Inside and Outside the Middle

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0. Introduction[1]

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 *-θət* in (1a) in Həl̓q̓əmín̓əm̓, the Island dialect of the Halkomelem language, also serves as an inchoative (1b), the reciprocal suffix *-təl* (2a) also serves as a collective (2b), and the desiderative suffix *–əlmən* (3a) also serves as an inceptive (3b):

(1) a. q̓ayθət 'kill self', c̓əy̓xʷθət 'dry self', ləx̌ʷəθət 'cover self', həlíθət 'save self'
b. ʔayəmθət 'get slow', θiθát 'get big', x̌ax̌θət 'get stormy', ʔiyəsθət 'get happy'

(2) a. c̓awətəl 'help each other', ʔik̓ʷətəl 'separate from each other', maləqʷtəl 'mix with each other', x̌iq̓ətəl 'scratch each other'
b. ʔəɬtantəl 'eat together', ya:ystəl 'work together', ʔiməstəl 'walk together'

(3) a. l̓icəmə́lmən 'want to swim', l̓iləmə́lmən 'want to swim', ɬeẇə́lmən 'want to run away', ʔənəxʷə́lmən 'want to stop'
b. q̓ʷaqʷə́lmən 'almost got hit', θəxʷə́lmən 'almost fade out of sight', yəxʷə́lmən 'nearly came undone', ʔax̌ʷə́lmən '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 = transtive.

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 Həl̓q̓əmín̓əm̓ as being particularly multifunctional.[2] 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. l̓əm̓šəm̓əm 'braid one's hair'
b. ʔiləqəlcəm 'buy it for me'
c. q̓ʷələm ʔə k̓ʷ sce:ɬtən 'cook some salmon'
d. kʷənətəm 'be taken'

These constructions all have transitive counterparts. Thus, *-m* appears to function as a 'detransitivizer'. 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', x̌in̓əm 'growl', taq̓ʷəm 'cough', yiqəm 'tip over', q̓əwəm 'kneel', ɬeẇsəm̓ 'glitter', p̓eq̓əm 'bloom', p̓iləm 'overflow', q̓el̓əm '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: wekən 'wagon', wekənəm 'to go by wagon'
b. noun to adjective: qaʔ 'water', qaʔəm 'watery'
c. location to state: ʔilé?əq 'be in the stern', ʔilé?əqəm 'go to the stern'
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.[3]

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

[2]For previous work on *-m* in Halkomelem, see Galloway 1993, Leslie 1979, and Suttles to appear. Galloway, in particular, gives a thorough listing for intransitive verbs in *-m*.

[3]The polymorphous nature of *-m* is especially pronounced in Southern Interior Salish languages where it has taken on full aspectual status (Kroeber 1986).

discoveries we have made for Həl̓q̓əmín̓əm̓. 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).[4] 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. Gerdts (1991, 1996) has previously discussed Həl̓q̓əmín̓əm̓ 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 Həl̓q̓əmín̓əm̓ that have corresponding transitives. First, however, we give a brief summary of Həl̓q̓əmín̓əm̓ 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

[4]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 Gerdts (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 *–nəxʷ* (8), and the causative suffix *-stəxʷ* (9).

(7) ni? q̓ʷaqʷ-ət-əs łə sɬeni? ʔə kʷθə sq̓əməl̓
aux club-tr-3erg det woman obl det paddle
'He clubbed the woman with the paddle (on purpose).'

(8) ni? q̓ʷəqʷ-nəxʷ-əs łə sɬeni? ʔə kʷθə sq̓əməl̓
aux club-l.c.tr+3obj-3erg det woman obl det paddle
'He accidentally clubbed the woman with the paddle.'

(9) ni? ʔiməš-stəxʷ-əs łə sɬeni?.
aux walk-cs+tr+3obj-3erg det woman
'He made the woman walk.'

Surface transitivity is transparent in Həl̓q̓əmín̓əm̓. The transitive markers themselves are a test for transitivity: if the verb is morphosyntactically transitive, then it must have a transitive suffix. Furthermore, as Gerdts (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).[5]

(10) ni? ʔiməš łə sɬeni?.
aux walk det woman
'The woman walked.'

[5]For further conditions on causatives, see Gerdts 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? cən q̓ʷəl-ət-stəxʷ łə słeni? (?ə) kʷθə səplíl.
aux 1sub bake-tr-cs+tr+3obj det woman obl det bread
'I had the woman bake the bread.'

(12) *ni? cən nə?ém-st(əxʷ)-stəxʷ łə Mary (?ə) kʷθə puk-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. Həl̓q̓əmín̓əm̓ 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 *-əs*, as seen in the above examples. In contrast, third person subjects in main clause intransitives do not determine agreement.[6]

Also, only transitive verbs license a direct object NP in direct case, for example, *łə słeni?* 'the woman' in examples (7) and (8) above, as opposed to oblique NPs, for example, *kʷθə sq̓əməl̓* 'the paddle' in (7) and (8), which is introduced by the multi-purpose oblique preposition *?ə*.

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

(13) tθə cq̓iǐ spe?əθ ni? ši?šǩʷam̓
det black bear aux swimming
'the black bear that is swimming'

(14) tθə sqəy̓qe? ni? q̓ayt-əs kʷθə spe?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 *-əs* is omitted.

[6]Həl̓q̓əmín̓əm̓ has a split agreement system. In suborinate clauses, all third person subjects that *-əs* agreement.

[7]These facts hold generally for extractions including Wh-questions, clefts, and focus constructions.

(15) tθə swəy̓qe? ni? q̓ayt kʷθə spe?əθ
det man aux kill-tr det bear
'the man that killed the bear'

In contrast, obliques can only be extracted via nominalization:

(16) kʷθə sq̓əməl̓ ni? š-q̓ʷaqʷ-ət-s łə słeni?
det paddle aux nm-club-tr-3pos det woman
'the paddle with which he clubbed the woman'

The oblique nominalizer *š-* 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 Həl̓q̓əmín̓əm̓.

1.2. Personal reflexives

In Həl̓q̓əmín̓əm̓ 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? cən ləx̌ʷə-θət. 'I covered myself.'
ni? č ləx̌ʷə-θət. 'You (sg.) covered yourself.'
ni? ct ləx̌ʷə-θət. 'We covered ouselves.'
ni? ce:p ləx̌ʷə-θət. 'You (pl.) covered yourselves.'
ni? ləx̌ʷə-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) niˀ tši-ˀqʷ-t-əs łə słeniˀ kʷθə sqʷəméy̓.
aux comb-hair-tr-3erg det woman det dog
'The woman combed the dog's hair.'

(19) niˀ ˀə č θəy-eˀł-θám̓š?
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 *-θət* (20a, 21a); instead they use the suffix *-m* (20b, 21b).

(20) a. *niˀ cən t̓ᶿəx̌ʷ-šé-θət.
aux 1sub wash-foot-tr:refl
'I washed my feet.'

b. niˀcən t̓ᶿəx̌ʷ-šén-əm.
aux 1sub wash-foot-intr
'I washed my feet.'

