Inside and Outside the Middle
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0. Introduction

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 -m in (1a) in Halq̓amăn̓łəsh, the Island dialect of the Halkomelem language, also serves as an inchoative (1b), the reciprocal suffix -tal (2a) also serves as a collective (2b), and the desiderative suffix -alman (3a) also serves as an inceptive (3b):

(1) a. ḥaq̓ʷiʃəṃ 'kill self', ḥaq̓ʷiʃəṃ 'dry self', ḥaq̓ʷiʃəṃ 'cover self', ḥaq̓ʷiʃəṃ 'save self'
   b. ḥaq̓ʷəṃχə 'get slow', ḥaq̓ʷəṃχə 'get big', ḥaq̓ʷəṃχə 'get stormy', ḥaq̓ʷəṃχə 'get happy'

(2) a. čəyałəm 'help each other', čəyałəm 'separate from each other', məlaq̓ʷəṃ 'mix with each other', čəyałəm 'scratch each other'
   b. čəmałəm 'eat together', čəyałəm 'work together', čəmałəm 'walk together'

(3) a. čəmələm 'want to swim', čəmałəm 'want to swim', čəmələm 'want to run away', čəmələm 'want to stop'
   b. čəmələm 'almost got hit', čəmələm 'almost fade out of sight', čəmələm 'nearly came undone', čəmələm 'almost got hooked'

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.

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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, des = desiderative, cs = causative, det = determiner, erg = ergative, fut = future, int = interrogative, intr = intransitive, l.c. = limited control, m = middle, nm = nominalizer, obj = object, obi = oblique, pos = possessive, pl = plural, rec = reciprocal, ref = reflexive, sr = serial, sub = subject, ssu = subordinate subject, tr = transitive.

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

Nevertheless, the suffix -m stands out in Halq̓amăn̓ləsh as being particularly multifunctional. 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. ḥaxšaxəm 'braid one's hair'
   b. ḥaʔalq̓ələm 'buy it for me'
   c. ḥəq̓ʷəṃ 'ʔaʔ ʃectəm 'cook some salmon'
   d. ḥəṃ 'ʔatəm '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) a. naq̓ʷəm 'divine', ʔiʔəm 'growl', taq̓ʷəm 'cough', ʔəq̓ʷəm 'tip over', ʔəq̓ʷəm 'knee', leq̓ʷəm 'glitter', leq̓ʷəm 'bloom', ʔeq̓ʷəm 'overflow', ʔeq̓ʷəm '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: ʔaxq̓ʷəm 'wagon', ʔeq̓ʷəm 'to go by wagon'
   b. noun to adjective: qaʔ 'water', qaʔ 'water'
   c. location to state: ʔaxq̓ʷəm 'be in the stem', ʔeq̓ʷəm 'go to the stem'
   d. action to inchoative: ʔitaʔ 'sleep', ʔitaʔ 'get sleepy'

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discoveries we have made for Halkomelem. 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). The middle is a network of constructions with overlapping properties. The key feature that these constructions share is that they are syntactically intransitive though most of them are semantically transitive, that is, they have both an agent and a patient. Thus, they sit halfway between fully transitive constructions and fully intransitive ones.

A problem for the middle analysis is the occurrence of -m within the domain of monadic verbs, that is, verbs that are semantically intransitive and also have one NP in their argument structure. We make a more detailed analysis of these cases in section 2. We explore the question of how -m affects the structure of intransitive verbs. We answer this by looking at pairs of examples where a root can appear with or without -m. We examine the root and the root + m forms in terms of their categorial status and their argument structure. Very few monadic verbs with -m have free-standing counterparts, however. Section 2 takes a fuller list of monadic verbs consisting of root + m, including the free and the bound roots, and examines them from the point of view of verb class semantics. Gerds (1991, 1996) has previously discussed Halkomelem 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 Halkomelem that have corresponding transitive. First, however, we give a brief summary of Halkomelem 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

structure and syntax of the form?

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

1.1. Transitives and intransitives

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

(7) \(\text{ni} \quad \text{q}^{\text{aq}} \cdot \text{at-} \text{os} \quad \text{lo sieni} \quad \text{ko k}^{\text{ko}} \quad \text{same}\).
\(\text{aux club-} \text{tr-} \text{3erg} \quad \text{det woman obd det paddle}
\quad \text{He clubbed the woman with the paddle (on purpose).}\)

(8) \(\text{ni} \quad \text{q}^{\text{aq}} \cdot \text{nax-} \text{os} \quad \text{lo sieni} \quad \text{ko k}^{\text{ko}} \quad \text{same}\).
\(\text{aux club-} \text{l.c.tr-3obj-3erg det woman obd det paddle}
\quad \text{He accidentally clubbed the woman with the paddle.}\)

(9) \(\text{ni} \quad \text{imo}^{\text{a}} \cdot \text{stx-} \text{os} \quad \text{lo sieni}\).
\(\text{aux walk-} \text{cs-} \text{tr-3obj-3erg det woman}
\quad \text{He made the woman walk.}\)

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

(10) \(\text{ni} \quad \text{imo}^{\text{a}} \quad \text{lo sieni} \).
\(\text{aux walk det woman}
\quad \text{The woman walked.}\)

\(\text{For further conditions on causatives, see Gerds 1995a.}\)
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? con q"=a-at-sax*  la sleni? ("a) k"u\$ sapli.
    aux 1sub bake-tr-cs+tr+3obj det woman obl det det bread
    'I had the woman bake the bread.'

(12) *ni? con na"em-st(ax*)-sax*  la Mary ("a) k"u\$ 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. Hol\$am\$ash 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 -;JS, as seen in the above examples. In contrast, third person subjects in main clause intransitives do not determine agreement.

Also, only transitive verbs license a direct object NP in direct case, for example, to sleni? 'the woman' in examples (7) and (8) above, as opposed to oblique NPs, for example, k"u\$ s\$amol 'the paddle' in (7) and (8), which is introduced by the multi-purpose oblique preposition ?i.

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

(13) t\$\$ c\$i\$k spe?\$ ni? \$i\$q\$k\$x\$\$nh
    det black bear aux swimming
    'the black bear that is swimming'

(14) t\$\$ sq\$y\$qe? ni? qa\$t-as k"u\$ spe?\$\$0
    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 -;sa is omitted.

\[\text{\textsuperscript{6}}\text{Hol\$am\$ash has a split agreement system. In subordinate clauses, all third person subjects that -\$as agreement.}\]

\[\text{\textsuperscript{7}}\text{These facts hold generally for extractions including Wh-questions, clefts, and focus constructions.}\]
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 -8at (20a, 21a); instead they use the suffix -m (20b, 21b).

