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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 -sן in (1a) in Hał̓əm̓il̓əm̓, the Island dialect of the Halkomelem language, also serves as an inchoative (1b), the reciprocal suffix -təl (2a) also serves as a collective (2b), and the desiderative suffix -sətəm (3a) also serves as an inceptive (3b):

1. a. qəyətəm 'kill self', səyəxətəm 'dry self', ləxəəxətəm 'cover self', hələtəm 'save self'
   b. səyətam 'get slow', ələtəm 'get big', sələtəm 'get stormy', səyəxətəm 'get happy'

2. a. ə̓qəwətəm 'help each other', sə̓kwətəm 'separate from each other', məsəqətəm 'mix with each other', ə̓kwətəm 'scratch each other'
   b. sə̓kwətəm 'eat together', yə̓sətkətəm 'work together', sə̓kwətəm 'walk together'

3. a. lə̓sə̓təm 'want to swim, lə̓sə̓təm 'want to swim', lə̓xə̓təm 'want to run away', ə̓xəsə̓təm 'want to stop'
   b. sə̓qətəm 'almost got hit', ə̓xə̓sə̓təm 'almost fade out of sight', yə̓xətəm 'nearly came undone', sə̓xə̓təm 'almost got hooked'

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We use the following abbreviations in the glosses of the data: 1 = first person, 2 = second person, 3 = third person, act = activity, appi = applicative, aux = auxiliary, ben = benefactive, comp = complementizer, cont = continuous, ca = causative, cs = causative, dx = desiderative, cs = causative, det = determiner, erg = ergative, fut = future, int = interrogative, intr = intransitive, l.c.e. = limited control, m = middle, nm = nominalizer, obj = object, obl = 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 Həl̓əm̓il̓əm̓ as being particularly multifunctional. ² It is ubiquitous both in the number of forms it occurs on and the number of different constructions it appears in. For example, in Hakari 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. ʰɑ̓ləsə̓təm 'braid one's hair'
   b. ʰə̓ləsə̓təm 'buy it for me'
   c. ʰə̓ləsə̓təm 'cook some salmon'
   d. kə̓sə̓təm 'be taken'

These constructions all have transitive counterparts. Thus, -m appears to function as a 'demasiativizer'. 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 intransitivities that take -m:

5. a. sə̓qətəm 'dive', sə̓qətəm 'growl', tə̓qətəm 'cough', yə̓qətəm 'stip over', ṣə̓qətəm 'sleep', ṣə̓qətəm 'glitter', ṣə̓qətəm 'bloom', ṣə̓qətəm 'overflow', ṣə̓qətəm '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: ṣə̓qətəm 'waggon', ṣə̓qətəm 'to go by wagon'
   b. noun to adjective: qa't 'water', qa't 'water'
   c. location to state: ṣə̓qətəm 'be in the stem', ṣə̓qətəm 'go to the stem'
   d. action to inchoative: ṣə̓qətəm 'sleep', ṣə̓qətəm 'get sleepy'

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

³For previous work on -m in Halkomelem, see Galloway 1993, Leslie 1979, and Sutcliffe to appear. Galloway, in particular, gives a thorough listing for intransitive verbs in -m.

²The polymorphous nature of -m is especially pronounced in Southern Interior Salish languages where it has taken on full aspectual status (Kroeber 1986).
discoveries we have made for Halqamthän. 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 Kerner (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. Gerdis (1991, 1996) has previously discussed Halqamthän in terms of two classes: intransitives, 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 intransitivity 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 Halqamthän that have corresponding transitive constructions. First, however, we give a brief summary of Halqamthän 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 semantic class 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 Gerdis (1988b). Transitive clauses contain a verb that is morphologically marked with a transitive suffix. These include, inter alia, the general transitive suffix -st (7), the limited control transitive suffix -nax- (8), and the causative suffix -sax- (9).

(7) ni? Ɂ臬-sax- as Ɂis? Ɂa k'ωa Ɂqaməl
    aux club-3erg det woman obl det paddle
    'He clubbed the woman with the paddle (on purpose).'

(8) ni? Ɂ臬-nax- as Ɂis? Ɂa k'ωa Ɂqaməl
    aux club-3erg 3obj-3erg det woman obl det paddle
    'He accidentally clubbed the woman with the paddle.'

(9) ni? Ɂiməw-stax- as Ɂis? Ɂa
    aux walk-3erg 3obj-3erg det woman
    'He made the woman walk.'

Surface transitivity is transparent in Halqamthän. The transitive markers themselves are a test for transitivity: if the verb is morphologically transitive, then it must have a transitive suffix. Furthermore, as Gerdis (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) ni? Ɂiməw Ɂis? Ɂa
    aux walk det woman
    'The woman walked.'

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

5 For further conditions on causatives, see Gerdis 1995a.
But causatives cannot be formed on transitive clauses, as seen in (11), a causative based on the transitive suffix -i, and (12), a double causative:

(11) "ni? can ɔq-ɔl-ɔt-stɔx " la sten? (ʔɑ) kʰa speʔə
    aux 1sub bake-tr-cs+tr+3obj det woman obl det bread
    'I had the woman bake the bread.'

(12) "ni? can na'ɛm-m-si(ə)x*-stɔx " la Mary (ʔɑ) kʰa pok=ə.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. Holqamfah 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 -as, as seen in the above examples. In contrast, third person subjects in main clause intransitives do not determine agreement.6

Also, only transitive verbs license a direct object NP in direct case, for example, la sten? 'the woman' in examples (7) and (8) above, as opposed to oblique NPs, for example, kʰa səqumal 'the paddle' in (7) and (8), which is introduced by the multi-purpose oblique preposition ʔa.

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

(13) tɔŋ tʃək speʔə ni? ʃiʔɛk=əʃ
    det black bear aux swimming
    'the black bear that is swimming'

(14) tɔŋ səqumal ni? ɛqɨt-as kʰa speʔə
    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 -as is omitted.