(21) a. *niˀ ˀəx̌-ayθí-θət.[8]
aux scrape-con:mouth-tr:refl
'He shaved.'

b. niˀ ˀəx̌-ayθín-əm.
aux scrape-con:mouth-intr
'He shaved.'

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

(22)	ˀeˀt̓ᶿ-šə-t	'wiping his/her feet'	ˀeˀt̓ᶿ-šən-əm̓	'wiping one's feet'
	šk̓ʷ-əyəł-t	'bathe his/her baby'	šk̓ʷ-əył-əm	'bathe one's baby'
	t̓əmš-ən̓ə-t	'braid his/her hair'	łəm̓š-ən̓ə-m	'braid one's hair'

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

[8]The final *n* of a lexical suffix deletes before the *-t* transitive.

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

(23)	seˀ-šén-əm	'raise one's foot'
	seˀ-cs-əm	'raise one's hand'
	t̓ᶿx̌ʷ-cs-əm	'wash one's hands'
	łič̓-áˀqʷ-əm	'get a haircut'
	tš-iˀqʷ-əm	'comb one's hair'
	t̓q̓ʷ-el̓č̓ə-m	'cut one's hair'
	xʷt̓ᶿəł-qín-əm	'quench one's thirst'
	t̓ᶿx̌ʷ-əlnəs-əm	'brush one's teeth'
	xʷˀət̓ᶿ-əlqsən-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)	sew̓q̓-əw̓txʷ-t	'looking for a house for him/her'	sew̓q̓-əw̓txʷ-əm̓	'looking for a house for oneself'
	kʷaxʷ-əw̓txʷ-ət	'knock on his/her house'	kʷaxʷ-əw̓txʷ-əm	'knock on own house'
	θq̓ʷ-it̓ᶿeˀ-t	'put many layers of clothes on him/her'	θq̓ʷ-it̓ᶿeˀ-əm	'put many layers of clothes on self'

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

(25)	θəy-eˀł-əm	'make one's own bed'
	kʷən̓é-w̓əł-əm	'take one's own car or boat'
	θəy-əw̓txʷ-əm	'build a house for oneself'
	łəw̓-t̓ᶿeˀəm	'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-coreferential external possession examples in the third column.

(26)	a.	meˀ-šən 'shoe comes off'	meˀ-šén-əm 'take off one's shoes'	meˀ-šé-t 'take off his/her shoes'
	b.	qəq̓-cəs 'bandaged hand'	qəq̓-cs-əm 'bandage one's hand'	qəq̓-cəs-t 'bandage his/her hand'
	c.	š-t̓ᶿx̌ʷ-as 'washed face'	xʷt̓ᶿx̌ʷ-ás-əm 'wash one's face'	xʷt̓ᶿx̌ʷ-as-t '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.	šak̓ʷ-əm 'bathe (self)'	šak̓ʷ-ət 'bathe him/her'
	b.	hi:wəs-əm[9] 'bring oneself to people's attention'	hi:wəs-t 'bring him/her to people's attention'
	c.	c-məq̓məq̓-əm 'fill oneself until bloated'	məq̓-ət 'fill him/her with food'

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

(28)	a.	kəpú	'coat' (from French *capote* via Chinook Jargon)
		kəpúˀəm	'put one's coat on'
		kəpúˀət	'put his/her coat on'
	b.	ləšá:n	'shawl' (from French *le châle*)
		ləšá:nəm	'put one's shawl on'
		ləšá:nt	'put a shawl on him/her'
	c.	stekən	'sock' (from English stocking)
		təkénəm	'put one's socks on'
		təként	'put his/her socks on'

[9] This may contain the lexical suffix *-as* 'face', which is also the goal applicative. CF. *ˀiwəst* 'to point it out, to show it'.

	d.	yasáˀqʷ	'hat'[10]
		yasáˀqʷəm	'put one's hat on'
		yasáˀqʷt	'put his/her hat on'
	e.	qʷłeỷšən	'shoe'[11]
		qʷłəỷšénəm	'put one's shoes on'
		qʷłəỷšét	'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) ˀeˀət yəƛ̓əƛ̓əm̓-šéń-əm̓ tᶿəń mən ˀə tᶿə qʷəłłéỷšən.
aux ser-try+stative-foot-m det+2pos father obl det shoes
'Your father has tried on all the shoes.'

(30) niˀ nem̓ xʷˀət̓ᶿ-əlqsən-əm kʷθəń məńə.
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 Həl̓q̓əmíńəm̓, this provides additional evidence for their surface intransitivity.

(31)	a.	q̓p-as-əm-stəxʷ gather-face-m-cs	'make them assemble'
	b.	yəɬ-aˀqʷ-əm-stəxʷ rub-head-m-cs	'make him/her shampoo'
	c.	šak̓ʷ-əm-stəxʷ bathe-m-cs	'make him/her bathe'
	d.	təláləs-əm-stəxʷ glasses-m-cs	'make him/her wear glasses'
	e.	ˀit̓ᶿ-əm-stəxʷ dress-m-cs	'dress him/her'

[10] The word for hat contains the lexical suffix for head *-aˀqʷ*.
[11] 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 unusal 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), Həl̓q̓əmíṅəṁ benefactives are expressed in applicative constructions formed by the addition of the verbal suffix *-łc*, 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 *ʔə*.

(32) ni? q̓ʷəl-əłc-θáṁš-əs ʔə kʷθə sce:łtən.
aux bake-ben-tr:1obj-3erg obl det salmon
'He baked the salmon for me.'

(33) ni? ʔə č kʷən-əłc-θáṁš ʔə k̓ʷ səplíl.
aux int 2sub take-ben-tr+1obj obl det bread
'Did you get me some bread?'

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

(34)

q̓ʷələt	'bake it'	q̓ʷələłcət	'bake it for him/her'
θəyt	'fix it'	θəyəłcət	'fix it for him/her'
x̌əl̓t	'write it'	x̌ələłcət	'write it for/to him/her'
kʷənət	'take it'	kʷənəłcət	'take it for him/her'
p̓eɬ̓θət	'sew it'	p̓eɬ̓θəłct	'sew it for him/her'

The applicative suffix *-łc* 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 corferent to the speaker.[12]

[12]Suttles (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) neṁ č ʔiləq-əłc-əm ʔə k̓ʷ səplíl.
go 2sub buy-ben-intr obl det bread
'Go buy some bread for me/*yourself/*him!'

(36) neṁ č ce? ʔaləx̌-əłc-əm ʔə k̓ʷ q̓əx̌mín.
go 2sub fut gather-ben-intr obl det consumption seed
'Go and gather some consumption seed for me!'

(37) ni? ʔə č kʷən-əłc-əm ʔə k̓ʷ telə?
aux int you get-appl-m obl det money
'Did you get me some money?'

(38) ni? ʔə č wəł yak̓ʷ-əłc-əm ʔə k̓ʷ təməł?
aux int you alredy smash-appl-m obl det ochre
'Did you already break up the ochre for me?'