(20) a. *ni? can tBax w-se-8at
    aux1sub wash-foot-tr:refl
    'I washed my feet.'

b. ni?can tBaxw-sen-am.
    aux1sub wash-foot-intr
    'I washed my feet.'

    aux scrape-con:mouth-tr:refl
    'He shaved.'

b. ni? ?a8-ay9in-am.
    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) ?e?8-8a-t 'wiping his/her feet'  ?e?8-8an-am 'wiping one's feet'
    $k*-aayl-t 'bathe his/her baby'  $k*-ayl-am 'bathe one's baby'
    lom8-a2a-t 'braid his/her hair'  lamb8-a2a-m 'braid one's hair'

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

8The final n of a lexical suffix deletes before the -t transitive.
(26) a. meʔ-šən  
    'shoe comes off' 
    meʔ-šən-əm  
    'take off one's shoes' 
    meʔ-šə-t  
    'take off his/her shoes'

b. qaʔ-čas  
    'bandaged hand' 
    qaʔ-čas-əm  
    'bandage one's hand' 
    qaʔ-čas-t  
    'bandage his/her hand'

c. š-ʔəx-əs  
    'washed face' 
    š-ʔəx-əs-əm  
    'wash one's face' 
    š-ʔəx-əs-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. šək-əm  
    'bathe (self)' 
    šək-ət  
    'bathe him/her'

b. hiʔwəs-əm  
    'bring oneself to people's attention' 
    hiʔwəs-t  
    'bring him/her to people's attention'

c. c-məqʷəq-əm  
    'fill oneself until bloated' 
    məqʷ-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) 
    kəpúʔ-əm  
    'put one's coat on' 
    kəpúʔ-ət  
    'put his/her coat on'

b. ʃəkʷən  
    'shawl' (from French le châle) 
    ʃəkʷənəm  
    'put one's shawl on' 
    ʃəkʷənt  
    'put a shawl on him/her'

c. stəkəm  
    'sock' (from English stocking) 
    stəkəməm  
    'put one's socks on' 
    stəkənt  
    'put his/her socks on'

d. yasəʔqʷəʔt  
    'hat'  
    yasəʔqʷəʔ-əm  
    'put one's hat on' 
    yasəʔqʷəʔ-ət  
    'put his/her hat on'

e. qʷəʔəyəʔən  
    'shoe'  
    qʷəʔəyəʔənəm  
    'put one's shoes on' 
    qʷəʔəyəʔət  
    '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) ?əʔot yəʔəxəm-šəʔəm  
    aux ser-try+stative-foot-m  
    det+2pos father  
    Obl det shoes
    'Your father has tried on all the shoes.'

(30) nιʔ  
    xʷʔəʔəq-Saharanəm  
    kʷəʔən  
    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 Holqəməθəni, this provides additional evidence for their surface intransitivity.

(31) a. ʃəp-əʔəm-ʃəx  
    'make them assemble' 
    gather-face-m-cs

b. yəʔiʔəʔqʷəʔ-əm-ʃəx  
    'make him/her shampoo' 
    rub-head-m-cs

c. ʃəkʷəʔ-əm-ʃəx  
    'make him/her bathe' 
    bathe-m-cs

d. taləʔəʔ-əm-ʃəx  
    'make him/her wear glasses' 
    glasses-m-cs

e. ʃiʔəʔ-əm-ʃəx  
    'dress him/her' 
    dress-m-cs

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9 This may contain the lexical suffix -əs 'face', which is also the goal applicative. Cf. ṭiʔəs 'to point it out, to show it'.

d. yasəʔqʷəʔ  
    'hat'  
    yasəʔqʷəʔ-əm  
    'put one's hat on' 
    yasəʔqʷəʔ-ət  
    'put his/her hat on'

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10 The word for hat contains the lexical suffix for head -əʔqʷ.

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 unusual for a language to have two reflexives and to split the reflexive and ancillary functions across the two constructions. It is somewhat rare for a language to have two reflexives that are both syntactically intransitive. This point is discussed further in section 1.6.4.

1.3. Logophoric reflexives

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

(32) ni? ʔ?al-alc-θam-s ʔa ʔ<0>c sce:1tan.
aux bake-ben-tr:1obj-3erg obl det salmon
'He baked the salmon for me.'

(33) ni? ʔa c k?an-alc-θam-s ʔa ʔ<0>c sappl1.
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 -lc, as long as there is a logically possible benefactive or malefactive reading. Additional examples of the benefactive are given in (34):

(34) ʔ?alat 'bake it'
θayt 'fix it'
θalat 'write it'
k?anat 'take it'
ʔělalat 'sew it'

The applicative suffix -lc typically occurs with transitive -t, although it is also possible with -m, in which case the construction is a logophoric reflexive, where the beneficiary/goal is coreferent to the speaker.13

(35) ne?n c ?ilaq-alc-am ʔa ʔ<0>c sappl1.
go 2sub buy-ben-intr obl det bread
'Go buy some bread for me/*yourself/*him!'

(36) ne?n c ʔa ?alaq-alc-am ʔa ʔ<0>c qa:xmfin.
go 2sub fut gather-ben-intr obl det consumption seed
'Go and gather some consumption seed for me!'

(37) ni? ʔa c k?an-alc-am ʔa ʔ<0>c tels?
aux int you get-appl-m obl det money
'Did you get me some money?'

(38) ni? ʔa c ʔal? yak-alc-am ʔa ʔ<0>c taral?
aux int you already smash-appl-m obl det ochre
'Did you already break up the ochre for me?'

(39) ni?can ʔ?al-alc-am.
aux 1sub bake-ben-appl
'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:

(i) *ni? can ʔ?al-alc-θot.
aux 1sub bake-ben-refl
'I cooked it for myself.'

13The reflexive suffix -θot cannot follow an applicative suffix:

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

14Gerdts 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.

12Suttles (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.
A second property of this construction is also suggestive of logophoricity. In usual contexts the subject of the constructions is second person. In fact, the most common use is in the imperative as in (35) and (36). However, a third person subject is possible in the domain of a speech act verb used to express an indirect imperative, as in the following example:

(41) cse-t can ce? la sleni? ʔaw qwal-alc-am-as
tell-tr 1sub fut det woman comp bake-ben-intr-3ssub
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 can ce? la sleni? ʔaw tś-iʔal-os
tell-tr 1sub fut det woman comp comb-hair-intr-3ssub
*I'm telling the woman to comb her own hair./

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 if or ergative agreement. Furthermore, causatives seem to be impossible. So forms like *k*am-lc-am-st:d: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 -namat. This suffix is the limited control reflexive, but as discussed in section 2, it takes on the meaning of 'manage to' when suffixed to an active intransitive verb. As seen in (43), this suffix can co-occur with a logophoric reflexive.