6Holqamfah has a split agreement system. In subordinate clauses, all third person subjects that -as agreement.

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

(15) tɔŋ səqumal ni? ɛqɨt kʰa speʔə
    det man aux kill-tr det bear
    'the man that killed the bear'

In contrast, obliques can only be extracted via nominalization:

(16) kʰa səqumal ni? t-əq*-ət-əs la sten?
    det paddle aux nm-club-tr-3pos det woman
    'the paddle with which he clubbed the woman'

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

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

1.2. Personal reflexives

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

(17) niʔ can 1xka=ʔat. 'I covered myself.'
    niʔ ʃ 1xka=ʔat. 'You (sg.) covered yourself.'
    niʔ ct 1xka=ʔat. 'We covered ourselves.'
    niʔ ko-p 1xka=ʔat. 'You (pl.) covered yourselves.'
    niʔ 1xka=ʔat. 'He/she/it/they covered self.'

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

As is the case with noun incorporation in many languages, heads of possessed themes can appear as lexical suffixes. This gives rise to an external possession construction. That is, the semantic possessor appears as an argument of the verb. Thus, in (18) and (19) the nominal possessor is the syntactic object of the clause.
The reflexive external possession construction is extremely common in Holqam fists. We give some additional examples in (23):

(23) seʔ.əm-n-əm ‘raise one’s foot’
seʔ.əm-cs-əm ‘raise one’s hand’
śaʔ.əm-cs-əm ‘wash one’s hands’
lak.əm ‘get a haircut’
təʔ.əm-am ‘comb one’s hair’
ɬəʔ.əm-əkə-əm ‘cut one’s hair’
xʷəʔ.əl-əm-əm ‘quench one’s thirst’
ləxʷ-əl-əm-əm ‘brush one’s teeth’
xʷəʔ.əl-əl-əm-əm ‘wipe one’s nose’

The use of -əm in a reflexive sense is very productive with somatic (body-part) lexical suffixes. But the -əm ‘own’/’-ə’ ‘other’ distinction also occurs with non-somatic suffixes.

(24) seʔ.əm-əl-əm ‘looking for a house’
seʔ.əm-əl-əm ‘looking for a house for him/her’
kax-əm-əl-əm ‘knock on his/her house’
θəʔ.əm-əl-əm ‘knock on own house’
θəʔ.əm-əl-əm ‘put many layers of clothes on him/her’
θəʔ.əm-əl-əm ‘put many layers of clothes on self’

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

(25) əʔəʔ.əl-əm ‘make one’s own bed’
kəx.əl-əm ‘take one’s own car or boat’
θəʔ.əl-əm ‘build a house for oneself’
ləxʷ-əl-əm ‘undress, take off one’s clothes’

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

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

Non-coreferent (third person) external possessors are signalled by -ə while coreferent external possessors are signalled by -əm.

8The final n of a lexical suffix deletes before the -ə transitive.
(26) a. meŋ-šan  
    meŋ-šān-om  
    meŋ-šē-t 
    'shoe comes off' 
    'take off one's shoes' 
    'take off his/her shoes'

b. qaŋ-cas 
    qaŋ-cas-am 
    qaŋ-cas-t 
    'bandaged hand' 
    'bandage one's hand' 
    'bandage his/her hand'

c. xʷ-pəkʷ-əs 
    xʷ-pəkʷ-əs-am 
    xʷ-pəkʷ-əs-t 
    'washed face' 
    'wash one's face' 
    'wash his/her face'

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

(27) a. ḥək-əm 
    ḥək-ət 
    'bathe (self)' 
    'bathe him/her'

b. hiwəs-am⁹ 
    hiwəs-t 
    'bring oneself to people's attention' 
    'bring him/her to people's attention'

c. cə maqmə-kəm 
    maqmə-ət 
    'fill oneself until bloated' 
    'fill him/her with food'

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

(28) a. kəpət 
    'coat' (from French capote via Chinook Jargon) 
    kəpətəm 
    'put one's coat on' 
    kəpətət 
    'put his/her coat on'

b. leškən 
    'shawl' (from French le châle) 
    leškənəm 
    'put one's shawl on' 
    leškənt 
    'put a shawl on him/her'

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

d. yasəqʷəm 
    'hat'¹⁰ 
    yasəqʷəm 
    'put one's hat on' 
    yasəqʷət 
    'put his/her hat on'

e. qaɬəyəsəm 
    'shoe'¹¹ 
    qaɬəyəsəm 
    'put one's shoes on' 
    qaɬəyəsət 
    '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) cəqət yələxʊə-šəməŋ 
    xənə̱ mən 
    tə qəɬəyəsən. 
    ax ŋxə̱t-ə̱-ə̱m-ə̱m 
    det+2pos father old det shoes 
    'Your father has tried on all the shoes.'

(30) xənə̱ nəm xʷəpələqə̱ə̱m 
    kəθə̱ mənə̱. 
    ax ŋxə̱t-ə̱-ə̱m-ə̱m 
    det+2pos child 
    'Your child went to wipe his nose.'

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

(31) a. ɬəpə-ə̱m-ə̱mə̱t* 
    'make them assemble' 
    ɬəpə-ə̱m-ə̱m 
    gather-face-m-čs 
    'make them assemble'

b. yoɬə-aɬə-ə̱m-ə̱mə̱t* 
    'make him/her shampoo' 
    rub-head-m-čs 
    'make him/her shampoo'

c. ḥək-əm-ə̱mə̱t* 
    'make him/her bathe' 
    bathe-m-čs 
    'make him/her bathe'

d. teləsə-ə̱m-ə̱mə̱t* 
    'make him/her wear glasses' 
    glasses-m-čs 
    'make him/her wear glasses'

e. ɬɪɬə-ə̱m-ə̱mə̱t* 
    'dress him/her' 
    dress-m-čs 
    'dress him/her'

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

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

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.