(39) ni?cən q̓ʷəl-əłc-əm.
aux1sub bake-ben-intr
'I cooked it for myself.'[13]

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.[14] 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:

[13]The reflexive suffix *-θət* cannot follow an applicative suffix:

(i) *ni? cən q̓ʷəl-əłc-θət.
aux 1sub bake-ben-refl
'I cooked it for myself.'

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

[14]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)	ɬaxʷəɬcəm	'take downhill for me'	ɬaxʷəɬcət	'take downhill for him/her'
	pq̓ʷəɬcəm	'break a piece off for me'	pq̓ʷəɬcət	'break a piece off for him/her'
	q̓iẇəɬcəm	'hang it for me'	q̓iẇəɬcət	'hang it for him/her'
	θəyəɬcəm	'fix it for me'	θəyəɬcət	'fix it for him/her'
	ɬq̓ʷəɬcəm	'break it for me'	ɬq̓ʷəɬcət	'break it for him/her'
	ɬθx̌əɬcəm	'wash it for me'	ɬθx̌əɬcət	'wash it for him/her'
	ʔa:ɬcəm	'ask for for me'	ʔa:ɬcət	'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 an imperative as in (35) and (36). However, a third person subject is possible in the the domain of a speech act verb used to expressed an indirect imperative, as in the following example:

(41) cse-t cən ce? łə sleni? ʔəẇ q̓ʷəl-əɬc-əm-əs
tell-tr 1sub fut det woman comp bake-ben-intr-3ssub
ʔə kʷθə 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? łə sleni? ʔəẇ tš-iʔqʷ-əs
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 **kʷən-ɬc-əm-st-á: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) niʔ ʔə č kʷən-əɬc-əm-namətʔ
aux int you get-appl-m-l.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. niʔ q̓ʷəl tθə sce:ɬtən.
aux bake det salmon
'The salmon cooked/barbecued.'

b. niʔ q̓ʷəl-ə-təs tθə sce:ɬtən.
aux bake-tr-3erg det salmon
'He cooked/barbecued the salmon.'

c. niʔ q̓ʷəl-əm ʔə tθə sce:ɬtən.
aux bake-m obl det salmon
'He cooked/barbecued/bake the salmon.'

(45) a. k̓ʷəɬ kʷθə štihélə nə-s-nəẇ-xʷk̓ʷs-eṅə.
spill det teapot 1poss-nm-aux+comp-burn-ear
'The kettle spilled and I got a burnt ear/side of head.'

b. niʔ k̓ʷɬe-t-əs tθə qaʔ.
aux spill-tr-3rd det water
'He poured the water.'

c. cse-t tᶿə swiẇləs ʔəẇ niɬ-əs neṁ ḱʷɬ-eʔəm
tell-tr det young-man comp be-he-3ssub go spill-m
ʔə tᶿə qaʔ.
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	'bury it'	pənəm	'plant, sow'
	q̇əp	'gathered'	q̇pət	'gather it'	q̇peʔəm	'gather'
	ḱʷes	'get hot'	ḱʷest	'heat it'	ḱʷseʔəm	'heat over flames, singe'
	miθ	'get mashed'	miθət	'mash it'	məθéʔəm	'mash'
	pəqʷ	'break'	pqʷat	'break it'	pqʷeʔəm	'break some off'
	səq̇	'split, tear'	sq̇et	'tear it'	sq̇eʔəm	'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 q̇ʷəl-ət-stəxʷ ʔə θə sce:ɬtən.
aux 1sub barbecue-tr-cs obl det salmon
'I made him cook/barbecue/bake the salmon.'

(48) niʔ cən q̇ʷəl-əm-stəxʷ ʔə tᶿə sce:ɬtən.
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,

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

(49) niʔ ʔə č ceʔ ʔam-əs-t tᶿəṅ sqeʔəq ʔə ḱʷ teləʔ
aux int 2sub fut give-appl-tr det+2pos brother obl det money
'Are you going to give your younger brother some money?'

(50) stem ḱʷə ʔi ʔəṅs ʔam-əs-t tᶿəṅ sqeʔəq?
what det aux 2pos give-appl-tr det+2pos brother
'What are you going to give your younger brother?'

(51) niɬ ɬwet kʷθə niʔ ʔam-əs-t-əs tᶿəṅ sqeʔəq ʔə tᶿə skʷəl̓eš?
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) ləm-staṁš ʔə tᶿə skʷəl̓eš niʔ s-ʔam-əs-θaṁš-s ceʔ tᶿəṅ 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 heẏəm ʔə ḱʷ sqewʔ
aux obl 2sub fut bake-m obl det fry.bread
'Are you going to make fry bread?'

(54) stem ḱʷ niʔ ʔəṅ-s-heẏ-əmʔ
what det aux 2pos-nm-bake-m
'What did you bake?'

Thus the direct object/obliqueobject 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 *šxʷ-*.

(55) łiḱʷ-ət tθə sce:łtən ʔə tθə łəḱʷtən.
hook-tr det salmon obl det gaff hook
'Hook the fish with a gaff!'

(56) ʔeʔət tθə łəḱʷtən ʔən-š-łiḱʷ-ət tθə sce:łtən.
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 Ø-marked antipassive in (57b), and the antipassive with *m* in (57c).

(57) a. ʔi cən wəł čekʷxt tθə sməyəθ.
aux 1subj now fry+imperf-tr det deer
'I am frying the deer meat.'

a. neṁ čəkʷx ʔə kʷθə sce:łtən.
go fry obl det salmon
'Go fry some salmon!'

c. neṁ čəkʷxéʔəm ʔə ḱʷ sqəw səplíl.
go fry-m obl det fry bread
'Go fry some fry bread.'

Here are three more verbs of this type:

(58)

Base		Antipassive		Transitive	
łəṅ	'weave	łəṅəm	'weave'	łəṅət	'weave it'
səwq̓	'look for'	səwq̓əm[15]	'look for'	səwq̓t	'look for him/her'
xte?	'do	xteʔəm	'make'	xtaʔstəxʷ	'make him/her'

[15]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 Ø and an *m* antipassive. There are quite a few verbs, however, of the Ø antipassive type that regularly appear either with or without an oblique object. These include verbs like *qaʔqaʔ* 'drink', *qʷal* 'speak', and *ʔəɬtən*[16] 'eat'. For example, 'eat' takes an oblique-marked patient in (59) which tests to be an oblique object as (60) shows.

(59) ʔəɬtən ʔə č ceʔ ʔə ḱʷ sqew?
eat int 2sub fut obl det fry bread
'Will you eat some fry bread?'

(60) stem ḱʷ niʔ ʔəṅ-s-ʔəɬtən?
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	
ʔa:m	'ask/call for'	ʔa:t	'call/ask him for'
ɬi:m	'beg/ask for	ɬi:t	'beg/ask him for'
ya:m	'place an order for'	ya:t	'warn him about'

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

(62) ʔeʔət ʔa:m tθəṅ-siɬə ʔə ḱʷ qaʔ.
aux call-m det+2pos-grandparent obl det water
'Your grandfather is calling for water.'