(43) ni? ʔa ʔaw k*am-alc-am-namat?
aux int you get-appl-m-lc-ref
'Did you manage to get it for me?'

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

1.4. Antipassives

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

(44) a. ni? qwal fla sce:lt:Jn.
aux bake det salmon
'The salmon cooked/barbecued.'

aux bake-tr-3erg det salmon
'He cooked/barbecued the salmon.'

c. ni? qwal-am ʔaw fla sce:lt:Jn.
aux bake-en obI det salmon
'He cooked/barbecued/bake the salmon.'

(45) a. k*al k*tho stihelo na-s-nəw-x*k*s-em:la.
spill det teapot Iposs-nm-aux-comp-burn-ear
'The kettle spilled and I got a burnt ear/side of head.'

b. ni? k*le-t-as ʔaw qa?.
aux spill-tr-3rd det water
'He poured the water.'
ergative agreement while clause formation by registering this with an a-nominal prefix on the verb. (See, inter alia, oblique in comparing (44b)

The marking.

suffixed with -m. Only a (44c) is intransitive. The optional patient NP in (44c) is introduced by the oblique (44b) cannot

(46) Base Transitive Antipassive

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 ʔa. 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 ʔamast 'give', which contains the applicative suffix noted above and transitive -t.

(49) niʔ ?o č ceʔ ʔam-as-t ʔaʔa sqeʔaq ʔo ʔaʔa tels?

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 ʔaʔa ?iʔ ʔaʔa ʔam-as-t ʔaʔa sqeʔaq?

what det aux 2pos give-appl-tr det+2pos brother

'What are you going to give your younger brother?'

(51) niʔ lwet ʔaʔa niʔ ʔam-as-t-as ʔaʔa sqeʔaq ʔaʔa sk*oleʔ?

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) lam-stanʔs ʔaʔa sk*oleʔ niʔ sʔam-as-ʔaʔaʔs-s ceʔ ʔaʔa sqeʔaq,

look-comp+10bj obl det gun aux nm-give-appl-tr+10bj-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 ?o č ceʔ heʔam ʔo ʔaʔa sqew?

aux obl 2sub fut bake-m obl det fry.bread

'Are you going to make fry bread?'

(54) stem ʔaʔa niʔ ʔaʔa sk*oleʔ-am?

what det aux 2pos-sheʔam

'What did you bake?'

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

Extraction further distinguishes between oblique objects and any other obliques. Instrumentals (and some locatives) extract by registration on the verb with the instrumental prefix ʔə̣χ-.
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. ?i can wal ček*št tºo smøyəθ. aux Isubj now fry+imperf-tr det deer
   ‘I am frying the deer meat.’

b. nem ček*šk ʔa k*θa sce:ltan. go fry obl det salmon
   ‘Go fry some salmon!’

c. nem ček*škəm ʔa k* sqw spəlI. go fry+ m obl det fry bread
   ‘Go fry some fry bread.’

Here are three more verbs of this type:

(58) Base Antipassive Transitive

<table>
<thead>
<tr>
<th>Base</th>
<th>Antipassive</th>
<th>Transitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ian</td>
<td>‘weave’</td>
<td>‘weave’</td>
</tr>
<tr>
<td>sawq</td>
<td>‘look for’</td>
<td>‘look for’</td>
</tr>
<tr>
<td>šte?</td>
<td>‘do’</td>
<td>‘make’</td>
</tr>
</tbody>
</table>

15Not 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 qa'qa' ‘drink’, q*e ‘speak’, and ?atλan16 ‘eat’. For example, ‘eat’ takes an oblique-marked patient in (59) which tests to be an oblique object as (60) shows.

(59) ?atλan ʔa če ce? ʔa k* sqew?
   eat int 2sub fut obi det fry bread
   ‘Will you eat some fry bread?’

(60) stem k* ni? ʔah-s-ʔatλan?
    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

<table>
<thead>
<tr>
<th>Antipassive</th>
<th>Transitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>?a:m ‘ask/call for’</td>
<td>?a:t ‘call/ask him for’</td>
</tr>
<tr>
<td>?a:m ‘place an order for’</td>
<td>?a:t ‘place/ask him about’</td>
</tr>
</tbody>
</table>

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

    aux call-m det+2pos-grandparent obi det water
    ‘Your grandfather is calling for water.’

(63) nem ?a:t ?əh-mən.
    go call-tr dev+2pos-father
    ‘Go call your father.’

16There are several verbs of ‘eat’. This only has no -t transitive counterpart.
These data are interesting since they show that the oblique object in the antipassive and the direct object of the transitive equivalent do not always have the same semantic roles.

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

(64) Antipassive       Transitive
    'e*am  'give'       'am-as-t  'give it to him/her'
x*ayam  'sell'       x*ayam-as-t  'sell it to him/her'

(65) a. 'e*-am  'a k*ʔa sče:ltan
      give-m  obl det salmon
      'give the salmon'

      b. x*ay-om  'a k*ʔa nq*owl
      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) na*ot q*as-els  'a k*ʔo k*elōn sče:ltan.
      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).
formed with the prefix sx~. 'instrument/locative' and the -els antipassive.

(69) sxwiq~als 'grinder', sxek~als 'frying pan', sx*t'qals 'baking pan', sxēkt'als 'picker, picking machine', sseq'als 'shake splitter', sx*as*ek'als 'sander', sx*ēt'q'als 'eraser', sx*t's'wals '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) yɔ-k*am-ə-s-els 'steer horses, drive car' [hold face]
    šásam-a*q-ā-els 'smoking fish heads' [smoke-dry head]
    k*ə-as-els 'count money' [count round objects]
    x*-πaq*-s-els 'punch in face' [punch face]
    ʔax-fωs-els 'scrape ducks' [scrape body/fowl]
    k*ax*-awtx-ə-els 'knock on houses' [knock building]
    ʔoxt*-af-ə-els 'washing clothes' [wash garment]

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) ʔat-am-els can ceʔ ʔo k* sce:tan ʔaw ʔk*yəl-əs
     bake-m-act 1sub fut obl det salmon comp day-3sуб
     'I am going to barbecue fish tomorrow.'

(72) ʔi ct popan'ahals ʔo k*ʔə səewə,
     aux 1psub plant-cont-m-act obl det potato
     'We are doing the planting of the potatoes.'