3. Logophoric reflexives

As discussed in Gerds (1988a), Hašomish beneficiaries are expressed in applicative constructions formed by the addition of the verbal suffix -c, which appears before the transitive suffix. The goal is the object and hence is cross-referenced by the object agreement suffix, while the theme is an oblique nominal introduced by the all-purpose preposition ʔa.

(32) niʔa ʔa-šal-olc-ʔašiʔ-os ʔa k’te salamon.
aux bake-ben-1+obj-3erg obl det salmon
‘He baked the salmon for me.’

(33) niʔa ʔa k’-on-olc-ʔašiʔ ʔa k’te saptfl.
aux int 2sub take-ben-1+obj obl det bread
‘Did you get me some bread?’

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

(34) ʔašal ʔašal-šalcat ‘bake it’
ʔayt ʔayt-šalcat ‘fix it’
ʔalit ʔalit-šalcat ‘write it’
ʔašalat ʔašalat-šalcat ‘take it for him/her’
ʔašalat ʔašalat-šalcat ‘take it for him/her’
ʔašalat ʔašalat-šalcat ‘sow it for him/her’

The applicative suffix -c 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 coherent to the speaker.12

12Studies (in preparation) also notes this construction. We are not aware of its existence in other Salishan languages. Gerds (1989a) 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.

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:

(35) nəm ʔa ʔalq-olc-satl ʔa k’te satfl.
go 2sub buy-ben-intr obl det bread
‘Go buy some bread for me, yourself/him!’

(36) nəm ʔa ʔašol-olc-satl ʔa k’te ʔaškəm ŋə.
go 2sub fut gather-ben-intr obl det consumption seed
‘Go and gather some consumption seed for me!’

(37) niʔa ʔa k’-on-olc-ʔašiʔ ʔa k’te təla?
aux int you get-app1obl obl det money
‘Did you get me some money?’

(38) niʔa ʔa k’-əj-olc-ʔašiʔ ʔa k’te təma?
aux int you alreadly smash-app1obl obl det ochre
‘Did you already break up the ochre for me?’

(39) niʔa ʔa ʔašol-olc-am.
aux 1sub bake-ben-intr
‘I cooked it for myself.’

The reflexive suffix -θat cannot follow an applicative suffix:

(40) *niʔa ʔa ʔa-θal-olc-θat.
aux 1sub bake-ben-refl
‘I cooked it for myself.’

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

14Gerds 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.
A second property of this construction is also suggestive of logophoricity. In usual contexts the subject of the constructions is second person. In fact, the most common use is in the an imperative as in (35) and (36). However, a third person subject is possible in the the domain of a speech act verb used to express an indirect imperative, as in the following example:

(41) cse-t can ce? la steni? jow q=xal-xlc-am-as
    tell-er 1sub fut det woman comp bakeben-intr-3s
    '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-bound. Thus the reflexive in the embedded clause refers only to its clause霰subject, not to the speaker.

(42) cse-t can ce? la steni? jow ti-pq=-as
    tell-er 1sub fut det woman comp comb-hair-intr-3s
    'I'm telling the woman to comb her own hair.'
    '*'I'm telling the woman to comb my hair (for me).'

It is difficult to establish the final transitivity of the logophoric reflexive construction. Since we have no data with a third person main clause subject, we cannot test it for ergative agreement. Furthermore, causatives seem to be impossible. So forms like *k=xam-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 -namor. 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 logophorphic reflexive.

(43) ni? la z k=xam-xlc-am-namor?
    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 (Germd 1988a, Hikari 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? j=xal eb sce:lan.
    aux bake det salmon
    'The salmon cooked/barbecued.'

b. ni? j=xal-o tas r=a sce:lan.
    aux bake-o-3erg det salmon
    'He cooked/barbecued the salmon.'

c. ni? j=xal-am y la r=a sce:lan.
    aux bake-o obl det salmon
    'He cooked/barbecued/bake the salmon.'

(45) a. k=xal k=xal-xla stihilo na-s-xow-xk=ximk-x-xed.
    spill det scapot 1poss-am-aux+comp-burn-car
    'The kettle spilled and I got a burnt ear/strip of head.

b. ni? k=xal-x-la r=a qa?
    aux spill-o-3rd det water
    'He poured the water.'
The verbs in (44b) and (45b) take the transitive suffix -t while the verbs in (44c) and (45c) are suffixed with -m. Only a small group of verbs in our data (approximately 32) show alternation between -t and -m of this sort. Additional examples are given in (46):

(46) Base | Transitive | Antipassive
--- | --- | ---
poa 'get buried' | pan‘it ‘bury it' | poa‘om ‘plant, sow'
qnap ‘gathered’ | qnap‘it ‘gather it' | qnap‘om ‘gather'
k’es ‘get hot’ | k’es‘it ‘heat it' | k’es‘om ‘heat over flames, singe'
mite‘ ‘get mashed' | mite‘it ‘mash it’ | mite‘om ‘mash'
pq‘t‘ break’ | pq‘it ‘break it’ | pq‘om ‘break some off'
saq‘ ‘split, tear’ | saq‘it ‘tear it’ | saq‘om ‘tear off a piece'

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

(47) ni? can yq‘al-at-stax” ə θa sect:ion.
  aux 1sub barbecue-r-cs obl det salmon
  'I made him cook/barbecue/bake the salmon.'

(48) ni? can yq‘al-am-stax” ə θa sect:ion.
  aux 1sub barbecue-m-cs obl det salmon
  'I made him cook/barbecue/bake the salmon.'

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

The case marking of the patient NP provides a third indication that (44b) is transitive and (44c) is intransitive. The optional patient NP in (44c) is introduced by the oblique marker ə. 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,

Hakari 1997.) Compare the following set of sentences based on the transactional verb əam-sst ‘give’ which contains the applicative suffix noted above and transitive -t.

