal reflexive | logophoric reflexive | antipassive | passive    |
| productive? | yes                | yes                  | no          | yes        |
| base        | lexical suffix     | benefactive          | root        | transitive |
|             | denominal V        |                      |             |            |
|             | root (rare)        |                      |             |            |
| causative   | yes                | no                   | yes         | no         |
| non-limited | external           | benefactive          | theme       | agent      |
| controller  | subject            | speaker              |             |            |
| limitations | none               | 1st person           | 3rd person  | 3rd person |
|             |                    |                      | inanimate   | animate    |

Our investigation has shown that there is no single property that definitively unites all constructions with -m, although there is a general sense that each construction is deviating from a fully transitive counterpart. If we place intransitives at one end of a scale and transitives at the other, then we find that these constructions sit *somewhere* in the middle. This is because they are semantically transitive but inflectionally intransitive.

If we view this problem from a cross-linguistic perspective, we see that other languages have morphology which mark a similar range of constructions and are frequently referred to as *middles*. In her extensive study of the middle, Kemmer (1993) refers to middle systems as a set of relations between the morphosyntactic and semantic middle categories. The semantic category middle has no precise boundaries but has a semantic core that matches the traditional definition of middle voice: an action or state that affects the subject of the verb and its 'interests' (Lyons 1969:373).

Kemmer has found that middle systems develop two ways diachronically, depending upon the source use of the middle morpheme. The most common source is reflexive. Secondly, a variety of other sources have been documented including passive morphemes, reciprocals, and verbal intensives. The source use is taken to be the core central category. Other uses radiate out from this use, though, of course, new uses can also serve as sources for other constructions.

personal reflexives, the non-linked object is the theme in antipassives, not the benefactive, and it is not coreferent to the subject. We note that the antipassive middle, but not the antipassive with *-els* sometimes carries the implication that the action is for the subject's benefit, as in *sgé'am* 'split, tear off a piece for oneself', but we are not convinced that this is generally a property of the construction. Perhaps this use is similar to the predictability of the object in many cases of external possession, for example, grooming verbs. The unmarked situation there is for the agent to perform the action on herself/himself or for herself/himself rather than on another person (Haiman 1983).

Instead, we turn to Kemmer (1993) for insight as to how these two constructions are alike. Kemmer looks at constructions from the point of view of a general property termed the *relative elaboration of events*. She defines this as: 'the degree to which the participants and component sub-events in a particular verbal event are distinguished.' (1993:121) If there is a high elaboration of events then the clause will be packaged on the transitive side of the spectrum, and if there is a low elaboration of events then it appears as a more intransitive construction, frequently by means of middle morphology. Kemmer (1993:209) identifies two key factors as relevant to elaboration of events: the backgrounding of particular participants and the predictability of expectedness of certain participant relations in connection with specific events. We clearly see these semantic factors at work in the *Haldqam(úam)* antipassive. They are characteristic of both the *-m* and *-els* antipassives. We did see in comparing the two types of antipassive, that the theme in the *-m* antipassive was often defocused or de-individualized while the theme in the *-els* antipassive was often omitted altogether. So *-m* shows low elaboration of the theme involved in the event while *-els* places more emphasis on the activity than on the participants.

The diachronic scenario that fits with this hypothesis is that the personal reflexive use of *-m* carries with it the semantics of low elaboration of events. It is this feature of the semantics that gets spread to a sub-class of antipassives.

### 1.6.3. Reflexive and passive

According to Kemmer (1993:209), low elaboration of events is also at play in the passive construction. Agentless passives can be seen as an extreme form of this. The agent is regarded as irrelevant or totally predictable so it is not expressed. Short of total suppression, there are other subtle ways in which the agent is downplayed. One way is to use reflexive morphology in constructing a passive. In languages that have reflexive passives contrasting with plain passives, the former often look more transitive, sometimes require a generic reading, sometimes exclude agents especially non-third person agents, and even sometimes require an impersonal subject. Impersonal reflexive passives like the following are typical:

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Furthermore, the new uses can share properties with each other and thus reinforce the overall system.

Let's take as a hypothesis that the *Haldqam(úam)* middle marker originates as a reflexive. This places the question of what properties are shared by the *-m* constructions in a different light. Rather than looking for overall similarities, we look instead for properties that are shared between the reflexive and each other construction. We address this issue in the rest of this section, returning briefly to the alternate hypothesis, that the source is something other than the reflexive, in the conclusion.

### 1.6.1. The two reflexive middles

The connection between the personal reflexive and the logophoric reflexive is obvious. In each case *-m* allows the suppression of an object of a transitive event because that object is known through grammatical means. In the case of the personal reflexive, the object is coreferent with the clause-mate subject. This is the restriction typically (perhaps even universally) found on morphological reflexives. In the case of the logophoric reflexive, the object is coreferent with the speaker. We could surmise an earlier state of development for logophoric reflexives where a subject antecedent condition held and reference to all persons was allowed. If, however, the construction tended to be used in first person contexts, this use could have taken over. Once the construction was limited to first person, then a clausemate antecedent was unnecessary. The construction then could extend to instances of the indirect imperative, where the subject of the higher verb was a controller, and then to direct imperatives, where the sense of 'I am telling you to X' is only implied. From there it could extend to other cases involving speaker coreference.

This scenario would account for the differing judgments we get from various speakers or even from the same speaker on different occasions. The logophoric reflexive is a rather marginal construction. It is not encountered frequently and the full transitive form is always available instead. In our discussion above, we tried to present consensus data. But it should be noted that we only get full agreement on data involving a first person benefactive, a second person subject, and an direct or indirect imperative. Other sorts of judgements that we get sporadically are: non-imperative contexts including past and future, third person subjects in indirect imperative contexts, and second and third person benefactives with clausemate antecedents. Clearly, more research is necessary on this topic to sort out the exact clustering of judgments for each speaker.

### 1.6.2. Reflexive and antipassive

The relationship of antipassive *-m* to the reflexive is less transparent. Both constructions are clearly morphosyntactically intransitive, as they both can be causativized. Each involves the non-linking of the object and in each case the agent is the sole remaining argument. Unlike

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- (87) Se habla español. 'Spanish is spoken.' (Spanish)  
 Hier tanzt sich gut 'One can dance well here'. (German, Kemmer 1993: 148)

In some languages, passive morphology historically derives from reflexive morphology, for example in Uto-Aztec as discussed by Langacker and Munro (1975). They suggest that what reflexives and passives have in common is "non-distinctness". The agent and patient in a reflexive are co-referent and therefore are non-distinct. Furthermore, in an agentless passive, the agent would be featureless and thus non-distinct from the patient. Likewise, in an impersonal passive, which could be regarded as subjectless, the subject and the patient would be non-distinct.