(73) k*ə-yam-els ʔo əb ma*əq*ə
     burn-m-act obl det water fowl
     'Do the job of singeing the water fowl'

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

1.4.4. The structure of antipassives

Antipassives are surface intransitives that are nevertheless semantically transitive. Thus, antipassives share properties with both intransitive and transitive forms. If the antipassive is viewed from a derivational perspective, then there are two possible paths of derivation. First, it can be claimed that the antipassive morphology is added to the base intransitive with two concomitant effects: the agent is added and the patient is denied argument status. This analysis would leave the data in section 1.4.1, where the base form is already agent-oriented, unexplained. Second, it can be claimed that the transitive verb serves as the base. In this case, the -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 suppression of the goal in the antipassive is left unexplained. Furthermore, we regard both of these scenarios as unnecessarily complicated. Rather than proposing a derivation for the antipassive based upon another verb form, we think of all three verb valences as standing in a lexical relation to each other. 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 de-transitivizing function, then its presence on antipassives with agent-oriented intrasitive 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 Halk̓q̓am̓n̓aʔam.

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).

19This is the approach taken in Gerds 1993.
20This and other differences between the passive and antipassive have led Farrell...
Like antipassives and reflexives, the Holqâm 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 Gerds (1988), passive agents are not accessible in relative clause constructions either directly (76) or through nominalization (77).

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.

Example (79) shows the transitive verb sentence pattern with the -as ergative marker on the verb indicating the subject (third person) and the direct noun phrase s/nó swáyqe? 'the man' as the object. In the passive (80), the verb no longer has the ergative suffix -as. 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.

(76) *nil ʔs sleniʔ niʔ lem-ət-əm s*nítam.  
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) *sleniʔ niʔ (s/-)pən-ət-əm(-s) k*ʔo sqewʔ.  
woman aux (nom)-plant-tr-m(-3pos) det potato  
'The woman is the one who the potatoes were planted by.'

Thus they differ from oblique objects, which are extracted via nominalization with the prefix s-, and obliques such as instruments, which are extracted via nominalization with the prefix l-.

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.22

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 Holqâm 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

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21See Gerds (1995b) for a Mapping Theory analysis of this phenomena.

22See Gerds (1988a) for illustration of this and other constraints on passive.
Hālqamīkūmī 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 Hālqamīkūmī 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 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>first person</td>
<td>cēwāθēlt</td>
</tr>
<tr>
<td>second person</td>
<td>cēwaθamat</td>
</tr>
<tr>
<td>third person</td>
<td>cēwatēmat</td>
</tr>
</tbody>
</table>

(84) "I can ask + sub + const + m comp help tr + lobj + pas" 'I asked if I would be helped.'

The dependent passive morphology is used in subordinate clauses, obligatorily so for many speakers if the verb of the subordinate clause carries the subordinate clause morphology (the ?ɔw complementizer proclitic or the s-nominalizer). This -t may derive historically from the reflexive, as in reflexive-θat and the limited control reflexive -namat. The reflexive -t might also be a frozen morpheme in such intransitives as 'tīat 'sleep' and 's'amat '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, -θat, 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).

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 | logophoric | antipassive | passive |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>productive?</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>base</td>
<td>lexical suffix</td>
<td>benefactive</td>
<td>root</td>
</tr>
<tr>
<td>causative</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>non-linked</td>
<td>external</td>
<td>benefactive</td>
<td>theme</td>
</tr>
<tr>
<td>controller</td>
<td>subject</td>
<td>speaker</td>
<td></td>
</tr>
<tr>
<td>limitations</td>
<td>none</td>
<td>1st person</td>
<td>3rd person</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inanimate</td>
<td>animate</td>
</tr>
</tbody>
</table>

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

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

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

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

1.6.1. The two reflexive middles

The connection between the personal reflexive and the logophoric reflexive is obvious. In each case -m allows the suppression of an object of a transitive event because that object is known through grammatical means. In the case of the personal reflexive, the object is coreferent with the clause-mate subject. This is the restriction typically (perhaps even universally) found on morphological reflexives. In the case of the logophoric reflexive, the object is coreferent with the speaker. We could surmise an earlier state of development for logophoric reflexives where a subject antecedent condition held and reference to all persons was allowed. If, however, the construction tended to be used in first person contexts, this use could have taken over. Once the construction was limited to first person, then a clause-mate 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 indirect or 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 clause-mate 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 sēqēm 'split, tear off a piece for oneself', but we are not convinced that this is generally a property of the construction. Perhaps this use is similar to the predictability of the object in many cases of external possession, for example, grooming verbs. The unmarked situation there is for the agent to perform the action on herself/himself or for herself/himself rather than on another person (Haiman 1983).

Instead, we turn to Kemmer (1993) for insight as to how these two constructions are alike. Kemmer looks at constructions from the point of view of a general property termed the relative elaboration of events. She defines this as: 'the degree to which the participants and component sub-events in a particular verbal event are distinguished.' (1993:121) If there is a high elaboration of events then the clause will be packaged on the transitive side of the spectrum, and if there is a low elaboration of events then it appears as a more intransitive construction, frequently by means of middle morphology. Kemmer (1993:209) identifies two key factors as relevant to elaboration of events: the backgrounding of particular participants and the predictability of expectedness of certain participant relations in connection with specific events. We clearly see these semantic factors at work in the ḫāmidd construction. 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 is 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:
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 Ḥolqam fian passive above showed several features typical of reflexive-marked impersonal intransitives. Only third person agents are allowed and the patient is represented with object, not subject, morphology. Therefore, the Ḥolqam fian passive 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 Ḥolqam fian 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 will exist in tandem, sharing the workload. This seems to be the situation in Ḥolqam fian. Although both types of reflexives are surface intransitives, the reflexive -bət patterns with the object agreement morphology in having the transitive marker as its initial element (Gerds to appear). Furthermore, the reflexive -bət is limited to core cases of an action involving an agent and a patient which 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 Ḥolqam fian 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 difficult to characterize an element of meaning that -m contributes to the word. In addition, intransitive -m is highly idiosyncratic. Whatever semantic or syntactic generalization one makes about -m, it is easy to find verbs of similar meaning and function that do not take -m. Given these difficulties, it is not surprising that our research on intransitive -m yields only tentative results.

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

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 Ḥolqam fian. Although both types of reflexives are surface intransitives, the reflexive -bət patterns with the object agreement morphology in having the transitive marker as its initial element (Gerds to appear). Furthermore, the reflexive -bət is limited to core cases of an action involving an agent and a patient which 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.