(49) ni? ə ə ce? əam-sst fəsil sqe‘aq ə ə telu?
  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 ə ə əam-sst fəsil sqe‘aq?
  what det aux 2pos give-appl-tr det+2pos brother
  'What are you going to give your younger brother?'

(51) nil əst ə əam-sst-os fəsil sqe‘aq ə ə sk‘a?e?
  focus who det det give-appl-tr-erg det+2pos brother obl det gun
  'Who is your younger brother going to give the gun to?'

(52) la-m-staxial fə ə sk‘a?leš ni? s-əam-sst-fəsil sqe‘aq
  look-cs-1obj obl det gun aux nm-give-appl-tr+1obj-3pos fut det+2pos brother
  'Show me the gun that your younger brother is going to give me.'

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

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

(53) ni? ə ə ce? he‘am ə ə sqw?
  aux obl 2sub fut bake-m obl det fry,bread
  'Are you going to make fry bread?'

(54) stem ə ə ni? əə-s-he‘am?
  what det aux 2pos-nm-bake-m
  'What did you bake?'

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

Instrumental (and some locatives) extract by registration on the verb with the instrumental prefix əx‘-.
(55) liΧt-αt ει' o σειλιον γι' o 1αι-ται.
hook-τρ det salmon obl det gaff hook
'Hook the fish with a gaff!'

(56) ει' ο 1αι-ται γι' αη-łów-liΧ-αt ει' σειλιον.
here det gaff hook 2pos-am-hook-τρ det salmon
'Here is the gaff you hook the salmon with.'

The above evidence points to two facts about antipassives. First, they are surface intransitives, as they reflect 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. ηι' was ηι' 1αι-λτ
    aux 1subj now fry imperf-τρ det deer
    'I am frying the deer meat.'

     a. neη 1αι-λτ  γι' 1αι-σειλιον.
        go det salmon
     'Go fry some salmon!'

c. neη 1αι-λτέοn γι' 1αι-σεσσω σεσπλ.
        go fry-obl det fry bread
     'Go fry some fry bread.'

Here are three more verbs of this type:

(58) Base Antipassive Transitive
lαι' 'weave' basam 'weave' 1ai-η
sawj 'look for' sawdiam 15 'look for' sawj-η 'look for him/her'
sawj-η 'do' sawj-ισιo 'make' sawj-ισιo-η 'make him/her'

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 qe'qeq 'drink', qe'qη 'speak', and qe'imp16 'eat'. For example, 'eat' takes an oblique-marked patient in (59) which tests to be an oblique object as (60) shows.

(59) qe'imp1 γι' η έι' qe'qη sqew.
    eat int 2sub fut obl det fry bread
    'Will you eat some fry bread?'

(60) stem η1 γι' qe'imp1-s-π
eu was aux 2pos-am-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
    ηαη 'ask/call for' ηαη 'call/ask him for'
    iηm 'beg/ask for' iηm 'beg/ask him for'
yαim 'place an order for' yαim 'warn him about'

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

(62) ηαη 'ηαη ηαη ηαη-διη ηαη
    aux call-m det-2pos-grandparent obl det water
    'Your grandfather is calling for water.'

16There are several verbs of 'eat'. This only has no -τ 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.

Nobably 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
τβ’um 'give' τβ’as-t 'give it to him/her'
σασ ‘sell’ σασ-τ-τ 'sell it to him/her'

(65) a. τβ’um τα τα σε-λταν
'give-m obi det salmon'
'give the salmon'

b. σασ-τ-τ καθα σμε-αυλ
'sell-m obi 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 -el

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

(66) na’ot qat-as-el τα τα κελθα σε-λταν.
aux pour-cont-act obi det salted salmon
'She is soaking the salted fish.'

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

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


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) y-a-k-ıso-ıls ıls 'steer horses, drive car' [hold face]
saıx-ı-ıls 'smoking fish heads' [smoke-dry head]
k-ı-s-ıls 'count money' [count round objects]
x-ı-n-ıls 'punch in face' [punch face]
ıs-ı-lw-ıls 'scrape ducks' [scrape body/fowl]
k-ı-x-ı-wıx-ıls 'knock on houses' [knock building]
ıs-ı-x-ıls 'washing clothes' [wash garment]

Perhaps the -m antipassive is incompatible with lexical suffixation because both serve a similar function of backgrounder 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) ı-ı-ı-s-ıls ıls ce? ı-ı-ı-sıq-ıls 'bake'-m-act ıls sub fur ob det salmon comp day-3sub 'I am going to barbecue fish tomorrow.'

(72) ı-ı-ı-s-ıls ıls ce? ı-ı-ı-sıq-ıls 'bake'-m-act ıls sub fur ob det salmon comp day-3sub 'We are doing the planting of the potatoes.'

(73) ı-ı-ı-s-ıls ıls ce? ı-ı-ı-sıq-ıls 'bake'-m-act ıls sub fur ob det salmon comp day-3sub 'We are doing the planting of the potatoes.'

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 -ı is replaced by antipassive morphology and the patient is denied argument status. The data with goal applicatives verbs in section 1.4.2 are a problem for this analysis. The total supression of the goal in the antipassive is left unexplained. Furthermore, we regard both of these scenarios as unnecessarily complicated. Rather than proposing a derivation for the antipassive based upon another verb form, we think of all three verb valences as standing in a lexical relation to each other.19 This does not strike us as an unreasonable way of thinking about them from the viewpoint of the speaker/hearer, who we believe has them in the mental lexicon. Not all verbs have all the slots in their paradigm filled, but enough so that the relationship between the forms is clear.

What is less clear is the function of -m in the antipassive construction. If it is regarded as having solely a detransitivizing function, then its presence on antipassives with agent-oriented intransitive counterparts in section 1.4.1 and on examples with the stacking of -m and -ıls 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 Hóséqamítsam.