Our discussion of Hálqəm fínəm passives above showed several features typical of reflexive-marked impersonal passives in other languages. Only third person agents are allowed and the patient is represented with object, not subject, morphology. Therefore, the Hálqəm fínəm passives may be a reflexive passive and hence take morphology otherwise associated with reflexives.

#### 1.6.4. The reflexive hypothesis

The discussion above lends credence to the suggestion that the personal reflexive should be regarded as the core central category of the Hálqəm fínəm middle. Other uses radiate out from this source and then mutually reinforce each other as 'detransitivizers'. The alternative scenario, that one of the other uses was the historical source is implausible. Only the personal reflexive use and the passive use are totally productive and, according to Kemmer, the source morpheme should be relatively less-grammaticized—that is, it should be fully productive, it should have a less idiosyncratic meaning, and it should express a more primary category. Kemmer (1993:229) notes that passive markers are possible sources of middle morphology. However, she postulates that whenever a language has a non-reflexive source of the middle marker, that reflexive uses are excluded from the middle category. Verbal morphology does not take on referential functions over the course of time. The converse path of development is well-attested. A morpheme with more robust referential meaning often takes on a more functional meaning serving to delimit or modify the event and may eventually become fused portion of the verb.<sup>23</sup> Thus, the fact that Hálqəm fínəm uses the middle as a reflexive provides evidence against the passive being the source.

One objection to this proposal might be that Hálqəm fínəm already has a reflexive, the plain reflexive -θət, and this would block -m from having the core meaning of reflexive.<sup>24</sup>

<sup>23</sup>See Gerdts (to appear) for a discussion of this path of development for reflexives and reciprocals.

<sup>24</sup>In fact the reflexive -θət also shows much grammaticized behavior (Gerdts to

Ironically, the presence of a second, more syntactic reflexive actually supports our hypothesis. According to Kemmer, there are many languages with a two reflexive system. What she expects is that when the reflexive category radiates out to other categories to create a middle system, the language will develop a second, newer reflexive. This reflexive is more transitive than the historically prior one and will have a more transparently reflexive meaning. The reflexives will exist in tandem, sharing the workload. This seems to be the situation in Hálqəm fínəm. Although both types of reflexives are surface intransitives, the reflexive -θət patterns with the object agreement morphology in having the transitive marker as its initial element (Gerdts to appear). Furthermore, the reflexive -θət is limited to core cases of an action involving an agent and a patient and thus is used in contexts with a high elaboration of events. The reflexive -m picks up cases at the edge where it represents a possessive or benefactive relationship to the agent or the speaker.

Having established -m as a middle marker, whose source is the category reflexive, we turn now to another key piece of the middle puzzle. In middle systems, especially those with a reflexive source, some classes of intransitives also tend to take the middle marker. According to Kemmer (1993:224), the marker should extend into verb classes such as motion verbs, verb of change in body posture, and grooming verbs. In fact, many intransitive verbs in Hálqəm fínəm do take middle marking. We turn to a discussion of intransitive middle verbs in the next section.

## 2. Intransitive -m

We now focus on verbs with -m which, unlike the constructions in section 1, seem to be semantically monadic. They do not transparently yield a 'self' versus 'other' reading, nor do they allow an oblique object, like unpassives, or an oblique agent, like passives. The intransitive suffix -m has many uses. Moreover, it often appears on bases that do not occur independently. Therefore it is difficult to characterize an element of meaning that -m contributes to the word. In addition, intransitive -m is highly idiosyncratic. Whatever semantic or syntactic generalization one makes about -m, it is easy to find verbs of similar meaning and function that do not take -m. Given these difficulties, it is not surprising that our research on intransitive -m yields only tentative results.

Our survey of intransitive -m starts in section 2.1 with an exploration of words with -m where the base is independently attested. Although there are comparatively few of these, we use these to establish the general properties of intransitive -m. In subsequent sections, we cast the net more broadly and discuss the total class of verbs with -m. In section 2.2, we group the verbs into semantic subclasses and discuss them in terms of unergativity and unaccusativity. In section 2.3, we discuss verb classes from the point of view of the middle hypothesis.

appear.) Kemmer notes the existence of languages with two middles. This may be the case here.



*/sʰəməm/* 'berries' in Nanaimo dialect is */sʰu:m/* in other Island dialects. In other cases, it is unclear whether *m* is part of the root or the suffix *-m*. We have included the two motion words above because some speakers pronounce them with half-long vowels. Otherwise, CV<sup>m</sup> forms with short vowels have been excluded from the discussion. Comparative research may be able to establish their status.

We see then that part of the difficulty in providing a thorough treatment of *-m* is actually deciding if it occurs in a given example. In this section, we limit the discussion to examples like those in (88), that is, examples where the base is a free form. We contrast the base with the word consisting of the base plus the suffix *-m* with respect to category and semantic verb class.

One major use of *-m* is to derive verbs from nouns. We have already noted the class of verbs based on clothing names in (28) above. In addition, the verbs can mean 'use' or 'do' the noun.

- (92) *qəwət* 'drum (n.)' *qəwətəm* 'drum (v.)'  
*kʰəʃ* 'amount, number' *kʰəʃəm* 'count'

Also, *-m* can derive verbs that mean manner or direction of motion.

- (93) *pətən* 'sail (n.)' *pətənəm* 'sail (v.)'  
*wəkən* 'wagon' *wəkənəm* 'go by wagon'  
*ʔilʰəʔəq* 'stern' *ʔilʰəʔəqəm* 'go to the stern'  
*qʰən* 'bow' *qʰənəm* 'go to the bow'

The meaning of motion also comes through in many forms containing lexical suffixes, though most forms consisting of lexical suffixes + *-m* are personal reflexives, as discussed in section 1.2 above.

- (94) *xʰənəm* 'run' ('fast + foot')  
*nɛləwʰixəm* 'visit' (cf. *nɛləwʰix* 'next door' = 'different + dwelling')  
*ʔasəm* 'face towards' (from the lexical suffix *-s* 'face')  
*tuwʰtəm* 'it listed (cf. *tuʰt* 'boat) to be tilted' = 'tilt + side, ear'  
*qəʃkənəm* 'go on tuptoes' ('doubled + toes')  
*θkəsəm* 'park, come to a stop' ('push + face')

Most of the time, the suffix *-m* is not so spectacularly category-shifting. Rather, it adds a slight modification to the meaning, such as inchoative, intensive, or change of state. The bases can be adjectives (95a), process verbs (95b), or even actions 95(c).

2.1. Roots and *-m*

Part of the difficulty in discussing intransitive *-m* is that the base is not independently attested. The base is a free form in some examples.

- (88) *ʔilʰəʔəq* 'be in the stern' *ʔilʰəʔəqəm* 'go to the stern'  
*wəkən* 'wagon' *wəkənəm* 'go by wagon'  
*ʔitət* 'sleep' *ʔitətəm* 'become sleepy'  
*sil* 'roll' *siləm* 'roll'

Pairs like these are rare in our sample. More typically, the base is recognizable because it appears as a root with other affixes, even though it is not attested as a free form. In the examples in (89), we can identify the base since the form minus *-m* serves as a base in other cases.