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

24 In fact the reflexive -bət also shows much grammaticized behavior (Gerds to 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) \( ?i\text{il}e\text{q}\text{q}\text{m} \) 'be in the stern' \( ?i\text{il}e\text{q}\text{qam} \) 'go to the stern'
\( \text{wek}\text{on} \) 'wagon' \( \text{wek}\text{onam} \) 'go by wagon'
\( \text{iti}\text{t} \) 'sleep' \( \text{iti}\text{t}\text{am} \) 'become sleepy'
\( \text{sil} \) 'roll' \( \text{sil}\text{am} \) '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) \( \text{tak}\text{en}\text{am} \) 'put your socks on' \( \text{tak}\text{en}\text{t} \) 'put his/her socks on'
\( \text{k}\text{ec}\text{e}\text{m} \) 'scream, holler' \( \text{k}\text{ec}\text{et} \) 'scream at him/her'
\( \text{pi}\text{i}\text{l}\text{am} \) 'overflow' \( \text{pi}\text{i}\text{let} \) 'fill it to the brim'
\( \text{haq}\text{m}\text{am} \) 'smell bad' \( \text{c}\text{haq}^* \) '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) \( \text{hesam} \) 'sneeze'
\( \text{he}\text{Pam} \) 'breathe'
\( \text{qew}\text{am} \) 'rest'
\( \text{q}\text{d}\text{am} \) '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 Həlqəmətšx̱an 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 of part of the root.

(91) \( \text{pa}\text{m} \) 'swell up'
\( \text{cam} \) 'go up from water, go up hill'
\( \text{nem} \) 'go'

Where the root vowel is long, this could have easily arisen through a process of medial resonant deletion and vowel coalescence. That is, \( /\text{pa}\text{m} + \text{am}/ \rightarrow /\text{pa} + \text{am}/ \rightarrow /\text{pa}:\text{m}/. \) This is a frequently attested change within Həlqəmətšx̱an. In fact, we see pairs of words with medial resonants in the Nanaimo dialect and with long vowels in other dialects. So, for example /s\text{i}l\text{\textsuperscript{\text{p}}am}\text{am}/'berries' in Nanaimo dialect is /s\text{i}l\text{\textsuperscript{\text{m}}}\text{am}/ 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) \( \text{q}\text{w}\text{at} \) 'dress (n.)' \( \text{q}\text{w}\text{at}\text{am} \) 'dress (v.)'
\( \text{k}\text{os}\text{h} \) 'amount, number' \( \text{k}\text{os}\text{e}\text{m} \) 'count'

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

(93) \( \text{pat}\text{am} \) 'sail (n.)' \( \text{pat}\text{en}\text{am} \) 'sail (v.)'
\( \text{wek}\text{on} \) 'wagon' \( \text{wek}\text{onam} \) 'go by wagon'
\( \text{\textit{q}i}\text{te}\text{q}\text{g}\text{qam} \) 'sterm' \( \text{\textit{q}i}\text{te}\text{q}\text{g}\text{qam} \) 'go to the stern'
\( \text{ql}\text{an} \) 'bow' \( \text{ql}\text{anam} \) '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) \( \text{x}\text{ce}\text{m}\text{am} \) 'run' ('fast + foot')
\( \text{ne}\text{c}\text{e}\text{w}\text{x}\text{am} \) 'visit' (cf. \( \text{ne}\text{c}\text{e}\text{w}\text{x}\text{am} \) 'next door' = 'different + dwelling')
\( \text{\textit{q}sa}\text{m} \) 'face towards' (from the lexical suffix -as 'face')
\( \text{tuw}\text{am} \) 'it listed (cf. \( \text{tu}\text{e}\text{ka} \) (boat) to be tilted' = 'tilt + side, ear')
\( \text{\textit{q}p}\text{\textit{e}}\text{\textit{sa}}\text{m} \) 'go on tiptoes' ('doubled + toes')
\( \text{\textit{\text{t}}r}\text{\textit{sa}}\text{m} \) '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).
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 Hälqam-Sánâ. 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.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>qawām</td>
<td>'drum'</td>
</tr>
<tr>
<td>hawāšān</td>
<td>'play'</td>
</tr>
<tr>
<td>qawām</td>
<td>'rest'</td>
</tr>
<tr>
<td>qālān</td>
<td>'camp'</td>
</tr>
<tr>
<td>škān</td>
<td>'swim'</td>
</tr>
</tbody>
</table>

A.2 Manner of speaking.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>qewām</td>
<td>'howl'</td>
</tr>
<tr>
<td>šēqām</td>
<td>'growl'</td>
</tr>
<tr>
<td>leqām</td>
<td>'whisper'</td>
</tr>
<tr>
<td>qēlqām</td>
<td>'(seal) to bark'</td>
</tr>
<tr>
<td>kēqām</td>
<td>'scream, yell'</td>
</tr>
<tr>
<td>hiʔkʷoʔā</td>
<td>'crying out the news, drawing people in'</td>
</tr>
<tr>
<td>ūqem</td>
<td>'cry'</td>
</tr>
<tr>
<td>yōqām</td>
<td>'laugh'</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>četem</td>
<td>'crawl'</td>
</tr>
<tr>
<td>ġetem</td>
<td>'swim'</td>
</tr>
<tr>
<td>čēqam</td>
<td>'jump'</td>
</tr>
<tr>
<td>wēkənām</td>
<td>'go by wagon'</td>
</tr>
<tr>
<td>popatešān</td>
<td>'sailing'</td>
</tr>
<tr>
<td>naqām</td>
<td>'dive'</td>
</tr>
<tr>
<td>šatešān</td>
<td>'(fish, seal) swimming'</td>
</tr>
<tr>
<td>šīxāqam</td>
<td>'go up from water/up hill'</td>
</tr>
<tr>
<td>neššān</td>
<td>'go'</td>
</tr>
<tr>
<td>čem</td>
<td>'wade out'</td>
</tr>
<tr>
<td>qšən</td>
<td>'go to the bow'</td>
</tr>
<tr>
<td>žiʔšən</td>
<td>'go to the stern'</td>
</tr>
<tr>
<td>xōʔašaš</td>
<td>'return, go back'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>liq&quot;</td>
<td>'calm, slack'</td>
</tr>
<tr>
<td>ʔiyas</td>
<td>'happy'</td>
</tr>
<tr>
<td>šēqwil</td>
<td>'be floppy'</td>
</tr>
<tr>
<td>čōx&quot;</td>
<td>'get dry'</td>
</tr>
<tr>
<td>ġōx&quot;</td>
<td>'get covered'</td>
</tr>
<tr>
<td>ʔitāt</td>
<td>'sleep'</td>
</tr>
<tr>
<td>ʔanax&quot;</td>
<td>'stop'</td>
</tr>
</tbody>
</table>

In (55) 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.