(63) neṁ ʔa:t tθəṅ-mən.
go call-tr det+2pos-father
'Go call your father.'

[16]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	
ʔeʔəm	'give'	ʔam-əs-t	'give it to him/her'
xʷayəm	'sell'	xʷayəm-əs-t	'sell it to him/her

(65) a. ʔeʔ-əm ʔə tᶿə sce:ɬtən
give-m obl det salmon'
'give the salmon'

b. xʷay-əm ʔə kʷθəṅ snəxʷəɬ
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.[17]

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.[18]

(66) naʔət qʷəs-əl̓s ʔə tᶿə ƛeɬəṁ sce:ɬtən.
aux pour+cont-act obl det salted salmon
'She is soaking the salted fish.'

[17] These examples are of additional interest because the *-m* suffix is retained in the ditransitive.

[18] Many languages of the world have more than one antipassive. Take for example the Mayan languages and Philippine languages under the ergative analysis (Gerdts 1987).

(67) neṁ ʔə c̓ə sq̓els kʷθəṅ men ʔə k̓ʷ scq̓əleẋəctəns.
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
k̓ʷəɬ	k̓ʷɬeʔəm	k̓ʷɬels	k̓ʷɬet
'spill'	'pour'	'pour'	'pour it'
qʷəs	qʷseʔəm	qʷsels	qʷsət
'fall in water'	'soak'	'soak'	'put in water'
c̓əq̓ʷ	c̓q̓ʷeʔəm	c̓q̓ʷels	c̓q̓ʷat
'pierced'	'poke through'	'poke through'	'pierce it'
q̓əp	q̓peʔəm	q̓pels	q̓pət
'gather small objects'	'gather sticks or gather something'	'collect money'	'gather it'

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 *k̓ʷ*, which is given a partitive reading, and furthermore, the objects are frequently plural or collective. Also, especially when the suffix appears as *-eʔəm*, 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 *q̓pels* 'collect' is appropriate when the person is going around collecting money for a collection, *k̓ʷɬels* 'pour' is appropriate when one is pouring the tea, coffee, or juice at a gathering, *wənéls* 'throw' is used when one is throwing out money or blankets in the bighouse, *nəwʔéls* 'show' is used when someone is bringing in a picture for ceremonial purposes in the bighouse, or *l̓q̓els* '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*^{w}- 'instrument/locative' and the *-els* antipassive.

(69) šc̓aɬq̓^{w}əɬs 'grinder', šc̓ek^{w}x̌əɬs 'frying pan', šx^{w}i?qəɬs 'baking pan', sɬeṁc̓əɬs 'picker, picking machine', šseq̓əɬs 'shake splitter', šx^{w}ax^{w}ək̓^{w}əɬs 'sander', šx^{w}?e?t$^{\theta}$əɬs 'eraser', šx^{w}?i?x̌wəɬs '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^{w}ən-ás-əls	'steer horses, drive car' [hold face]
	šašəm-a?q^{w}-éls	'smoking fish heads' [smoke-dry head]
	k̓^{w}š-as-éls	'count money' [count round objects]
	x^{w}-ɬ$^{\theta}$əq̓^{w}-s-éls	'punch in face' [punch face]
	?əx̌-íws-els	'scrape ducks' [scrape body/fowl]
	k^{w}ax^{w}-əẇtx^{w}-əls	'knock on houses' [knock building]
	ɬ$^{\theta}$əx̌^{w}-əɬ$^{\theta}$-éɬs	'washing clothes' [wash garmet]

Perhaps the *-m* antipassive is incompatible with lexical suffixation because both serve a similar function of backgrouding 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) q̓^{w}əl-əm-els cən ce? ?ə k̓^{w} sce:ɬtən ?əẇ k^{w}eyəl-əs.
bake-m-act 1sub fut obl det salmon comp day-3ssub
'I am going to barbeque fish tomorrow.'

(72) ?i ct pəpəṅəṁəɬs ?ə k^{w}θə sqewθ.
aux 1plsub plant+cont-m-act obl det potato
'We are doing the planting of the potatoes.'

(73) k̓^{w}s-e?əm-els ?ə t$^{\theta}$ə ma?əq^{w}!
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 activitiy 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 concommitant 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 *-t* 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 supression 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.[19] 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 detransitivizing 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 Həɬq̓əmíṅəṁ.

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):[20]

[19]This is the approach taken in Gerdts 1993.

[20]This and other differences betweeen the passive and antipassive have led Farrell

(74) ni? pas-ət-əs t^{θ}ə swəẏqe? t^{θ}ə spe?əθ.
aux hit-tr-3erg det man det bear
'The man hit the bear (with a thrown object).'

(75) ni? pas-ət-əm ?ə t^{θ}ə swəẏqe? t^{θ}ə spe?əθ.
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 Həl̓q̓əmín̓əm̓ passive seems to have one less direct argument that 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) *niɬ θə słeni? ni? lem-ət-əm t^{θ}ə x^{w}ənítəm.
3-emph det woman aux look-tr-m de t white.man
'It's the woman who the white man was looked at by.'

(77) *słeni? ni? (s/š-)pən-ət-əm(-s) k^{w}θə 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 intruments, which are extracted via nominalization with the prefix *šx^{w}-*.

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*.[21]

(78)

	singular		plural	
first person	pasəθéləm	'I was hit.'	pasətáləm	'We were hit.'
second person	pasəθá:m	'You were hit.'	pasətáləm	'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 Həl̓q̓əmín̓əm̓ syntactic while the antipassive is lexical. See also the remarks on difference between the two in Davis (to appear).

[21]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 t^{θ}ə swəẏqe?.
aux hit-tr-3erg det man
'He hit the man.'

(80) ni? pas-ət-əm ?ə t^{θ}ə swəẏqe?.
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 *-əs* ergative marker on the verb indicating the subject (third person) and the direct noun phrase *t^{θ}ə swəẏqe?* 'the man' as the object. In the passive (80), the verb no longer has the ergative suffix *-əs*. 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-əθámə.
aux 1sub throw-tr+2obj
'I hit you.'

(82) ni? pas-əθá:m ?ə t^{θ}ə swəẏqe?.
aux throw-tr+2obj+m 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.[22] 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 Həl̓q̓əmín̓əm̓ 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

[22]See Gerdts (1988a) for illustration of this and other constraints on passive.

Həl̓q̓əmín̓əm̓ 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 Həl̓q̓əmín̓əm̓ 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 *-t* component appears.