- (89) *təkən-əm* 'put your socks on' *təkən-t* 'put his/her socks on'  
*kʰec-əm* 'scream, holler' *kʰec-t* 'scream at him/her'  
*ʔil-əm* 'overflow' *ʔil-t* 'fill it to the brim'  
*haqʰ-əm* 'smell bad' *c-haqʰ* 'catch a whiff of something'

However, there are many examples—in fact, probably a large majority—where the base is unattested in other forms.

- (90) *hesəm* 'sneeze'  
*heʔəm* 'breathe'  
*qewəm* 'rest'  
*qʰəm* 'drop, drop off'

It is especially tempting to segment the suffix *-m* from a cranberry base in cases like these, since what remains would be a well-formed *Həłəm* form, usually C(V)C. In other cases, for example the words in (91), it is not clear to us whether the *-m* is a suffix or part of the root.

- (91) *pa:m* 'swell up'  
*cam* 'go up from water, go up hill'  
*ne:m* 'go'

Where the root vowel is long, this could have easily arisen through a process of medial resonant deletion and vowel coalescence. That is, */pa:m + əm/* → */pa + əm/* → */pa:m/*. This is a frequently attested change within *Həłəm* forms. In fact, we see pairs of words with medial resonants in the Nanaimo dialect and with long vowels in other dialects. So, for example

- (95) (a) liq' 'calm, slack'  
 ?iyas 'happy'  
 s'elip' 'be floppy'
- (b) čayx'əm 'get dry'  
 čeyəx'əm 'get dry (weather)'  
 ʃax'əm 'get covered'
- (c) ?itət 'sleep'  
 ?ənax' 'stop'

In sum, we see that *-m* is multifunctional. It goes on a variety of bases—nouns, adjectives, and verbs—to yield adjectives or verbs. It derives actions, including motion verbs, but also states and processes. It sometimes adds only a shade of meaning, often of a more aspectual nature. Our data contained very few examples of alternations of base and base + *-m*. As we see in the following section, there are many more forms where the base is bound. The data in the larger sample often reflect the sorts of meanings illustrated above.

## 2.2. Semantic classes of intransitive *-m*

In this section, we examine the monadic verbs from the viewpoint of verb class semantics. We sort the verbs into subclasses in section 2.2.1. In 2.2.2, we address the verb semantics from the point of view of the unergative/unaccusative distinction. We also briefly contrast verbs with *-m* with verbs without *-m* and make some generalizations about which verb classes take *-m* and which do not. Section 2.2.3 reviews tests for unergativity versus unaccusativity in Hə́lqəm fūə́n. Finally, in section 2.2.4, we apply these tests to each sub-class. This task is problematic because we lack clear results in some cases. Nevertheless, we make some tentative conclusions about verb classes and *-m* in section 2.2.5.

### 2.2.1. Semantic verb classes

The suffix *-m* appears on many monadic verbs from a variety of different semantic classes. These verbs fall into two major classes depending on whether the verbs denote willed or volitional acts (Type A) or non-agentive events that are out of the control of the participant (Type B).

A. Actions. These are verbs with an agent, generally a human or animate, that is in control.

#### A.1 Activities, volitional acts.

qəwətəm	'drum'
həwələm	'play'
qəwəm	'rest'
qələm	'camp'
ʃk'əm	'swim'

#### A.2 Manner of speaking.

qəwəm	'howl'
xiləm	'growl'
leqəm	'whisper'
q'elqəm	'(seal) to bark'
k'ecəm	'scream, yell'
hi?'k'əm	'crying out the news, drawing people in'
čim	'cry'
yəm	'laugh'

A.3 Motion verbs. These include both verbs that describe the manner of the motion and verbs that specify the direction or the endpoint of the motion.

čim	'crawl'
ičəm	'swim'
čəm	'jump'
wəkənəm	'go by wagon'
pepetənəm	'sailing'
neqəm	'dive'
šatəm	'(fish, seal) swimming'
six'əm	'wade out'
nəm	'go'
cam	'go up from water/up hill'
qlanəm	'go to the bow'
?il'əqəm	'go to the stern'
x'ə'aləm	'return, go back'

A.4 Spatial configuration. These verbs describe the assumption or maintenance of a body position.

θqəi'ke'əm 'kneel'  
 qe'wəm 'kneel'  
 'asəm 'face towards'

B. Non-agentive verbs. These are verbs denoting events without an external cause, but where the argument is not an agent in full control of the event.

B.1 Body processes. These processes are prototypically involuntary but involve a higher animate being who may have some partial control over the action.

čənəm 'tremble'  
 he'səm 'sneeze'  
 taq'əm 'cough'  
 he'pəm 'breathe'  
 čisəm 'grow'

B.2 Motion verbs. These are non-agentive motion verbs, including movement caused by a force of nature.

silem 'roll'  
 pīləm 'overflow'  
 hīləm 'fall from a height'  
 yak'əm 'smash up, break into pieces'  
 ke'pəxəm 'scatter'  
 šasəm 'slip down (e.g. a skirt)'  
 pə'pəpəšin 'staggering'  
 yiqəm 'fall, tip over'  
 yemətəm 'ripple'  
 x'čələm 'tide turns'  
 x'tə'firi'n 'tide reverses against the water flow'  
 me'yeqəm 'ripple (of water)'  
 q'əwəin 'slowly flowing'

B.3 Change of state. These verbs describe a change in the physical shape or appearance of some entity. No external cause is implied.

pəm 'swell up'  
 p'ə'pəq'əm 'roaring'  
 q'wəm 'fester (e.g. a boil)'  
 pəqəm 'bloom'  
 liq'əm 'get calm (water, weather)'  
 čə'xə'əm 'get dry (weather)'

B.4. Verbs of Emission. These include verbs of light, sound, smell, or substance emission. These events are seen as arising from inherent properties of the argument.

ke'vəsən 'gliner'  
 p'ə'š'əm 'shining, glistening (off of snow, ice, frost), shiny'  
 pix'əm 'spark'  
 ke'wəqəm 'flicker (light)'  
 p'ə'č'əm 'making the sound of hoof rattlers'  
 qe'pəqəm 'squeak, rasp'  
 šatəq'əm 'snore'  
 pə'p'əm 'smell foul, stink (e.g. a skunk or a mink)'  
 haq'əm 'smell bad (e.g., rotten fish smell)'  
 x'q'ə'č'əm 'smell'  
 me'xəm 'smell (e.g. a burning rag)'  
 šə'əm 'smell strong'  
 p'qəm 'drip'  
 x'čələsəm 'drip'  
 p'k'əm 'emit a cloud of dust or a (very fine) splash of water'  
 ke'šən 'start to sprinkle'  
 ke'šətəm 'sprinkle, drizzle'  
 ke'yeqəm 'smoke'  
 x'ə'n'k'əm 'roaring, heavy breathing'  
 θx'əm 'bleed'

## 2.2.2. Unergative versus unaccusative verbs

Based on cross-linguistic data, Levin & Rappaport Hovav (1995) [henceforth L. & RH] propose a typology of intransitive verbs. Following the Relational Grammar and

Government/Binding literature, they allow two basic types of monadic verbs—unergatives and unaccusatives. Unergative verbs are those whose sole NP is an external argument (or, in RG terms, a subject). In contrast, the sole NP in unaccusatives is an internal argument (or, in RG terms, an object). Previous research on the unergative vs. unaccusative distinction (Perlmutter 1978, Rosen 1984, among others) has shown a strong correlation between verb type and verb semantics. Verbs that denote willed, volitional actions and take animate agents are typically unergative, while verbs that are patient-oriented are unaccusative.