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

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḍqatšam</td>
<td>'kneel'</td>
</tr>
<tr>
<td>qeqam</td>
<td>'kneel'</td>
</tr>
<tr>
<td>'asam</td>
<td>'face towards'</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>čąam</td>
<td>'tremble'</td>
</tr>
<tr>
<td>hesam</td>
<td>'sneeze'</td>
</tr>
<tr>
<td>taq'am</td>
<td>'cough'</td>
</tr>
<tr>
<td>hepoam</td>
<td>'breathe'</td>
</tr>
<tr>
<td>čisam</td>
<td>'grow'</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>silam</td>
<td>'roll'</td>
</tr>
<tr>
<td>pilam</td>
<td>'overflow'</td>
</tr>
<tr>
<td>hilam</td>
<td>'fall from a height'</td>
</tr>
<tr>
<td>yak'am</td>
<td>'smash up, break into pieces'</td>
</tr>
<tr>
<td>ħe'pa'am</td>
<td>'scatter'</td>
</tr>
<tr>
<td>lasam</td>
<td>'slip down (e.g. a skirt)'</td>
</tr>
<tr>
<td>po'pāpa'äm</td>
<td>'staggering'</td>
</tr>
<tr>
<td>yi'qam</td>
<td>'fall, tip over'</td>
</tr>
<tr>
<td>ye'ma'łam</td>
<td>'ripple'</td>
</tr>
<tr>
<td>x'ma'lam</td>
<td>'tide turns'</td>
</tr>
<tr>
<td>x'ta'yi'ni'</td>
<td>'tide reverses against the water flow'</td>
</tr>
<tr>
<td>me'ye'qam</td>
<td>'ripple (of water)'</td>
</tr>
<tr>
<td>q'a'wam</td>
<td>'slowly flowing'</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ħam</td>
<td>'swell up'</td>
</tr>
<tr>
<td>pa'pāq'am</td>
<td>'rotting'</td>
</tr>
<tr>
<td>q'eq'am</td>
<td>'fester (e.g. a boil)'</td>
</tr>
<tr>
<td>peq'am</td>
<td>'bloom'</td>
</tr>
<tr>
<td>liq'eq'am</td>
<td>'get calm (water, weather)'</td>
</tr>
<tr>
<td>ħeqay'eq'am</td>
<td>'get dry (weather)'</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>le'wam</td>
<td>'glitter'</td>
</tr>
<tr>
<td>pa'lit'am</td>
<td>'shining, glistening (off of snow, ice, frost), shiny'</td>
</tr>
<tr>
<td>piv'am</td>
<td>'spark'</td>
</tr>
<tr>
<td>ṣe'waq'am</td>
<td>'flicker (light)'</td>
</tr>
<tr>
<td>pe'ka'am</td>
<td>'making the sound of hoof rattlers'</td>
</tr>
<tr>
<td>qe'paq'am</td>
<td>'squeak, rasp'</td>
</tr>
<tr>
<td>la'aq'am</td>
<td>'snore'</td>
</tr>
<tr>
<td>pe'pam</td>
<td>'smell foul, stink (e.g. a skunk or a mink)'</td>
</tr>
<tr>
<td>haq'am</td>
<td>'smell bad (e.g., rotten fish smell)'</td>
</tr>
<tr>
<td>x'q'ax'eq'am</td>
<td>'smell'</td>
</tr>
<tr>
<td>me'q'am</td>
<td>'smell (e.g. a burning rag)'</td>
</tr>
<tr>
<td>saq'am</td>
<td>'smell strong'</td>
</tr>
<tr>
<td>p'eq'am</td>
<td>'drip'</td>
</tr>
<tr>
<td>x'alaq'am</td>
<td>'drip'</td>
</tr>
<tr>
<td>pk'am</td>
<td>'emit a cloud of dust or a (very fine) splash of water'</td>
</tr>
<tr>
<td>le'säm</td>
<td>'start to sprinkle'</td>
</tr>
<tr>
<td>le'lsäm</td>
<td>'sprinkle, drizzle'</td>
</tr>
<tr>
<td>ṣe'e'q'am</td>
<td>'smoke'</td>
</tr>
<tr>
<td>x'ahk'am</td>
<td>'roaring, heavy breathing'</td>
</tr>
<tr>
<td>0x'a'am</td>
<td>'bleed'</td>
</tr>
</tbody>
</table>

2.2.2. Unergative versus unaccusative verbs

Based on cross-linguistic data, Levin & Rappaport Hovav (1995) [henceforth L & RH] propose a typology of intransitive verbs. Following the Relational Grammar and
Government/Binding literature, they allow two basic types of monadic verbs—unergatives and unaccusatives. Unergative verbs are those whose sole NP is an external argument (or, in RG terms, a subject). In contrast, the sole NP in unaccusatives is an internal argument (or, in RG terms, an object). Previous research on the unergative vs. unaccusative distinction (Perlmutter 1978, Rosen 1984, among others) has shown a strong correlation between verb type and verb semantics. Verbs that denote willed, volitional actions and take animate agents are typically unergative, while verbs that are patient-oriented are unaccusative.

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

In contrast, very few Holqamfash verbs with -m 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 cause 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 Holqamfash, these are process unaccusatives, which tend to be simple roots. Their causative counterparts are formed with the general transitive suffix -t. In addition verbs of existence and appearance are thought to be unaccusative, and no verbs with -m fall into this class. Finally, there is a large group of psych verbs, such as qel ‘believe a lie’, caq ‘get surprised’, hek* ‘recall to mind’, none of which take -m.

In sum, what we have found, with only a few exceptions, is that monadic verbs in Holqamfash with the suffix -m fall under L & RH’s characterization of unergative verbs on semantic grounds. So we see that L & RH’s characterization of unergatives versus unaccusatives is straightforward.

2.2.3. Unergatives versus unaccusatives in Holqamfash

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 Holqamfash verb bases. Each base was tested with respect to a list of six verb suffixes. The suffixes are: -t, the general transitive suffix; -st, the causative suffix; -tal, the reciprocal suffix, -bat, the reflexive suffix, -namat, the limited control reflexive suffix, and -alman, the desiderative suffix.