(83)

	singular		plural	
first person	c̓ewəθéːlt	'I was helped'	c̓ewətáːlt	'we were helped'
second person	c̓ewəθámət	'you were helped'	c̓ewətáːlt	'you-people were helped'
third person	c̓ewətéwət	'He/she/it they were helped'		

(84)

ʔi	cən	pət-əm̓	ʔəẇ	c̓ew-əθéːlt.
aux	1sub	ask+cont-m	comp	help-tr+1obj+pas

'I asked if Iwould 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 *ʔəẇ* complementizer proclitic or the *s*-nominalizer). This *-t* may derive historically from the reflexive, as in reflexive-*θət* and the limited control reflexive *-namət*. The reflexive *-t* might also be a frozen morpheme in such intransitives as *ʔitət* 'sleep' and *ʔəmət* '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.	t̓əm̓š-ən̓ə-m	'braid one's hair'
b.	ʔiləq-əɬc-əm	'buy it for me'
c.	q̓ʷəl-əm ʔə k̓ʷ sceːɬtən	'cook some salmon'
d.	kʷən-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 denominal V root (rare)	benefactive	root	transitive
causative	yes	no	yes	no
non-linked	external possessor	benefactive	theme	agent
controller	subject	speaker		
limitations	none	1st person	3rd person inanimate	3rd person 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 someplace in the midde. 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.

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

Let's take as a hypothesis that the Həl̓q̓əmín̓əm̓ 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 similiarities, 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

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 *sqeʔəm* '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 particpants 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 Həl̓q̓əmín̓əm̓ 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:

(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-Aztecan 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 Həl̥q̇əmín̓əm̓ 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 Həl̥q̇əmín̓əm̓ 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 Həl̥q̇əmín̓əm̓ 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 becomea fused portion of the verb.[23] Thus, the fact that Həl̥q̇əmín̓əm̓ uses the middle as a reflexive provides evidence against the passive being the source.

One objection to this proposal might be that Həl̥q̇əmín̓əm̓ already has a reflexive, the plain reflexive *-θət*, and this would block *-m* from having the core meaning of reflexive.[24]

[23]See Gerdts (to appear) for a discussion of this path of development for reflexives and reciprocals.

[24]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 Həl̥q̇əmín̓əm̓. 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 Həl̥q̇əmín̓əm̓ 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 antipassives, 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 difficulty 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 discussion 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.

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)	ʔilé?əq	'be in the stern'	ʔilé?əqəm	'go to the stern'
	wekən	'wagon'	wekənəm	'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)	təkén-əm	'put your socks on'	təken-t	'put his/her socks on'
	kʷec-əm	'scream, holler'	kʷcə-t	'scream at him/her'
	ṗil-əm	'overflow'	ṗi:l-t	'fill it to the brim'
	haqʷ-əm	'smell bad'	c-haqʷ	'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'
	hetʰəm	'breathe'
	qewəm	'rest'
	qx̌əm	'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 Həl̓q̓əmíṅəm̓ root, 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)	ṗa:m	'swell up'
	cam	'go up from water, go up hill'
	neṁ	'go'

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

/siʲʷəməṁ/'berries' in Nanaimo dialect is */siʲʷu:ṁ/* 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, CVm 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)	q̓əwət	'drum (n.)'	q̓əwətəm	'drum (v.)'
	k̓ʷəš	'amount, number'	k̓ʷšem	'count'

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

(93)	patən	'sail (n.)'	pəténəm	'sail (v.)'
	wekən	'wagon'	wekənəm	'go by wagon'
	ʔilé?əq	'stern'	ʔilé?əqəm	'go to the stern'
	q̓ɬan	'bow'	q̓ɬanəm	'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)	x̌ʷčenəm	'run' ('fast + foot')
	neć̓əẇtxʷəm	'visit' (cf. *neć̓əẇtxʷ* 'next door' = 'different + dwelling')
	ʔasəm	'face towards' (from the lexical suffix *-as* 'face')
	tuwənəm	'it listed (cf. *tuʔéṅə* '(boat) to be tilted' = 'tilt + side, ear')
	q̓ətʰšénəm	'go on tiptoes' ('doubled + toes')
	θx̌asəm	'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).

(95) (a) liqʷ 'calm, slack' liqʷəm 'get calm (water, weather)'
ʔiyəs 'happy' ʔiyəsəm 'get happier'
sƛ̓əɬ̓ṗ 'be floppy' ƛ̓əɬ̓ṗəm '(too) floppy'

(b) c̓əy̓xʷ 'get dry' c̓əy̓xʷəm '(too) dry'
c̓əy̓xʷ 'get dry' c̓eyəxʷəm 'get dry (weather)'
ƛ̓əxʷ 'get covered' ƛ̓xʷəm 'get warm'

(c) ʔitət 'sleep' ʔitətəm 'get sleepy'
ʔənəxʷ 'stop' xʷʔənəxʷəm '(flow of the tide) has stopped'

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 Həɬq̓əmíṅəm̓. 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.

q̓əwətəm 'drum'
həẇáɬ̓əm̓ 'play'
qəwəm 'rest'
q̓ələm̓ 'camp'
šk̓ʷam̓ 'swim'

A.2 Manner of speaking.

q̓eẇəm 'howl'
x̌iṅəm 'growl'
ɬeqəm 'whisper'
qʷelq̓əm '(seal) to bark'
kʷecəm 'scream, yell'
hiʔkʷəm̓ 'crying out the news, drawing people in'
x̌e:m 'cry'
yənəm '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.

c̓tem 'crawl'
ɬicəm 'swim'
cƛ̓əm 'jump'
wekənəm 'go by wagon'
pəpəteṅəm̓ 'sailing'
nəqəm 'dive'
šətem̓ '(fish, seal) swimming'
six̌ʷəm 'wade out'
nem̓ 'go'
cam 'go up from water/up hill'
q̓ɬanəm 'go to the bow'
ʔilé?əqəm 'go to the stern'
xʷəʔaləm̓ 'return, go back'

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

θq̇əɬx̌eʔəm	'kneel'
q̇ewəm	'kneel'
ʔasəm	'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.

ċənəm	'tremble'
hesəm	'sneeze'
taq̇ʷəm	'cough'
heɬ$^{\theta}$əm	'breathe'
ċisəm	'grow'

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

siləm	'roll'
ṗiləm	'overflow'
hiləm	'fall from a height'
yaǩʷəm	'smash up, break into pieces'
x̌epəx̌əm	'scatter'
ɬasəm	'slip down (e.g. a skirt)'
pəẏpəṗəṁ	'staggering'
yiqəm	'fall, tip over'
yeməɬəm	'ripple'
xʷċaləm	'tide turns'
xʷtəẏtiːṁ	'tide reverses against the water flow'
meyəqəm	'ripple (of water)'
qʷaẇəṁ	'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.

ṗaːm	'swell up'
ɬ$^{\theta}$aɬ$^{\theta}$əq̇ʷəṁ	'rotting'
q̇ʷcəm	'fester (e.g. a boil)'
ṗeq̇əm	'bloom'
liqʷəm	'get calm (water, weather)'
ċeyəxʷəm	'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.