Many verbs, however, do not straightforwardly meet these definitions and thus are not easy to characterize. L & RH take tests developed to distinguish uncontroversially unergative and unaccusative verbs, and apply them to a variety of verb types. The cross-linguistic data sort into three classes of verbs: those that are unergative, those that are unaccusative, and those that “swing”, that is, those that are sometimes unergative and sometimes unaccusative across languages or within a language.

L & RH find that many more verb classes are unergative than would be expected under a definition based upon the concept of willed, volitional actions. They characterize unergative verbs as those that have an internal causer, whether or not the causer is a controlling agent. In agentive verbs, the agent is the internal cause and thus these are straightforwardly unergative. In non-agentive verbs, the verbs are internally caused if the events arise from the internal properties of the argument rather than through some external causer.

If we view the *Hə́lqəm fə́m* monadic verbs with a definition of unergative based on the notion of internal causer, we find that most of the verbs with *-m* fall within the unergative domain. The Type A verbs are agentive and therefore unergative. In addition, the verbs in classes B1, B3, and B4 would all be unergative by L & RH's definition. For example, the body processes in B1 involve an animate argument who is not strictly speaking an agent since the verb is not necessarily controlled. But these events are internally caused. Also, the argument of verbs of emission in B4 is an internal cause since the verbs come about as a result of the internal physical characteristics of the argument. So we see that L & RH would predict that many of the verbs with *-m* would be unergative.

In contrast, very few *Hə́lqəm fə́m* verbs with *-m* would fall into the unaccusative class. L & RH characterize unaccusative verbs as ones in which its sole argument is undergoing the directed change described by the verb. There is an implied external causer that is responsible for the change of state described. These include “break” verbs, “bend” verbs, and cooking verbs. In English and other languages, they characteristically alternate with a causative form. In *Hə́lqəm fə́m*, these are process unaccusatives, which tend to be simple roots. Their causative counterparts are formed with the general transitive suffix *-t*. In addition verbs of existence and appearance are thought to be unaccusative, and no verbs with *-m* fall into this class. Finally, there is a large group of psych verbs, such as *qel* ‘believe a lie’, *čəq* ‘get surprised’, *heq* ‘recall to mind’, none of which take *-m*.

In sum, what we have found, with only a few exceptions, is that monadic verbs in *Hə́lqəm fə́m* with the suffix *-m* fall under L & RH's characterization of unergative verbs on semantic grounds., though, of course, not all unergatives take *-m*. Furthermore, none of the verbs with *-m* denote the typical unaccusative meanings of process or existence and appearance.

### 2.2.3. Unergatives versus unaccusatives in *Hə́lqəm fə́m*

Some of the verbs, especially the non-agentive ones, are less straightforward. Therefore, in this section, we turn our attention to language internal tests for the verb class to see what these tell us about the status of monadic intransitives.

Gerdts (1991, 1996) surveyed 101 *Hə́lqəm fə́m* verb bases. Each base was tested with respect to a list of six verb suffixes.<sup>25</sup> The suffixes are: *-t*, the general transitive suffix; *-st*, the causative suffix; *-təl*, the reciprocal suffix; *-θət*, the reflexive suffix; *-nəmət*, the limited control reflexive suffix; and *-əlmən*, the desiderative suffix.<sup>26</sup>

Table 1 and Table 2 below, examples of these suffixes in combination with two verb bases *q'əyiləš* ‘dance’ and *qəp* ‘get added to’ are shown. The asterisk \* indicates that the combination of the verb base and the suffix is not possible. If the suffix is possible, a sample sentence is provided. These data show that there are differences between the two bases. While *qəp* ‘get added to’ allows the transitive suffix, *q'əyiləš* ‘dance’ does not. Furthermore, *q'əyiləš* ‘dance’ has a causative meaning when suffixed with the causative suffix. In contrast, the causative suffix on *qəp* ‘get added to’ has the grammaticized meaning of ‘have’ or ‘find’. With respect to reciprocals and reflexives, their meaning is ‘each other’ or ‘oneself’ when they appear with *qəp* ‘get added to’, but they do not carry these meanings with *q'əyiləš* ‘dance’. The limited control reflexive when suffixed on *qəp* ‘get added to’ has a reflexive meaning, but when suffixed on *q'əyiləš* ‘dance’ has the grammaticized meaning of ‘manage to’. Conversely, the desiderative suffix means ‘want’ when suffixed to *q'əyiləš* ‘dance’ but has the grammaticized meaning of inception or tendency when suffixed to *qəp* ‘get added to’. Thus, we see that very different forms arise when the same suffix is added to the two different bases.

<sup>25</sup>Howett (1993) uses a similar methodology to test verbs in N1e'ŋkəpm x. See Martina 1994 for a different approach, one that factors in aspect as well as argument structure.

<sup>26</sup>The morphemes discussed are: *-t*, the general transitive suffix, (Gerdts 1988a, 1993b, and to appear); *-st*, the causative suffix (Gerdts 1988a, 1991, 1994, 1995); *-təl*, the reciprocal suffix (Gerdts to appear), *-θət*, the reflexive suffix (Gerdts 1988a, 1989, to appear), *-nəmət*, the limited control reflexive suffix (Gerdts 1988a, to appear), and *-əlmən*, the desiderative suffix (Gerdts 1988b, 1991).

Table 1: Profile of an Unergative Verb

q̄ʷəyfləʃ 'dance'	nɪʔ	cən	q̄ʷəyfləʃ
aux	1sub	dance	
'I danced.'			
*q̄ʷəyfləʃ-t (dance+tr) 'dance it'			
q̄ʷəyfləʃ-stəx* (dance+cs) 'make s.o. dance'	nɪʔ	ɑ	q̄ʷəyfləʃ-stəx*.
aux	1plsub	dance-cs	
'We made him dance.'			
q̄ʷəyfləʃ-təl (dance+rec) 'dance together'	nɪʔ	q̄ʷəyfləʃ-təl	
aux	dance-rec		
'They danced together.'			
*q̄ʷəyfləʃ-θət (dance+refl) 'dance oneself' ???			
q̄ʷəyfləʃ-namət (dance+lc.refl) 'manage to dance'	nɪʔ	q̄ʷəyfləʃ-namət	
aux	dance-lc.refl		
'He got to dance.'			
q̄ʷəyfləʃ-šimən (dance+desid) 'want to dance'	nɪʔ	q̄ʷəyfləʃ-šimən	
aux	dance-desid		
'He wanted to dance.'			