Unlike -m in other constructions, passive -m follows the transitive suffix, as seen by comparing the active transitive clause in (74) with the passive in (75):20

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

(76) *nil ə a sɫeniá ní a leɑ-nt-ɑm tɛn xɑnθəm. 3-emph det woman aux look-t-3pl det white.man 'It's the woman who the white man was looked at by.'

(77) *sleniá ní (b/-)poɑ-nt-ɑm(-s) kɛθu sqewə. woman aux (nom)-plant-t-3pl(-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 oblique such as instruments, which are extracted via nominalization with the prefix $f$-.

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.\(^\text{21}\)

(78) singular

first person pasɑɸɛm 'I was hit.'
second person pasɑɸɛm 'You were hit.'
third person pasɑɛm 'hit him/himself'

plural

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

\(^{21}\) See Gerdes (1995b) for a Mapping Theory analysis of this phenomena.

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surface object (paralleled the object agreement marking on passive verbs) or a surface subject.

There are two situations when the passive pattern must be used. The first is when the agent is mentioned and not the patient. Compare the following sentences.

(79) ní a pɑ-sɑ-nt-ɑm ə tɛn sɛwəqə. a hit-t-3pl det man 'He hit the man.'

(80) ní a pɑ-sɑ-nt-ɑm ə tɛn sɛwəqə. a hit-t-3pl obi det man 'The man hit him/her was hit by the man.'

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

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

(81) ní a cɑn pɑ-ɑɪəmə. aux 1sub throw-t-2obj 'I hit you.'

(82) ní a pɑ-ɑɪəmə ə ɛtɛn sɛwəqə. aux throw-t-2obj det man 'The man hit you/You were hit by the man.'

Further, many speakers must use the passive when the agent is signalled by a proper name.\(^\text{22}\)

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

\(^{22}\) See Gerdes (1988a) for illustration of this and other constraints on passive.
Holiqamfash passive, -m would be such a morpheme. The inverse analysis fails to explain the presence of object morphology for first and second person "patients". 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 Holiqamfash does not have a typical passive, it does seem to be amenable to an inverse analysis.

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

(83)

<table>
<thead>
<tr>
<th>singular</th>
<th>plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>first person</td>
<td>čewatitl: 'I was helped' čewatitl: 'we were helped'</td>
</tr>
<tr>
<td>second person</td>
<td>čewatÌmo: 'you were helped' čewatÌmo: 'you people were helped'</td>
</tr>
<tr>
<td>third person</td>
<td>čewatÌwat: 'He/she/it they were helped'</td>
</tr>
</tbody>
</table>

(84) ?i con pot-arh =o-w =e-w-øëetically. aux lsub ask+con-t-m comp help-tr+tobj+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 Ñò complementizer proclitic or the -nominalizer). This -t may derive historically from the reflexive, as in reflexive -bát and the limited control reflexive -namð. The reflexive -t might also be a frozen morpheme in such intransitives as -šlán 'sleep' and -šmàt '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, -bát, and the personal reflexive, -m. It should be noted that reflexive passives are quite common in languages of the world and that in many languages with reflexive passive, the same morphology is also used for reflexives and intransitive middles.

1.6. The middle

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

---

(85) a. ížútæ-ðas-m 'braid one's hair'
b. ?¿loq-cit-æm 'buy it for me'
c. q¿-aï-m ño kÌ sce:ltan 'cook some salmon'
d. k¿-taï-æm 'be taken'

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

(86) personal

<table>
<thead>
<tr>
<th>productive</th>
<th>logophoric</th>
<th>reflexive</th>
<th>antipassive</th>
<th>passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>base</td>
<td>lexical suffix</td>
<td>reflexive</td>
<td>antipassive</td>
<td>passive</td>
</tr>
<tr>
<td>nominal V</td>
<td>root (rare)</td>
<td>root (rare)</td>
<td>root (rare)</td>
<td>root (rare)</td>
</tr>
<tr>
<td>causative</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>non-linked</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>controller</td>
<td>subject</td>
<td>speaker</td>
<td>theme</td>
<td>agent</td>
</tr>
<tr>
<td>limitations</td>
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<td>3rd person</td>
<td>3rd person</td>
</tr>
<tr>
<td>control</td>
<td>animate</td>
<td>animate</td>
<td>animate</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 intonationally 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 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 Hailqamadhaa middle marker originates as a reflexive. This places the question of what properties are shared by the -m constructions in a different light. Rather than looking for overall similarities, we look instead for properties that are shared between the reflexive and each other construction. We address this issue in the rest of this section, returning briefly to the alternate hypothesis, that the source is something other than the reflexive, in the conclusion.

1.6.1. The two reflexive middles

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

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

1.6.2. Reflexive and antipassive

The relationship of antipassive -m to the reflexive is less transparent. Both constructions are clearly morphosyntactically intransitive, as they both can be causatized. 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 gqam "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 predicatibility of the object in many cases of external possession, for example, grooming verbs. The unmarked situation there is for the agent to perform the act 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 backgrounds of particular participants and the predictability of anticipated certain participant relations in connection with specific events. We clearly see these semantic factors at work in the Hailqamadhaa antipassives. They are characteristic of both the -m and -els antipassives. We did see in comparing the two types of antipassive, that the theme in the -m antipassive was often defocused or de-individualized while the theme in the -els antipassive was often omitted altogether. So -m shows low elaboration of the theme involved in the event while -els places more emphasis on the activity than on the participants.

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

1.6.3. Reflexive and passive

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

28
Se habla español. 'Spanish is spoken.' (Spanish)

Hier taszt sich gut 'One can dance well here'. (German, Kemmer 1993: 148)

In some languages, passive morphology historically derives from reflexive morphology, for example in Uto-Aztecan as discussed by Langacker and Mrzou (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 Hälşam-fah=G passive above showed several features typical of reflexive-marked impersonal passives in other languages. Only third person agents are allowed and the patient is represented with object, not subject, morphology. Therefore, the Hälşam-fah=G passives may be a reflexive passive and hence take morphology otherwise associated with reflexives.