ɬeẇsəṁ	'glitter'
ɬ$^{\theta}$aɬx̌ʷəṁ	'shining, glistening (off of snow, ice, frost), shiny'
pixʷəm	'spark'
x̌ewəq̇əm	'flicker (light)'
ɬ$^{\theta}$etx̌əṁ	'making the sound of hoof rattlers'
qeɬ$^{\theta}$əq̇əm	'squeak, rasp'
ɬaɬəq̇ʷəm	'snore'
peɬ$^{\theta}$əm	'smell foul, stink (e.g. a skunk or a mink)'
haqʷəm	'smell bad (e.g., rotten fish smell)'
xʷq̇ʷax̌ʷəm	'smell'
mex̌əm	'smell (e.g. a burning rag)'
səyəm	'smell strong'
ɬ$^{\theta}$q̇əm	'drip'
xʷeləšəm	'drip'
pǩʷəm	'emit a cloud of dust or a (very fine) splash of water'
ɬeɬsəṁ	'start to sprinkle'
ɬeɬətəm	'sprinkle, drizzle'
x̌eyəq̇əm	'smoke'
xʷaṅǩʷəṁ	'roaring, heavy breathing'
θxʷaːm	'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 straightfowardly 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 Həl̓q̓əmín̓əm̓ 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 Həl̓q̓əmín̓əm̓ 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 Həl̓q̓əmín̓əm̓, 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 *q̓el̓* 'believe a lie', *c̓əq̓* 'get surprised', *hek̓ʷ* 'recall to mind', none of which take *-m*.

In sum, what we have found, with only a few exceptions, is that monadic verbs in Həl̓q̓əmín̓əm̓ 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 Həl̓q̓əmín̓əm̓

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 Həl̓q̓əmín̓əm̓ verb bases. Each base was tested with respect to a list of six verb suffixes.[25] The suffixes are: *-t*, the general transitive suffix; *-st*, the causative suffix; *-təl*, the reciprocal suffix, *-θət*, the reflexive suffix, *-namət*, the limited control reflexive suffix, and *-əlmən*, the desiderative suffix.[26]

Table 1 and Table 2 below, examples of these suffixes in combination with two verb bases *q̓ʷəyíləš* 'dance' and *q̓a?* '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 *q̓a?* 'get added to' allows the transitive suffix, *q̓ʷəyíləš* 'dance' does not. Furthermore, *q̓ʷəyíləš* 'dance' has a causative meaning when suffixed with the causative suffix. In contrast, the causative suffix on *q̓a?* '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 *q̓a?* 'get added to', but they do not carry these meanings with *q̓ʷəyíləš* 'dance'. The limited control reflexive when suffixed on *q̓a?* 'get added to' has a reflexive meaning, but when suffixed on *q̓ʷəyíləš* 'dance' has the grammaticized meaning of 'manage to'. Conversely, the desiderative suffix means 'want' when suffixed to *q̓ʷəyíləš* 'dance' but has the grammaticized meaning of inception or tendency when suffixed to *q̓a?* 'get added to'. Thus, we see that very different forms arise when the same suffix is added to the two different bases.

[25]Howett (1993) uses a similar methodology to test verbs in Nɬe?kepmx. See Mattina 1994 for a different approach, one that factors in aspect as well as argument structure.

[26]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), *-namət*, the limited control reflexive suffix (Gerdts 1988a, to appear), and *-əlmən*, the desiderative suffix (Gerdts 1988b, 1991).

Table 1: Profile of an Unergative Verb

q̓ʷəyíləš 'dance'
ni? cən q̓ʷəyíləš.
aux 1sub dance
'I danced.'

*q̓ʷəyíləš-t (dance+tr) 'dance it'

q̓ʷəyíləš-stəxʷ (dance+cs) 'make s.o. dance'
ni? ct q̓ʷəyíləš-stəxʷ.
aux 1pl.sub dance-cs
'We made him dance.'

q̓ʷəyíləš-təl (dance+rec) 'dance together'
ni? q̓ʷəyíləš-təl.
aux dance-rec
'They danced together.'

*q̓ʷəyíləš-θət (dance+refl) 'dance oneself' ???

q̓ʷəyíləš-nam̓ət (dance+l.c.refl) 'manage to dance'
ni? q̓ʷəyíləš-nam̓ət.
aux dance-l.c.refl
'He got to dance.'

q̓ʷəyìləš-ə́lmən (dance+desid) 'want to dance'
ni? q̓ʷəyìləš-ə́lmən.
aux dance-desid
'He wanted to dance.'

Table 2: Profile of an Unaccusative Verb

q̓a? 'get added to'
ni? q̓a? kʷθə nə šéləmcəs ʔə kʷθə nə s-kʷukʷ.
aux added det 1pos ring obl det 1pos nm-cook
'My ring got into my cooking.'

q̓a?-t (added+tr) 'put it in with'

*q̓a?-stəxʷ (added+cs)
ʔi cən sq̓əq̓á?-stəxʷ ʔə kʷθə teti?.
aux 1sub added(stat)-cs obl det canoe.race
'I have him in with those that are canoe racing.'

q̓a?-təl (added+rec) 'meet'
ni? q̓a?-təl ʔə kʷθə s-q̓a?-təl-s tə staɬə́w̓.
aux added-rec obl det nm-added-rec-3pos det river
'They met one another at the confluence of the rivers.'

q̓a?-θət (added+refl) 'join'
ni? q̓a?-θət ʔə kʷθə həẇáɬəm̓.
aux added-refl obl det play(cont)
'He joined those that are playing.'

q̓a?-nam̓ət (added+l.c.refl) 'manage to get (onself) in with'
ni? q̓a?-nam̓ət.
aux added-l.c.ref
'He managed to get in with them.'

q̓a?-ə́lmən (added+desid) 'almost get added'
ni? q̓a?-ə́lmən ʔə kʷθə nə sɬʲəẋ'əlwətəm.
aux added-desid obl det 1pos 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)

	unergative	process unaccusative
causative *-st*	cause	*/'find, have, get (stative)'
desiderative *-ələmən*	want	*/'about to, almost'
limited control *-namət*	'manage to'	accidental action on self
transitive *-t*	*	cause
reflexive *-θət*	*/'alone'	action on self
reciprocal *-təl*	*/'together'	action on each other

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

(97) heɬ̓ᵊəm 'breathe', ʔa:m 'call for', sq̓əl̓cəp 'chop wood', k̓ʷi? 'climb', ɬ̓ᵊəp̓nəxʷ 'close eyes', šaqʷəl 'cross to the other side', ʔəltən 'eat (intr.)', nem̓ 'go', x̌pil 'go down', cam 'go up to the house, go inland', yənəm 'laugh', ʔəšəl 'paddle', ɬ̓iləm 'sing', ʔəmət 'sit down, rise out of bed', ʔitət 'sleep', łx̌iliš 'stand up', six̌ʷəm 'wade', ʔiməš 'walk', yays 'work'