Table 2: Profile of an Unaccusative Verb

q̄ʷəʔ 'get added to'	nɪʔ	q̄ʷəʔ	kʷəb	nɪ	ʒəlɪmcs	ʔə	kʷəb	nɪ	s-kʷukʷ.
aux	added	det	lpos	ring	obl	det	lpos	nm-cook	
'My ring got into my cooking.'									
q̄ʷəʔ-t (added+tr) 'put it in with'									
*q̄ʷəʔ-stəx* (added+cs)	ʔə	cən	səpəq̄ʷəʔ-stəx*	ʔə	kʷəb	tətʔ.			
aux	1sub	added(stat)-cs	obl	det	canoe.race				
'I have him in with those that are canoe racing.'									
q̄ʷəʔ-təl (added+rec) 'meet'	nɪʔ	q̄ʷəʔ-təl	ʔə	kʷəb	s-q̄ʷəʔ-təl-s	ʔə	stəbɪw.		
aux	added-rec	obl	det	nm-added-rec-3pos	det	river			
'They met one another at the confluence of the rivers.'									
q̄ʷəʔ-θət (added+refl) 'join'	nɪʔ	q̄ʷəʔ-θət	ʔə	kʷəb	həwələnɪ				
aux	added-refl	obl	det	play(cont)					
'He joined those that are playing.'									
q̄ʷəʔ-namət (added+lc.refl) 'manage to get (onself) in with'	nɪʔ	q̄ʷəʔ-namət							
aux	added-lc.refl								
'He managed to get in with them.'									
q̄ʷəʔ-šimən (added+desid) 'almost get added'	nɪʔ	q̄ʷəʔ-šimən	ʔə	kʷəb	nɪ	s <sup>h</sup> əwələnɪ.			
aux	added-desid	obl	det	lpos	washing				
'It kept getting mixed in with my washing.'									

Here is a chart summarizing the properties of unergative and unaccusative verbs. Grammaticized meanings are given in quotes.

(96)	causative -st	unergative cause	process unaccusative
	desiderative -alman	want	*/'find, have, get (stative)'
	limited control -namst	'manage to'	*/'about to, almost'
	transitive -i	*	accidental action on self
	reflexive -θst	*/'alone'	action on self
	reciprocal -tst	*/'together'	action on each other

Furthermore, in the sample of 101 verbs, 19 other verbs pattern like *q'pylts' 'dance'* and 52 other verbs pattern like *qst' 'get added to'*. Examples of these are given in (97) and (98) respectively.

(97) *h'eθ'am 'breathe', 'a:m 'call for', s'p'leap 'chop wood', k-i' 'climb', θ'p'nax' 'close eyes', šaq'al 'cross to the other side', 'at'en 'eat (inr.)', nem 'go', k'pil 'go down', cam 'go up to the house, go inland', yan'am 'laugh', 'aš'al 'paddle', til'am 'sing', 'amət 'sit down, rise out of bed', 'itət 'sleep', k'ililš 'stand up', siš'am 'wade', 'iməš 'walk', yays 'work'*

(98) *k-i'?' 'be separated', teq' 'be tall, be tight', lak' 'break', 'iye?'q 'change', βok' 'come to the surface of the water, float', yaš' 'come undone, get untied, get out of jail', x'e?' 'decrease in quantity, get less', θax' 'fade away, fade out of sight', β'as 'get bumped', k'es 'get burnt', ma'ya?' 'get cheaper', q'aq' 'get clubbed', lič 'get cut', čəy'x' 'get dry', θey'q' 'get dug', məq' 'get full of food', pas 'get hit', 'ak' 'get hooked, snagged, hung up', k'al 'get hurt', qe'p' 'get inflected, get tied, get initiated', qis' 'get knotted', β'ak' 'get light directed onto', x'ač' 'get lodged between', 'ik' 'get lost', m'aləq' 'get mixed in with', 'ix' 'get scratched, scraped', liq' 'get slack', k'al 'get split, upset', β'əš' 'get washed', 'e'β' 'get wiped', qiw' 'get wrapped around something', β'al 'go broke, lose it all gambling', ten 'go out of sight', tə'θ'nə 'boat) lišt, tili', q'ix' 'miss', šiq' 'scratch an itch', seq' 'tear', q'a'p' 'wrinkle'*

There is an obvious semantic difference between the verbs of (97) and those of (98). The verbs in (97) are agent-oriented, controllable actions (unergative verbs), while the verbs in (98) denote patient-oriented actions (unaccusative verbs). Thus, it seems that the differences in the occurrence and meaning of suffixes directly corresponds to the semantics of the verb base.

These two patterns account for 73 verbs in the sample of 101. These are the two major verb classes that are apparently relevant in Hələm itəm verb categorization. In addition, the tests distinguish four other classes of verbs. First, eight verbs in the sample have unergative semantics, but nevertheless allow the transitive suffix. These are: *ticam* 'swim along', *ctem* 'crawl', *nəqam* 'dive down', *š'čənəm* 'run', *səw'q* 'seek', *te:m* 'call out, yell', *čləm* 'jump', *'ifəts* 'carry (in one hand at arm's length)'. In each case, the addition of the transitive suffix adds a grammatical object that is semantically oblique. For example: *ctemət* 'crawl after it', *š'čənəmət* 'run after it', *te:mət* 'call out to him'. Second, there are two additional classes of unaccusative verbs, which allow little or no suffixation at all. These are the states, comprising ten verbs in the sample (e.g. *'iyas* 'be happy', *scu'ēt* 'be adept, clever', *'ayam* 'be slow'), and the verbs of location, comprising six verbs in the sample (e.g. *si'q* 'be underneath', *'il'əq* 'be aft', *tecal* 'arrive here, get here'). Finally, a class of four verbs (e.g. *qep* 'assemble, gather', *čisam* 'grow') exhibit mixed behavior, depending upon whether an animate or an inanimate nominal serves as the subject.