1.6.4. The reflexive hypothesis

The discussion above lends credence to the suggestion that the personal reflexive should be regarded as the core central category of the Hälşam-fah=G 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-grammaticalized—i.e., 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, he postulates that whenever a language has a non-reflexive source of the middle marker, that reflexive uses are excluded from the middle category. Verbal morphology does not take on referential functions over the course of time. The converse path of development is well-attested. A morpheme with more robust referential meaning often takes on a more functional meaning serving to delimit or modify the event and may eventually becomes fused portion of the verb. Thus, the fact that Hälşam-fah=G uses the middle as a reflexive provides evidence against the passive being the source.

One objection to this proposal might be that Hälşam-fah=G already has a reflexive, the plain reflexive -θar, and this would block -m from having the core meaning of reflexive.

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 Hälşam-fah=G. Although both types of reflexives are surface intransitives, the reflexive -θar patterns with the object agreement morphology in having the transitive marker at its initial element (Gerds to appear).

Furthermore, the reflexive -θar is limited to core cases of action involving an agent and a patient and thus is used in contexts with a high elaboration of events. The reflexive -m picks up cases at the edge where it represents a possessive or benefactive relationship to the agent or the speaker.

Having established -m as a middle marker, whose source is the category reflexive, we turn now to another key piece of the middle puzzle. In middle systems, especially those with a reflexive source, some classes of intransitives also tend to take the middle marker. According to Kemmer (1993:224), the marker should extend into verb classes such as motion verbs, verb of change in body posture, and grooming verbs. In fact, many intransitive verbs in Hälşam-fah=G 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 neutrality and unaccusativity. In section 2.3, we discuss verb classes from the point of view of the middle hypothesis.
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) *t16oq 'be in the stern' *t16oqam 'go to the stern'
wekon 'wagon' wekonam 'go by wagon'
*tiot 'sleep' *tiotam 'become sleepy'
sil 'roll' silam '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) takén-om 'put your socks on' takén-t 'put his/her socks on'
k*c-o-om 'scream, hoister' k*c-o-t 'scream at him/her'
*til-om 'overflow' *til-t 'fill it to the rim'
haq-om 'small bed' haq-om '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) hésam 'sneeze'
bePam 'breathe'
gewam 'rest'
q*alam '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 Haida locative root, usually C(V)C. In other cases, for example the word in (91), it is not clear to us whether the -m is a suffix or part of the root.

(91) *paam 'swell up'
cam 'go up from water, go up hill'
ne'm 'go'

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

/astam/ 'berries' in Nuu-chah-nulth dialect is /as*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) *qapam 'drum (n.)' *qapam 'drum (v.)'
*k*am 'amount, number' *k*am 'count'

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

(93) *pasam 'sail (n.)' *pasam 'sail (v.)'
wekon 'wagon' wekonam 'go by wagon'
*t16aqam 'spear' *t16aqam 'go to the spear'
qlan 'bow' qlanam '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) *t*am 'run' ('fast + foot')
nétam 'visit' (cf. netam 'next door' = 'different + dwelling')
*am 'face towards' (from the lexical suffix -as 'face')
*tam 'it lined (cf. ra*tam 'boat to be lined' = 'tilt + side, ear')
q*alam 'go on tiptoes' ('doubled + toes')
*alam 'park, come to a stop' ('push + face')

Most of the time, the suffix -m is not so spectacularly category-shifting. Rather, it adds a slight modification to the meaning, such as inchoative, intensive, or change of state. The bases can be adjectives (95a), process verbs (95b), or even actions 95(c).
(95) (a) liq‘ 'calm, slack' liq‘am 'get calm (water, weather)'
    'iyaq ‘happy’ ‘iyaqam ‘get happier’
    s̱elep ‘be floppy’ s̱elap ‘(too) floppy’

(b) čaʃx‘ 'get dry'
    čaʃx‘am ‘(too) dry’
    čaʃx‘ ’get dry (weather)’
    š nowrap ‘get covered’ šəqwam ‘get warm’

(c) ʔaʃat ‘sleep’ ʔaʃatan ‘get sleepy’
    ʔaʃx‘ ‘stop’ x̱ ‘(flow of the tide) has stopped’

In sum, we see that -m is multifunctional. It goes on a variety of bases—nouns,
adjectives, and verbs—to yield adjectives or verbs. It derives actions, including motion verbs, but
also states and processes. It sometimes adds only a shade of meaning, often of a more aspecual
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 ineragative/unaccusative distinction. We also briefly
corrolate words 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 ineragativity versus
unaccusativity in H̱alq̱am mush. Finally, in section 2.2.4, we apply these tests to each sub-class.
This task is problematic because we lack 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-agressive events that are out of the control of the participant (Type
B).
A.4 Spatial configuration. These verbs describe the assumption or maintenance of a body position.