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

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

26The morphemes discussed are: -t, the general transitive suffix, (Gerdts 1988a, 1993b, and to appear); -st, the causative suffix (Gerdts 1988a, 1991, 1994, 1995); -tal, the reciprocal suffix (Gerdts to appear), -bat, the reflexive suffix (Gerdts 1988a, 1989, to appear), -namat, the limited control reflexive suffix (Gerdts 1988a, to appear), and -alman, the desiderative suffix (Gerdts 1988b, 1991).
### Table 1: Profile of an Unergative Verb

<table>
<thead>
<tr>
<th>Verb</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>qəˈylaˈni</td>
<td>'dance'</td>
</tr>
<tr>
<td>ni?</td>
<td>can qəˈylaˈni</td>
</tr>
<tr>
<td>aux</td>
<td>1 sub dance</td>
</tr>
<tr>
<td>'I danced.'</td>
<td></td>
</tr>
</tbody>
</table>

*qəˈylaˈni- t (dance+tr) 'dance it' |

qəˈylaˈni-stax* (dance+cs) 'make s.o. dance'  | translation |
| ni?  | ct qəˈylaˈni-stax* |
| aux | 1 pl. sub dance-cs |
| 'We made him dance.' |

qəˈylaˈni-tal (dance+rec) 'dance together'  | translation |
| ni?  | qəˈylaˈni-tal |
| aux | dance-rec |
| 'They danced together.' |

*qəˈylaˈni-θat (dance+refl) 'dance oneself'  | translation |

qəˈylaˈni-namat (dance+1.c.refl) 'manage to dance'  | translation |
| ni?  | qəˈylaˈni-namat |
| aux | dance-1.c.refl |
| 'He got to dance.' |

qəˈylaˈni-śıman (dance+desid) 'want to dance'  | translation |
| ni?  | qəˈylaˈni-śıman |
| aux | dance-desid |
| 'He wanted to dance.' |

### Table 2: Profile of an Unaccusative Verb

<table>
<thead>
<tr>
<th>Verb</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>qaʔ</td>
<td>'get added to'</td>
</tr>
<tr>
<td>niʔ</td>
<td>qaʔ kʔb no šelamos 'b kʔb no s-kʷuk:</td>
</tr>
<tr>
<td>aux</td>
<td>added det 1 pos ring obl det 1 pos nm-cook</td>
</tr>
<tr>
<td>'My ring got into my cooking.'</td>
<td></td>
</tr>
</tbody>
</table>

qaʔ-t (added+tr) 'put it in'  | translation |

*qaʔ-stax* (added+cs)  | translation |
| niʔ | qaʔ-stax* |
| aux | 1 added(stat)-cs det nm-cook |
| 'I have him in with those that are canoe racing.' |

qaʔ-tal (added+rec) 'meet'  | translation |
| niʔ | qaʔ-tal |
| aux | added-rec det nm-added-rec-3pos det river |
| 'They met one another at the confluence of the rivers.' |

qaʔ-θat (added+refl) 'join'  | translation |
| niʔ | qaʔ-θat |
| aux | added-refl det play(cont) |
| 'He joined those that are playing.' |

qaʔ-namat (added+1.c.refl) 'manage to get (onself) in with'  | translation |
| niʔ | qaʔ-namat |
| aux | added-1.c.refl |
| 'He managed to get in with them.' |

qaʔ-śıman (added+desid) 'almost get added'  | translation |
| niʔ | qaʔ-śıman |
| aux | added-desid det 1 pos nm-cook |
| 'It kept getting mixed in with my washing.' |
Here is a chart summarizing the properties of unergative and unaccusative verbs.

<table>
<thead>
<tr>
<th>Grammaticized Meanings</th>
<th>Unergative</th>
<th>Process Unaccusative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causative -st</td>
<td>cause</td>
<td>*/find, have, get (static)</td>
</tr>
<tr>
<td>Desiderative -alman</td>
<td>want</td>
<td>*/about to, almost</td>
</tr>
<tr>
<td>Limited control -namat</td>
<td>'manage to'</td>
<td>accidental action on self</td>
</tr>
<tr>
<td>Transitive -t</td>
<td>*</td>
<td>cause</td>
</tr>
<tr>
<td>Reflexive -fat</td>
<td>*/alone</td>
<td>action on self</td>
</tr>
<tr>
<td>Reciprocal -tal</td>
<td>*/together</td>
<td>action on each other</td>
</tr>
</tbody>
</table>

Furthermore, in the sample of 101 verbs, 19 other verbs pattern like "nayla šalat" 'dance' and 52 other verbs pattern like "qat" 'get added to'. Examples of these are given in (97) and (98) respectively.

(97) heš̱am 'breathe', ?am 'call for', sdo'lap 'chop wood', ši'? 'climb', Pš̱nam 'close eyes', šaq̱o'l 'cross to the other side', ſam 'eat (im'), neën 'go', šipil 'go down', cam 'go up to the house, go inland', yanam 'laugh', bš̱ol 'paddle', šilam 'sing', šam 'sit down, rise out of bed', šiš̱am 'wake', šimš̱ 'walk', yays 'work'

(98) k'ilaš 'be separated', taq 'be taut, be tight', šak 'break', šiyaq 'change', šak 'come to the surface of the water, float', yak 'come undone, get untied, get out of jail', xēq 'decrease in quantity, get less', šaq 'fade away, fade out of sight', šas 'get bumped', šes 'get burnt', maya 'get cheaper', šaq 'get cut', šayx 'get dry', šašiq 'get dug', maš 'get full of food', pas 'get hit', šak 'get hooked, snagged, hung up', šal 'get hurt', qep 'get inflicted, get tied, get initiated', qis 'get knotted', Pš̱ 'get light directed onto', šaš 'get lodged between', šik 'get lost', mašiq 'get mixed in with', šik 'get scratched, scraped', lišiq 'get slack', šol 'get split, upset', šəq 'get washed', šiš 'get wrapped around something', Pš̱la 'go broke, lose it all gambling', ten 'go out of sight', šašino 'go back, return to a place', šiš 'walk (in a straight line)', šiq 'scratch an itch', soș 'tear', šaq 'wrinkle'

These two patterns account for 73 verbs in the sample of 101. These are the two major verb classes that are apparently relevant in Haš̱qam š̱āfī 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: šišam 'swim along', šešam 'crawl', našam 'dive down', šenam 'run', šuwq 'seek', tešam 'call out, yell', člam 'jump', šišōma '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: šešam 'crawl after it', šenam 'run after it', tešam '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. šiyaq 'be happy', šawq 'be adept, clever', šayam 'be slow'), and the verbs of location, comprising six verbs in the sample (e.g. šlq 'be underneath', šišiq 'be at', šecal 'arrive here, get here'). Finally, a class of four verbs (e.g. šəp 'assemble, gather', šešam '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 Haš̱qam š̱āfī. This is not surprising given that Levin (1993) posits over four dozen verb classes for English. Further verb classes are likely to emerge in Haš̱qam š̱āfī 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) ḍəw GSTXW 'make him drum', ḍeq GSTXW 'make it growl', naq GSTXW 'make her dive', siq GSTXW 'make him wade out', ḍaql GSTXW 'make her go to the bow or get in the front seat', łą GSTXW 'make him kneel'