Thus, the preliminary research shows that at least five classes of intransitive verbs must be distinguished for Hələm itəm. This is not surprising given that Levin (1993) posits over four dozen verb classes for English. Further verb classes are likely to emerge in Hələm itəm as additional tests are applied to a larger sample of verbs. Nevertheless, we are able to give a hierarchical structure to verb classes as follows:

- (99) A. Unergative  
 (1) unergatives without -i transitives  
 (2) unergatives with -i transitives.  
 B. Unaccusatives  
 (1) process unaccusatives  
 (2) other unaccusatives  
     a. states  
     b. locations

#### 2.2.4. Testing the monadic verbs

Returning to the issue of the monadic verbs with -n, we apply the tests for unergativity versus unaccusativity to each of the verb subclasses to see how they are classified. First, as expected, the Type A active verbs all test to be unergative. They can take the causative (100), desiderative (101), and limited control intransitive suffixes (102), and the derived forms have appropriate semantics. Here are some samples from our data.

- (105) → niʔ cən heʔəm-stəx 'I got him to breathe.'  
 → niʔ taqʔəm-stəx 'It made him cough.'  
 → niʔ hesəm-stəx 'It made him sneeze.'
- (106) → niʔ heʔəm-əlmən 'He wants to breathe.'  
 → niʔ taqʔəm-əlmən 'He wanted to cough.'  
 niʔ hesəm-əlmən 'He started to sneeze.'  
 čisəm-əlmən 'begin to grow'
- (107) → niʔ heʔəm-namət 'She managed to breathe.'  
 → niʔ taqʔəm-namət 'She managed to cough.'  
 → niʔ čisəm-namət 'She managed to grow.'  
 niʔ hesəm-namət 'She finally sneezed.'

As seen above, each verb tests to be unergative by at least two of the tests. Furthermore, speakers rejected the transitive, reflexive, and reciprocal suffixes in combination with these verbs.

The non-agentive motion verbs in B2 are also mostly unergative. Note that the several verbs in this group, the 'roll' class, have a very special status in that they show alternations between *-m* and *-t*. But instead of showing the typical antipassive alternation between an agent-oriented intransitive and a transitive, they show an alternation between a patient-oriented intransitive and a transitive. The of intransitive is sometimes referred to as anticausative alternation, since it seems like the causer/agent is being suppressed.

- (108) naʔat ye-sil-əm ʔə snəxʔəl-s k-θə xʔənifəm.  
 aux ser-roll-m det canoe-3pos det white.man  
 'The white man's car is rolling.'
- (109) neim silit ʔə wekan qʔset ʔə ʔə staləw.  
 go roll-t det wagon dip-t obl det river  
 'Go and roll the wagon into the river.'

These verbs do not take oblique objects, and therefore we treat them as monadic predicates. Other verbs of this type are:

- (100) qəwəm-stəxw 'make him drum', xiñəm-stəxw 'make it grow!', nəqəm-stəxw 'make her dive', siʔəm-stəxw 'make him wade out', qjanəm-stəxw 'make her go to the bow or get in the front seat', qəwəm-stəxw 'make him kneel'
- (101) həwələm-əlmən 'want to play', qəwəm-əlmən 'want to rest', qəwəm-əlmən 'want to howl', kʔecəm-əlmən 'want to scream', yənem-əlmən 'want to laugh', čtem-əlmən 'want to crawl', čkəm-əlmən 'want to jump', wekənəm-əlmən 'want to go by wagon', neim-əlmən 'want to go', θqəiʔəʔəm-əlmən 'want to kneel'
- (102) həwələm-námət 'manage to play', qələm-námət 'manage to camp', leqəm-námət 'manage to whisper', yənem-námət 'manage to laugh', ličəm-námət 'manage to swim', ʔileʔəqəm-námət 'manage to go to the stern', xʔəʔələm-námət 'manage to return', ʔasəm-námət 'manage to face towards'

These verbs often take reciprocal suffixes. When they do, they usually have a collective meaning rather than a referential one.

- (103) qələm-təl 'take turns staying over at each other's place', qəwəm-təl 'howl together', wekanəm-təl 'go by wagon together', xʔəʔələm-təl 'return together', θqəiʔəʔəm-təl 'kneel together', ʔasəm-təl 'both face the same direction'

Also, some of these verbs can be transitivized with the suffix *-t*. In this case the object is semantically an oblique, usually a locative or directional.

- (104) qəwəmət 'howl at him/her', xiñəmət 'growl at him/her', leqəmət 'whisper to him/her', ličəmət 'swim after him/her', nəqəmət 'dive down to him/her', siʔəmət 'wade out to him/her', θqəiʔəʔəmət 'kneel in front of him/her/it'

Thus, we see that the Type A verbs are prototypically unergative.

Type B verbs, the non-agentive verbs, prove to be more problematical. The tests yield mixed results. A verb may exhibit some but not all the features associated with unergativity or unaccusativity. Furthermore, verbs within a class do not always behave alike.

The B1 verbs, denoting body processes, give fairly clear results. There are four verbs in this group: *hesəm* 'sneeze', *taqʔəm* 'cough', *heʔəm* 'breathe', and *čisəm* 'grow'. They test for the most part to be unergative in that they allow causatives (105), desideratives (106), and 'manage to' constructions (107). We have marked data indicative of unergativity with →.

(110)	piłem	'overflow'	piłt	'fill it to the brim'
	biłem	'fall from a height'	hiłt	'throw it off'
	yał'am	'smash up'	yał'at	'smash it up'
	łe pełem	'scatter'	łe pıłt	'scatter them'
	ıasam	'slip down (e.g. a skirt)'	ıasat	'slide it down'
	paýpayın	'staggering'	payt	'bend it'

Even though the verbs in this class clearly have non-agentive semantics, many tests to be unergatives, at least if we take the causative as criterial. Forms with the desiderative were usually rejected and the manage to construction yielded mixed results.

(111)	→ ıasam-stax	'make it slip down'
	→ paýpaýın-stax	'make him stagger down'
	→ piłem-stax	'make it overflow'
	→ yał'am-stax	'make it break'
	→ yıqam-stax	'make it tip over'
	→ ıe pełem-stax	'leave it scattered'
	→ yemıtam-stax	'make it ripple'
	→ q'awıñ-stax	'let it run'

(112)	piłem-əlmen	'almost full'
	yıqam-əlmen	'on the verge of tipping over'

(113)	→ sılem-namət	'managed to roll'
	→ biłem-namət	'managed to fall'
	yıqam-namət	'finally tipped over'
	q'awıñ-namət	'started to flow (of ice)'

We give the results of tests on five of the change of state verbs in B3.<sup>27</sup>

(114)	→ ıam-stax	'make it swell'
	→ peqem-stax	'let it bloom'

<sup>27</sup>One verb, *ce yax'am* 'get dry (weather)', yielded grammatical forms, but with the idiomatic reading of 'being depressed'. So *ce yax'am-stax* means 'make him/her depressed' and *ce yax'am-əlmen* means 'become depressed'.