(98) kʷiʔéʔ 'be separated', təqʷ 'be taut, be tight', ləkʷ 'break', ʔiyeʔq 'change', p̓əkʷ 'come to the surface of the water, float', yəx̌ʷ 'come undone, get untied, get out of jail', xʷeʔ 'decrease in quantity, get less', θəxʷ 'fade away, fade out of sight', ɬ̓ᵊas 'get bumped', k̓ʷes 'get burnt', məyaʔ 'get cheaper', q̓ʷaqʷ 'get clubbed', łic̓ 'get cut', c̓əy̓xʷ 'get dry', θəyqʷ 'get dug', məq̓ 'get full of food', pas 'get hit', ʔak̓ʷ 'get hooked, snagged, hung up', x̌əł 'get hurt', q̓ep̓ 'get inflected, get tied, get initiated', q̓is 'get knotted', ɬ̓ᵊək̓ʷ 'get light directed onto', xʷəc̓ 'get lodged between', ʔik̓ʷ 'get lost', maləqʷ 'get mixed in with', ʔix̌ 'get scratched, scraped', liqʷ 'get slack', k̓ʷəł 'get spilt, upset', ɬ̓ᵊəx̌ʷ 'get washed', ʔeɬ̓ᵊ 'get wiped', q̓iẇ 'get wrapped around something', ɬ̓ᵊəl 'go broke, lose it all gambling', ten 'go out of sight', təʔéʔnə '(boat) list, tilt', qʷix̌ʷ 'miss', x̌iq̓ 'scratch an itch', səq̓ 'tear', q̓ʷap̓ '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 Həl̓q̓əmín̓əm̓ 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: *ɬ̓icəm* 'swim along', *c̓tem* 'crawl', *nəqəm* 'dive down', *x̌ʷčenəm* 'run', *səẇq̓* 'seek', *te:m* 'call out, yell', *cx̌əm* 'jump', *ʔiɬ̓ən̓ə* '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: *c̓təmət* 'crawl after it', *x̌ʷčenəmət* '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. *ʔiyəs* 'be happy', *scuʔét* 'be adept, clever', *ʔayəm* 'be slow'), and the verbs of location, comprising six verbs in the sample (e.g. *siʔq* 'be underneath', *ʔilə́ʔəq* 'be aft', *tecəl* 'arrive here, get here'). Finally, a class of four verbs (e.g. *q̓əp* 'assemble, gather', *c̓isəm* '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 Həl̓q̓əmín̓əm̓. This is not surprising given that Levin (1993) posits over four dozen verb classes for English. Further verb classes are likely to emerge in Həl̓q̓əmín̓əm̓ 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 *-t* transitives
- (2) unergatives with *-t* 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 *-m*, 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.

(100) q̓əwətəm-stəxw 'make him drum', x̌iṅəm-stəxw 'make it growl', nəqəm-stəxw 'make her dive', six̌ʷəm-stəxw 'make him wade out', q̓ɬanəm-stəxw 'make her go to the bow or get in the front seat', q̓ewəm-stəxw 'make him kneel'

(101) həẇál̓əm̓-ə́lmən 'want to play', qəwəm-ə́lmən 'want to rest', q̓eẇəm-ə́lmən 'want to howl', kʷecəm-ə́lmən 'want to scream', yənəm-ə́lmən 'want to laugh', c̓təm-ə́lmən 'want to crawl', cx̌əm-ə́lmən 'want to jump', wekənəm-ə́lmən 'want to go by wagon', nem̓-ə́lmən 'want to go', θq̓əɬx̌eʔəm-ə́lmən 'want to kneel'

(102) həẇál̓əm̓-námət 'manage to play', q̓ələm̓-námət 'manage to camp', ɬeqəm-námət 'manage to whisper', yənəm-námət 'manage to laugh', ɬicəm-námət 'manage to swim', ʔileʔəqəm-námət 'manage to go to the stern', xʷəʔaləm̓-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) q̓ələm̓-təl ' take turns staying over at each other's place', q̓eẇəm-təl 'howl together', wekənəm-təl 'go by wagon together', xʷəʔaləm̓-təl 'return together', θq̓əɬx̌eʔəm-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) q̓eẇəmət 'howl at him/her', x̌iṅəmət 'growl at him/her', ɬeqəmət 'whisper to him/her', ɬicəmət 'swim after him/her', nəqəmət 'dive down to him/her', six̌ʷəmət 'wade out to him/her', θq̓əɬx̌éʔəmət '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', *taq̓ʷəm* 'cough', *heiθəm* 'breathe', and *c̓isəm* '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 →.

(105) → ni? cən heiθəm-stəxʷ 'I got him to breathe.'
→ ni? taq̓ʷəm-stəxʷ 'It made him cough.'
→ ni? hesəm-stəxʷ 'It made him sneeze.'

(106) → ni? heiθəm̓-əl̓məṅ 'He wants to breathe.'/'He's starting to breathe.'
→ ni? taq̓ʷəm-əlmən 'He wanted to cough.'
ni? hesəm-əlmən 'He started to sneeze.'
c̓isəm-əlmən 'begin to grow'

(107) → ni? heiθəm-namət 'She managed to breathe.'
→ ni? taq̓ʷəm-namət 'She managed to cough.'
→ ni? c̓isəm-namət 'She managed to grow.'
ni? 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 supressed.

(108) naʔət yə-sil̓-əm̓ tθə snəxʷəɬ-s kʷθə xʷənítəm̓.
aux ser-roll-m det canoe-3pos det white.man
'The white man's car is rolling.'

(109) nem̓ si:lt tθə wekən qʷsət ʔə tθə stal̓əẇ.
go roll-tr det wagon dip-tr 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:

(110)	ṗiləm	'overflow'	ṗi:lt	'fill it to the brim'
	hiləm	'fall from a height'	hi:lt	'throw it off'
	yaǩʷəm	'smash up'	yaǩʷət	'smash it up'
	ƛ̓epəx̌əm	'scatter'	ƛ̓epx̌t	'scatter them'
	łasəm	'slip down (e.g. a skirt)'	łasət	'slide it down'
	pəẏpəyəṁ	'staggering'	payt	'bend it'

Even though the verbs in this class clearly have non-agentive semantics, many test 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)	→	łasəm-stəxʷ	'make it slip down'
	→	pəẏpəṗəṁ-stəxʷ	'make him stagger down'
	→	ṗiləm-stəxʷ	'make it overflow'
	→	yaǩʷəm-stəxʷ	'make it break'
	→	yiqəm-stəxʷ	'make it tip over'
		ƛ̓epəx̌əm-stəxʷ	'leave it scattered'
	→	yeməɬəm-stəxʷ	'make it ripple'
	→	qʷaẇəṁ-stəxʷ	'let it run'

(112)	ṗiləm-əlmən	'almost full'
	yiqəm-əlmən	'on the verge of tipping over'

(113)	→	siləm-nam̓ət	'managed to roll'
	→	hiləm-nam̓ət	'managed to fall'
		yiqəm-nam̓ət	'finally tipped over'
		qʷaẇəṁ-nam̓ət	'started to flow (of ice)'

We give the results of tests on five of the change of state verbs in B3.[27]

(114)	→	ṗa:m-stəxʷ	'make it swell'
	→	ṗeq̓əm-stəxʷ	'let it bloom'

[27]One verb, c̓eyəxʷəm 'get dry (weather)', yielded grammatical forms, but with the idiomatic reading of 'being depressed.' So c̓eyəxʷəm-stəxʷ means 'make him/her depressed' and c̓eyəxʷəm–əlmən means 'become depressed'.