əp kolem 'knee'
dam 'knee'
'asam 'face towards'

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

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

dənem 'tremble'
hem 'sneeze'
taq'em 'cough'
hep'em 'breathe'
nisem 'grow'

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

silm 'roll'
jilam 'overflow'
hilam 'fall from a height'
yək'əm 'smash up, break into pieces'
jepeqam 'scatter'
lasem 'slip down (e.g. a skirt)'
pəpəpəqam 'staggering'
yiqam 'fall, tip over'
yəmeqam 'ripple'
x*całam 'tide turns'
x*ca'yənäm 'tide reverses against the water flow'
meqaqam 'ripple (of water)'
q*əwəm 'slowly flowing'

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

jəm 'swell up'
piq*ən 'rotting'
q*əm 'fester (e.g. a boil)'
peqam 'bloom'
liq*əm 'get calm (water, weather)'
çəxən 'get dry (weather)'

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

leqam 'glitter'
piq*ən 'shining, glistening (off of snow, ice, frost), shiny'
q*əm 'spark'
exoqam 'flicker (light)'
qənqam 'making the sound of hoof rattles'
gənqən 'squeak, rasp'
ləeq'əm 'snore'
peqam 'smell foul, stink (e.g. a skunk or a mink)'
həq'əm 'smell bad (e.g., rotten fish smell)'
x*əq*ən 'smell'
meqam 'smell (e.g. a burning rag)'
qən 'smell strong'
q*əm 'drip'
x*ənənəm 'drip'
pəq*əm 'emit a cloud of dust or a (very fine) splash of water'
jeleqam 'start to sprinkle'
leleqam 'sprinkle, drizzle'
exeq*əpam 'aromatic, heavy breathing'
th*ən 'bleed'

2.2.2. Unergative versus unaccusative verbs

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

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

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

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

In contrast, very few Halajmînî verbs with -m fall into the unaccusative class. L & RH characterize unaccusative verbs as those 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 characterize alternately with a causative form. In Halajmînî, 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 ö'el 'believe a lie', ö'el 'get surprised', ö'el 'recall to mind', none of which take -m.

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

2.2.3. Unergatives versus unaccusatives in Halajmînî

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 tests tell us about the status of monadic intrinsics.

Gerds (1991, 1996) surveyed 101 Halajmînî verb bases. Each base was tested with respect to a list of six verb suffixes.25 The suffixes are: -t, the general transitive suffix; -st, the causative suffix; -tal, the reciprocal suffix; -stol, the reflexive suffix; -nam, the limited control reflexive suffix; and -alman, the desiderative suffix.26

Table 1 and Table 2 below, examples of these suffixes in combination with two verb bases Ö'eylyl 'dance' and Ö'eylyl '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 Ö'eylyl 'get added to' allows the transitive suffix, Ö'eylyl 'dance' does not. Furthermore, Ö'eylyl 'dance' has a causative meaning when suffixed with the causative suffix. In contrast, the causative suffix on Ö'eylyl 'get added to' has the grammaticalized meaning of 'have' or 'find'. With respect to reciprocals and reflexives, their meanings is 'each other' or 'oneself' when they appear with Ö'eylyl 'get added to', but they do not carry these meanings with Ö'eylyl 'dance'. The limited control reflexive when suffixed on Ö'eylyl 'get added to' has a reflexive meaning, but when suffixed on Ö'eylyl 'dance' has the grammaticalized meaning of 'manage to'. Conversely, the desiderative suffix means 'want' when suffixed to Ö'eylyl 'dance' but has the grammaticalized meaning of intention or tendency when suffixed to Ö'eylyl 'get added to'. Thus, we see that very different forms arise when the same suffix is added to the two different bases.

25Howett (1995) uses a similar methodology to test verbs in Nl+2: 10 p.m. See Mazina 1994 for a different approach, one that factors in aspect as well as argument structure.

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

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Syntax</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>q-<em>syylaš</em> dance</em></td>
<td>*q-<em>syylaš</em> dance</td>
<td>aux sub dance</td>
<td>I danced.</td>
</tr>
</tbody>
</table>

* *q-*syylaš*-t (dance+rt) 'dance it'

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Syntax</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>q-<em>syylaš</em>-stax</em> (dance+ca) 'make s.o. dance'</td>
<td><em>q-<em>syylaš</em>-stax</em></td>
<td>aux 1pl.sub dance-ca</td>
<td>We made him dance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Syntax</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>*q-<em>syylaš</em>-tol (dance+rec) 'dance together'</td>
<td>*q-<em>syylaš</em>-tol</td>
<td>aux dance-rec</td>
<td>They danced together.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Syntax</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>*q-<em>syylaš</em>-bot (dance+refl) 'dance oneself'</td>
<td>*q-<em>syylaš</em>-bot</td>
<td>aux dance-refl</td>
<td>He got to dance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Syntax</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>*q-<em>syylaš</em>-šman (dance+desid) 'want to dance'</td>
<td>*q-<em>syylaš</em>-šman</td>
<td>aux dance-desid</td>
<td>He wanted to dance.</td>
</tr>
</tbody>
</table>

Table 2: Profile of an Unaccusative Verb

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Syntax</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>q-</em>’et (added+rt) 'get added to'</td>
<td><em>q-</em>’et</td>
<td>aux added det lpos nm-cook</td>
<td>'It kept getting mixed in with my washing.'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Syntax</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>q-</em>’et (added+rt) 'put it in with'</td>
<td><em>q-</em>’et</td>
<td>aux added det cano-race</td>
<td>'I have him in with those that are canoe racing.'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Syntax</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>q-</em>’et (added+rec) 'meet'</td>
<td><em>q-</em>’et</td>
<td>aux added-rec obi det nm-added-rec-3pos det river</td>
<td>They met one another at the confluence of the rivers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Syntax</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>q-</em>’et (added+refl) 'join'</td>
<td><em>q-</em>’et</td>
<td>aux added-refl obi det play(cont)</td>
<td>'He joined those that are playing.'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Syntax</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>q-</em>’et (added+refl) 'manage to get (oneself) in with'</td>
<td><em>q-</em>’et</td>
<td>aux added-refl</td>
<td>'He managed to get in with them.'</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>Syntax</th>
<th>English Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>q-</em>’et (added+desid) 'almost get added'</td>
<td><em>q-</em>’et</td>
<td>aux added-desid obi det lpos</td>
<td>'My ring got into my cooking.'</td>
</tr>
</tbody>
</table>
Here is a chart summarizing the properties of unergative and unaccusative verbs.

Grammatical meanings are given in quotes.