(115)	ıam-əlmen	'start to swell'
	q'cem-əlmen	'started to fester'
	peqem-əlmen	'start to bloom'
	liq'am-əlmen	'looks like it's getting calm'
(116)	ıam-namət	'manage to make it swell'
	peqem-namət	'newly flowered'
	liq'am-namət	'finally getting calm'
(117)	ıam-θət	'rose'
	pa'p'q'am-θət	'go rotten'
	q'cem-θət	'get festered'
	liq'am-θət	'finally got calm'

Finally, we turn to Type B4, the emission verbs. The tests on this group of verbs yielded a patchwork of results. We have summarized the results for the fourteen verbs for which we have data in Table 3. Note that about half of the verbs allow causatives with a meaning of 'make' and two allow the 'manage to' construction. Nevertheless, it appears that at least seven of these verbs test to be unaccusative.



## 2.2.5. Summary

In this section, we have grouped the monadic verbs with *-m* into semantic subclasses, then tested some of the verbs in each of the subclasses for unergativity versus unaccusativity. Our results are only tentative, pending further data elicitation. Nevertheless, some clear patterns have emerged. In (118), we list the results of our tests and compare them with the predictions made by Levin and Rappoport Hovav (1995) on the basis of cross-linguistic evidence.

(118)		L & RH's Predictions	Hálqəmfiñəm
	A.1 Activities, volitional acts	unergative	unergative
	A.2 Manner of speaking	unergative	unergative
	A.3 Motion verbs		
	Manner of motion:	unergative	unergative
	Directed motion:	unaccusative	unergative
	A.4 Spatial configuration	unergative	unergative
	B.1 Body processes:	unergative	unergative?
	B.2 Non-agentive motion verbs:	unaccusative	unergative:???
	B.3 Change of state:	unaccusative	unaccusative
	B.4 Verbs of emission:	unergative	mixed

We see that the Hálqəmfiñəm facts mostly match L & RH's expectations and that, furthermore, the data support their view that the unergative/unaccusative distinction rests on the notion of internal cause, not on the notion of agency or control. Thus, even though body processes, motion verbs like 'roll', and verbs of emission are non-agentive, many of them test to be unergative, at least by some of our tests.

The Hálqəmfiñəm data deviate from L & RH's predictions in two systematic ways. First, apparently all motion verbs in Hálqəmfiñəm are unergative, regardless of agentivity or direction toward an endpoint. Second, the verbs of emission do not behave like a class. Some test to be unergative while others are clearly unaccusative. This suggests that some other yet to be determined principle is at play in this class of verbs.

## 2.3. Intransitive verbs and the middle

In section 1, we argued that the suffix *-m* is the marker for the middle category. We discussed the middle system in Hálqəmfiñəm, arguing that it arose as a reflexive construction and then spread to other uses. Hálqəmfiñəm has a second, newer reflexive, the plain reflexive *-θət*, and so it is a two-reflexive language. Kemmer (1993) makes strong predictions about what

Table 3: Emission Verbs

-θət	#manage to	make it	getting to	make it	make it	manage to make it	*	now	start	now	become	now	*
-nəmt-	manage to	make it	start to	manage to get it	manage to	manage to	*	now	start	now	become	now	*
-əlmənt-	make it	getting to	start to	manage to get it	manage to	manage to	*	now	start	now	become	now	*
-stəx-	make it	getting to	start to	manage to get it	manage to	manage to	*	now	start	now	become	now	*
	emit a cloud of dust	'glitter'	'making the sound of hoof rattlers'	'smell bad'	'shining, glistening'	'snore'	'smell foul, sink'	'drip'	'start to sprinkle'	'sprinkle, drizzle'	'drip'	'start to sprinkle'	'drip'
	pkəm	tewsəm	'etəh	həqəm	'ləkəm	lədəqəm	je'təm	x'ešəm	tešəm	tešəm	tešəm	tešəm	tešəm

classes of intransitive verbs are expected to occur in a two-reflexive language where one of the reflexives is the source for the middle. The middle morphology will spread from the reflexive to a verb class and then from one verb class to another. Only some verbs of each class will take on middle morphology. Kemmer (1993:224) states this as an implicational hierarchy:

- (119) Reflexive < Nontranslational < Change in < Translational < Active One-Participant Verbs  
 Motion Body Posture Motion Verbs

If there are any verbs with middle marking in a category, then there will be at least some verbs with middle marking in each of the categories to the left. Hálqəmíñáñ shows verbs with middle marking at each point of the hierarchy.

Starting from the left, the middle is used on verbs of nontranslational motion, that is, verbs of moving the body without changing location. Only one verb of this meaning appeared in the sample above. However, there are numerous examples involving lexical suffixes with *-m*.

- (120) a. with lexical suffix *-as* 'face'
- |          |                                   |
|----------|-----------------------------------|
| ʔasəm    | 'face towards'                    |
| kʔəʔásəm | 'lift your face'                  |
| naʔasəm  | 'face away, turn one's face away' |
| qəlasəm  | 'turn away'                       |
| qəbasəm  | 'look down'                       |
| čaləsəm  | 'look back, turn around'          |
| xʔaʔasəm | 'face towards'                    |
- b. with lexical suffix *-žen* 'foot'
- |             |                                 |
|-------------|---------------------------------|
| ləm xʔžénəm | 'stomp feet on ground or floor' |
| ləžénəm     | 'pull your feet back'           |
| məŋ qžénəm  | 'put your feet in the water'    |

These examples show how the reflexive *-m*, which predominantly occurs after lexical suffixes, gets extended to take on non-reflexive meanings. In the true reflexive, we see the *-m* is used to represent 'self' as opposed to 'other'. For most of the situations in (xx), transitive counterparts are impossible, showing that the self/other contrast is not relevant for these examples.

Next, we would expect some verbs of change in body posture to take *-m*. We have seen several verbs with this meaning above, including *θəpʔkʔeʔəm* 'kneel', *qəwəwəm* 'kneel', and *xʔéñacəm* 'sit'. Next, we see middle morphology on verbs of translational motion, that is, verbs of self-induced motion of an animate entity along a path in space (Talmy 1985). Verbs of

this meaning are well-attested in the above data. The motion verbs in A3 illustrate this category, for example, *nəm* 'go', *hícam* 'swim', and *síxʔəm* 'wade out'. In fact, *-m* often contributes the meaning of motion, as seen in verbs formed from nouns, like *wəkənəm* 'go by wagon', *nəcəwixʔəm* 'visit', and other examples in (xx) and (xx) above. Finally, we see that many active one-participant verbs take middle morphology. The actions in A1 above illustrate this, for example, *qəwətəm* 'drum', *nəwšíñəm* 'play', and *qəlatəm* 'camp'. Suffice it to say that Hálqəmíñáñ shows intransitive verbs with middle morphology from all positions of the hierarchy.

In addition, Kemmer (1993) also discusses several other verb classes that radiate directly from the core construction, the reflexive. First are verbs of grooming or body care, which Kemmer claims are universally attested in languages where reflexive is the source construction for the middle. Further, she claims that 'bathe' is the prototypical verb taking the middle. As we discussed in section 1.2 above, numerous examples of grooming verbs with lexical suffixes take the middle, but *šəkʔəm* 'bathe' is the one clear example of a middle without a lexical suffix.