(115)	ṗa:m-əlmən	'start to swell'
	q̓ʷcəm-əlmən	'started to fester'
	ṗeq̓əm-əlmən	'start to bloom'
	liqʷəm-əlmən	'looks like it's getting calm'

(116)	ṗa:m-nam̓ət	'manage to make it swell'
	ṗeq̓əm-nam̓ət	'newly flowered'
	liqʷəm-nam̓ət	'finally getting calm'

(117)	ṗa:m-θət	'rose'
	t̓ᵊaɬᵊəq̓ʷəṁ-θət	'go rotten'
	q̓ʷcəm-θət	'get festered'
	liqʷəm-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.

		-stəx^{w}	-əlmən	-namət	-θət
		➡make it		#manage to	
pƛ'^{w}əm	'emit a cloud of dust or a splash of water'				
ɬewsuɬ	'glitter'	➡make it	getting to	make it	
ƛ'ewəɬəm	'flicker (light)'	➡make it	start to	start to	
ʔ^{ə}etxəɬ	'making the sound of hoof rattlers'	➡make it	*	manage to make it	
θx^{w}'ərm	'bleed'	➡make it	*	*	
ƛ'eyəɬəm	'smoke'	➡make it			now
haq^{w}əm	'smell bad'	find it	*	*	start
ʔ^{ə}alƛ^{w}əɬ	'shining, glistening'	have it	*	manage to get it	
ɬaɬəq'^{w}əm	'snore'	*	start to	➡manage to	now
pɛ'^{ə}əm	'smell foul, stink'	*	*	*	become
x^{w}eləšəm	'drip'	*	*	*	now
ɬeɬsəɬ	'start to sprinkle'	*	almost ready to	finally	
ɬeləɬəm	'sprinkle, drizzle'	*	looks like it will	finally	*
ʔ^{ə}ɬəm	'drip'	*	*	finally	

Table 3: Emission Verbs

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 Rapport Hovav (1995) on the basis of cross-linguistic evidence.

(118)

	L & RH's Predictions	Həl̓q̓əmín̓əm̓
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	unccusative
B.4 Verbs of emission:	unergative	mixed

We see that the Həl̓q̓əmín̓əm̓ 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 Həl̓q̓əmín̓əm̓ data deviate from L & RH's predictions in two systematic ways. First, apparently all motion verbs in Həl̓q̓əmín̓əm̓ 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 Həl̓q̓əmín̓əm̓, arguing that it arose as a reflexive construction and then spread to other uses. Həl̓q̓əmín̓əm̓ has a second, newer reflexive, the plain reflexive *-θət*, and so it is a two-reflexive language. Kemmer (1993) makes strong predictions about what

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 Motion < Change in Body Posture < Translational Motion < Active One-Participant 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. Həl̓q̓əmín̓əm̓ 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'
ḱʷəʔásəm	'lift your face'
naʔəsəm	'face away, turn one's face away'
qəl̓əsəm	'turn away'
qṗasəm	'look down'
c̓aləsəm	'look back, turn around'
x̌ʷtaʔəsəm	'face towards'

b. with lexical suffix *-šen* 'foot'

ləmxʷšénəm	'stomp feet on ground or floor'
ɬəl̓šénəm	'pull your feet back'
mətqʷšénəm	'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 *θq̓əl̓x̌eʔəm* 'kneel', *q̓ewəm* 'kneel', and *xʷc̓eńəcəm* '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, *neṁ* 'go', *i̓icəm* 'swim', and *six̌ʷəm* 'wade out'. In fact, *-m* often contributes the meaning of motion, as seen in verbs formed from nouns, like *wekənəm* 'go by wagon', *nec̓əẇ̓txʷəm* '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, *q̓əwətəm* 'drum', *həẇ̓ál̓əṁ* 'play', and *q̓ələṁ* 'camp'. Suffice it to say that Həl̓q̓əmín̓əm̓ 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. Futher, 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 *šaḱʷəm* '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: *kʷecəm* 'scream, yell', *x̌eːm* '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 Həl̓q̓əmín̓əm̓: *mil̓éləm*.

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: *ʔaːm* 'ask/call for', *i̓iːm* 'beg/ask for', and *yaːm* '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 *i̓əyəṁ* 'to claim land', which literally means 'to stick to something', also exemplifies indirect middle. Verbs with middle marking that denote natural reciprocal events include *nanəm* 'converse, discuss' and *q̓p-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, *p̓aːm* 'swell up' and *i̓ᶿaiᶿəq̓ʷəṁ* 'rotting'. Also, forms like *θx̌asəm* 'park, come to a stop' and *c̓isəm* 'grow' fit in this category.

In sum, we see that many classes of verbs take middle morphology cross-linguistically. The Həl̓q̓əmín̓əm̓ 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 *wekənəm* 'go by wagon'.

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

Həl̓q̓əmíṅəm̓? Two classes mentioned by Kemmer are the emotional middle and the cognition middle. Neither of these seem to appear with *-m* in Həl̓q̓əmíṅəm̓. 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 Həl̓q̓əmíṅəm̓.[28] Also, as noted above, process unaccusatives tend to appear as bare stems and thus do not usually occur with midde 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 midde—the antipassive, the passive, and the reflexive. This is because they are semantically transitive but inflectionally intransitive. What we find in Həl̓q̓əmíṅəm̓ is that some, though not all, constructions in each of these areas is marked by the suffix *-m*.

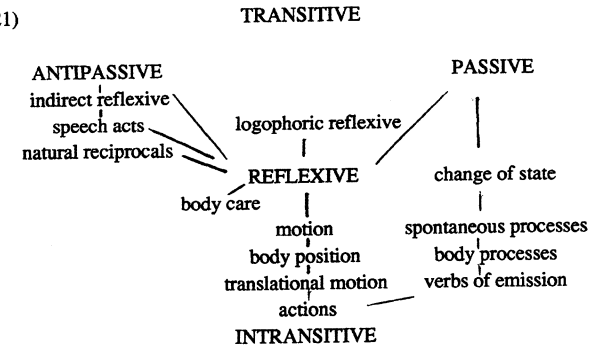
If we view this problem from a cross-linguistic perspective, we see that other languages have morphology which mark a similar range of constructions and are frequently referred to as *middles*. In her extensive study of the middle, Kemmer (1993) refers to middle systems as a set of relations between 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'.

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 souce of the middle marker in Həl̓q̓əmíṅəm̓. 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 soley by the morpheme *-m*. Passives take other morphology—subordinate passives lack *-m*: antipassives in *-els* 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 Həl̓q̓əmíṅəm̓ in the following diagram:

[28]We mentioned above the intensive *ʔiyəsəm* 'get happier' based on the form *ʔiyəs* 'happy.

(121)



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 Həl̓q̓əmíṅəm̓ 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 Həl̓q̓əmíṅəm̓. 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 Həl̓q̓əmíṅəm̓. 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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