(101) ḍaʃaln STNM 'want to play', ḍaʃaln STNM 'want to rest', ḍaʃaln STNM 'want to howl', ḍeqaln STNM 'want to scream', ḍeqaln STNM 'want to jump', łą STNM 'want to go by wagon', nesh STNM 'want to go', ąlaln STNM 'want to kneel'

(102) ḍaʃaln NAMAT 'manage to play', ḍaʃaln NAMAT 'manage to camp', ḍeqaln NAMAT 'manage to whisper', łą STNM 'manage to face towards', ąlaln STNM 'manage to go to the stern', ąlaln STNM 'manage to return', nesh STNM '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) ḍaʃaln TAL 'take turns staying over at each other's place', ḍeqaln TAL 'howl together', wekaln TAL 'go by wagon together', ḍeqaln TAL 'whisper to him/her', ąlaln TAL 'swim after him/her', ąlaln TAL 'dive down to him/her', ąlaln TAL 'wade out to him/her', ąlaln TAL 'kneel in front of him/her'

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) ḍeqaln 'howl at him/her', ḍeqaln 'growl at him/her', ḍeqaln 'whisper to him/her', ḍeqaln 'swim after him/her', ḍeqaln 'dive down to him/her', ḍeqaln 'wade out to him/her'

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: hesam 'sneeze', təqam 'cough', ḥətam 'breathe', and ćisam '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) - niʔ can ḍeqam STXW 'I got him to breathe.'
- niʔ ḍaqam STXW 'It made him cough.'
- niʔ hesam STXW 'It made him sneeze.'

(106) - niʔ ḍeqaln STNM 'He wants to breathe.' 'He's starting to breathe.'
- niʔ ḍaqaln STNM 'He wanted to cough.'
- niʔ hesaln STNM 'He started to sneeze.'
- ḍisam aln 'begin to grow'

(107) - niʔ ḍeqaln NAMAT 'She managed to breathe.'
- niʔ ḍaqaln NAMAT 'She managed to cough.'
- niʔ ćisam NAMAT 'She managed to grow.'
- niʔ hesaln NAMAT 'She finally sneezed.'

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

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

(108) naʔat ya-si-li-n ʔa naax STXW det white man aux ser-roll-m det canoe-3pos det white man
'The white man's car is rolling.'

(109) nem ści tə wekon qəsat ʔa ćuław.
go roll-tr det wagon dip-tr obi 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:
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.

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

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.

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27One verb, čeyox om 'get dry (weather)', yielded grammatical forms, but with the idiomatic reading of 'being depressed.' So čeyox om-stox* means 'make him/her depressed' and čeyox om-olm means 'become depressed.'
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 Halqamishan

A.1 Activities, volitional acts unergative unergative
A.2 Manner of speaking unergative unergative
A.3 Motion verbs
   Manner of motion: unergative unergative
   Directed motion: unaccusative unergative
A.4 Spatial configuration unergative unergative

B.1 Body processes:
   unergative unergative?
B.2 Non-agentive motion verbs: unaccusative unergative
B.3 Change of state: unaccusative unaccusative
B.4 Verbs of emission: unergative mixed

We see that the Halqamishan 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 Halqamishan data deviate from L & RH's predictions in two systematic ways. First, apparently all motion verbs in Halqamishan 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 Halqamishan, arguing that it arose as a reflexive construction and then spread to other uses. Halqamishan has a second, newer reflexive, the plain reflexive -θ, 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:

\[(119) \text{Reflective} < \text{Nontranslational} < \text{Change in} < \text{Translational} < \text{Active One-Participant} \]

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. Not all types of motion are impossible, showing that the self/other contrast is not relevant for these examples. These examples show how the reflexive gets extended to take on non-reflexive meanings.

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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: \(\text{ki} \text{cam} \text{`scream, yell'}\), \(\text{ki} \text{cam} \text{`cry'}\), and \(\text{yanam} \text{`laugh'}\). 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 \(\text{Halqam} \text{nath} \text{m} \text{iletam} \text{}`laugh'\).

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: \(\text{ni} \text{am} \text{`ask/call for'}\), \(\text{li} \text{am} \text{`beg/ask for'}\), and \(\text{yam} \text{`place an order for'}\). In (61) above, we showed that these forms take an oblique object and alternate with an active with an applicative meaning. The verb \(\text{ki} \text{cam} \text{`claim land'}\), which literally means 'to stick to something', also exemplifies indirect middle. Verbs with middle marking that denote natural reciprocal events include \(\text{nunam} \text{`converse, discuss'}\) and \(\text{qam} \text{`assemble, gather face to face'}\).

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, \(\text{pasam} \text{`swell up'}\) and \(\text{pasam} \text{`scream'}\) and \(\text{pasam} \text{`grow'}\) fit in this category.

In sum, we see that many classes of verbs take middle morphology cross-linguistically. The \(\text{Halqam} \text{nath} \text{m} \text{ystem} \text{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 \(\text{takenam} \text{`put on one's socks'}\) and \(\text{wanam} \text{`go by wagon'}\). We are left with the question, what kind of verbs do not take middle morphology in...
Halqaminam? Two classes mentioned by Kemmer are the emotional middle and the cognition
middle. Neither of these seem to appear with -m in Halqaminam. 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 unaccusatives tend to appear as bare stems and thus do not usually occur with middle
morphology.

3. Conclusion: The view from the middle

Our investigation has shown that there is no single property that definitively unites all
constructions with -m, although there is a general sense that each construction is deviating from
a fully transitive counterpart. If we place intransitives at one end of a diamond and transitives at
the other, then we find that there are three constructions that sit in the middle—the antipassive,
the passive, and the reflexive. This is because they are semantically transitive but inflectionally
intransitive. What we find in Halqaminam 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 source of the middle marker in Halqaminam. The
different uses of the middle developed from the central source of the construction—the personal
reflexive. The personal reflexive is fully productive. Furthermore, unlike the passive or
antipassive, it is represented solely by the morpheme -m. Passives take another 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 Halqaminam in the following diagram:

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 Halqaminam 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 Halqaminam.
Although both types of reflexives are surface intransitives, the reflexive -b at patterns with the
object agreement morphology in having the transitive marker as its initial element. Furthermore,
the reflexive -b at 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 Halqaminam. 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.
References