Also radiating from the reflexive according to Kemmer (1993:18) are emotive speech acts. The data in Type A3 above would pertain here, for example: *kʔecəm* 'scream, yell', *xʔəm* 'cry', and *yənəm* 'laugh'. Kemmer (1993:19) notes that a prototypical speech act with emotional overtones would be the verb 'confess', which does in fact have middle morphology in Hálqəmíñáñ: *míñlənəm*.

Two other verb types occurring in languages with a reflexive middle are the indirect middle and natural reciprocal events. The indirect middle is a type of self-benefactive and includes actions in which the agent is the implied recipient or benefactive. The suffix *-m* shows up productively on verbs of this type: *ʔa:m* 'ask/call for', *i:m* 'beg/ask for', and *ya:m* 'place an order for'. In (61) above, we showed that these forms take an oblique object and alternate with a transitive with an applicative meaning. The verb *íayəm* 'to claim land', which literally means 'to stick to something', also exemplifies indirect middle. Verbs with middle marking that denote natural reciprocal events include *nənəm* 'converse, discuss' and *qəp-as-əm* 'assemble, gather face to face'.

Finally, Kemmer (1993:17) mentions a class of spontaneous events. This class is seen as having semantic connections not with the reflexive core, but with the passive and the active one-participant verbs. The change-of-state verbs of type B3 illustrate this, for example, *pə:m* 'swell up' and *ʔəpʔəqʔəm* 'rotting'. Also, forms like *θkəsəm* 'park, come to a stop' and *čisəm* 'grow' fit in this category.

In sum, we see that many classes of verbs take middle morphology cross-linguistically. The Hálqəmíñáñ system seems to have a few verbs in most classes. At least two of the classes—grooming/body care and translational motion are robustly exemplified. Furthermore, middle morphology is used to add new words to these classes, as shown by denominal verbs like *təkénəm* 'put on one's socks' and *wəkənəm* 'go by wagon'.

We are left with the question, what kind of verbs do not take middle morphology in

Hə́ləmfišəm? Two classes mentioned by Kemmer are the emotional middle and the cognition middle. Neither of these seem to appear with *-m* in Hə́ləmfišəm. These would include psych-verbs like 'angry', 'sad', and 'happy', and cognitive verbs like 'think', 'ponder', and 'believe'. No verbs of this group appear with *-m* in Hə́ləmfišəm.<sup>28</sup> Also, as noted above, process unaccusatives tend to appear as bare stems and thus do not usually occur with middle morphology.

### 3. Conclusion: The view from the middle

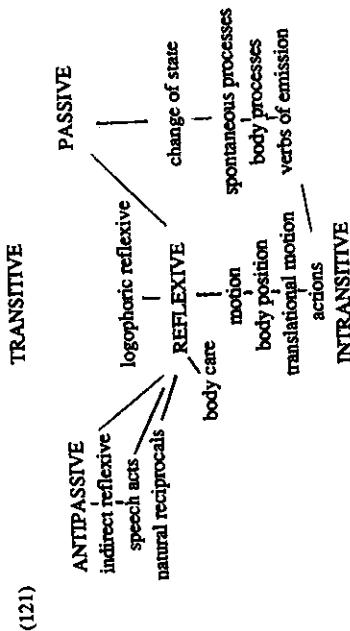
Our investigation has shown that there is no single property that definitively unites all constructions with *-m*, although there is a general sense that each construction is deviating from a fully transitive counterpart. If we place intransitives at one end of a diamond and transitives at the other, then we find that there are three constructions that sit in the middle—the antipassive, the passive, and the reflexive. This is because they are semantically transitive but inflectionally intransitive. What we find in Hə́ləmfišəm is that some, though not all, constructions in each of these areas is marked by the suffix *-m*.

If we view this problem from a cross-linguistic perspective, we see that other languages have morphology which mark a similar range of constructions and are frequently referred to as *midles*. In her extensive study of the middle, Kemmer (1993) refers to middle systems as a set of relations between the morphosyntactic and semantic middle categories. The semantic category middle has no precise boundaries but has a semantic core that matches the traditional definition of middle voice: an action or state that affects the subject of the verb and its 'interests'.

Kemmer has found that middle systems develop two ways diachronically, depending upon the source use of the middle morpheme. The most common source is reflexive. We have proposed that personal reflexive is the source of the middle marker in Hə́ləmfišəm. The different uses of the middle developed from the central source of the construction—the personal reflexive. The personal reflexive is fully productive. Furthermore, unlike the passive or antipassive, it is represented solely by the morpheme *-m*. Passives take other morphology—subordinate passives lack *-m*; antipassives in *-ls* are much more common and productive than antipassives in *-m*. Thus, the personal reflexive is a good choice for the central source morpheme in the middle system. Furthermore, its most common use is after lexical suffixes where it signals that the action was in one's own interest rather than for another's. Thus the personal reflexive is totally suitable as a source for the middle.

Starting from this core meaning, the middle radiates out in different directions and shares properties with a several different constructions. Following Kemmer, we represent the middle system for Hə́ləmfišəm in the following diagram:

<sup>28</sup>We mentioned above the intensive 'iyasəm 'get happier' based on the form 'iyas 'happy.



Each pair of constructions connected in the web share some properties. The middle marker is found on some of each of the constructions that are part of the middle system.

The Hə́ləmfišəm middle must be an old category. What we expect is that when the reflexive category radiates out to other categories to create a middle system, the language will develop a second, newer reflexive. This reflexive is more transitive than the older one and will have a more transparently reflexive meaning. This seems to be the situation in Hə́ləmfišəm. Although both types of reflexives are surface intransitives, the reflexive *-θət* patterns with the object agreement morphology in having the transitive marker as its initial element. Furthermore, the reflexive *-θət* is limited to core cases of an action involving an agent and a patient and thus is used in contexts with a high elaboration of events. The reflexive *-m* picks up cases at the edge where it represents a possessive or benefactive relationship to the agent or the speaker.

Another reason to surmise that the middle is old comes from the range of intransitive verb classes that it appears on. According to Kemmer (1993:224), the marker should extend into verb classes such as motion verbs, verb of change in body posture, and grooming verbs. In fact, many verbs from these classes do take middle marking in Hə́ləmfišəm. Moreover, middle usage sporadically extends to other verb classes. These include emotive speech acts, indirect reflexives, and natural reciprocals. It spreads from motion and body process to spontaneous events.

Looking at *-m* from the point of view of a central category looking out, we see a web of connected meanings. At the edges of the system the original reflexive meaning is almost entirely lost. The middle grammaticizes into something more aspectual indicating such properties as change of state and intensive.

In polysynthetic languages, many morphemes grammaticize at once. Each radiates, resulting in a network of overlapping morphological systems.

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