<table>
<thead>
<tr>
<th>(96)</th>
<th>unergative</th>
<th>process unaccusative</th>
</tr>
</thead>
<tbody>
<tr>
<td>causative -st</td>
<td>cause</td>
<td><em>/find, have, get (stative)</em></td>
</tr>
<tr>
<td>desiderative -alman</td>
<td>want</td>
<td><em>/about to, almost</em></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>cause</td>
<td></td>
</tr>
<tr>
<td>reflexive -bet</td>
<td><em>/alone</em></td>
<td>action on self</td>
</tr>
<tr>
<td>reciprocal -tal</td>
<td><em>/together</em></td>
<td>action on each other</td>
</tr>
</tbody>
</table>

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

(97) he narr 'breath', hām 'call for', sāl 'loot <chop wood>', ḍam 'climb', ḍal 'close eyes', ḏaqol 'cross to the other side', ḍal 'eat (meal)', ṣāl 'go', ḏāal 'go down', cam 'go up to the house, go inland', yənam 'laugh', 'māl 'paddle', ilam 'sing', ḏam 'sit down, rise out of bed', ḏis 'sleep', ḏiliili 'stand up', sīqum 'wade', 'timāl 'walk', yās 'work'

(98) ḍi 'be separated', ḏaq 'be taught, be sight', ḍak 'break', ḍiyeq 'change', ḏak 'come to the surface of the water, floor', yās 'come undone, get untied, get out of jail', ḏa 'decrease in quantity, get less', ḏax 'fade away, fade out of sight', ḏas 'get bumped', ḏax 'get burnt', maya 'get cheaper', ḏaq 'get clubbed', ilh 'get cut', ḏiṭay 'get dry', ḏaq 'get dug', maq 'get full of food', pas 'get hit', 'ākh 'get hooked, snagged, hung up', ḏal 'get hurt', ḏep 'get inflicted, get tied, get initiated', ḏis 'get knotted', ḏak 'get light directed onto', ḏaq 'get lodged between', ḏak 'get lost', maq 'get mixed in with', 'āk 'get scratched, scraped', ḏiq 'get slack', ḏa 'get split, upset', ḏal 'get washed', ḏep 'get wiped', ḏi 'get wrapped around something', ḏal 'go broke, lose it all gambling', ten 'go out of sight', ta'ēla 'boast', liṭh, ḏi 'miss', xiṭq 'scratch an itch', saq 'tear', ḏap '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 Halāṣam-fourth 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: ḏem 'swim along', ḏem 'crawl', naqam 'dive down', ḏenam 'run', ḏadq 'seek', ḏem 'call out, yell', ḏam 'jump', ḏadha '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: ḏenam 'craw after it', ḏenam 'run after it', ḏem '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. ḏa 'be happy', ḏayt 'be adept, clever', ḏaym 'be slow'), and the verbs of location, comprising six verbs in the sample (e.g. ḏa 'be underneath', ḏadq 'be af', ḏecal 'arrive here, get here'). Finally, a class of four verbs (e.g. ḏop 'assemble, gather', ḏam '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 Halāṣam-fourth. This is not surprising given that Levin (1993) posits over four dozen verb classes for English. Further verb classes are likely to emerge in Halāṣam-fourth 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. Unergatives
     (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.

There is an obvious semantic difference between the verbs of (97) and those of (98). The verbs in (97) are agent-oriented, controllable actions (unergative verbs), while the verbs in (98) denote patient-oriented actions (unaccusative verbs). Thus, it seems that the differences in the occurrence and meaning of suffixes directly corresponds to the semantics of the verb base.
These verbs often take reciprocal suffixes. When they do, they usually have a collective meaning rather than a referential one.

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

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: *hesem* 'sneeze', *taq'am* 'cough', *hep'am* 'breathe', and *cisam* '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 →.

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 -rr. 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 intransitive is sometimes referred to as anticausative alternation, since it seems like the causer/agent is being suppressed.

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.

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(110) ḫ̣ilam 'overflow' ḫ̣ilt 'fill it to the brim'
hilam 'fall from a height' hilit 'throw it off'
yakʾom 'smash up' yakhʾot 'smash it up'
ḫepḵom 'scatter' ḫepḵi 'scatter them'
lasam 'slip down (e.g. a skirt)' lasat 'slide it down'
puy-payom 'staggering' payt 'bend it'

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

(111) → lasam-stax* 'make it slip down'
→ puy-payom-stax* 'make him stagger down'
→ ḫ̣ilam-stax* 'make it overflow'
→ yakʾom-stax* 'make it break'
→ yiqm-stax* 'make it tip over'
→ ḫepḵom-stax* 'leave it scattered'
→ ye molom-stax* 'make it ripple'
→ qʾawom-stax* 'let it run'

(112) ḫ̣ilam-almən 'almost full'
yiqm-almən 'on the verge of tipping over'

(113) → səlom-namət 'managed to roll'
→ hilam-namət 'managed to fall'
→ yiqm-namət 'finally tipped over'
→ qʾawom-namət 'started to flow (of ice)'

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

(114) → qʾom-stax* 'make it swell'
→ peʾom-stax* 'let it bloom'

(115) ḫ̣om-almən 'start to swell'
qʾom-almən 'started to fester'
peʾom-almən 'start to bloom'
liqʾom-almən 'looks like it's getting calm'

(116) ḫom-namət 'manage to make it swell'
peʾom-namət 'newly flowered'
liqʾom-namət 'finally getting calm'

(117) ḫom-ʾot 'rose'
 fırsʾom-ʾot 'go rotten'
qʾom-ʾot 'get festered'
liqʾom-ʾot 'finally got calm'

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

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27One verb, ḥeqʾom-stax* 'get dry (weather)', yielded grammatical forms, but with the idiomatic reading of 'being depressed.' So ḥeqʾom-stax* means 'make him/her depressed' and ḥeqʾom-almən 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

| A.1 Activities, volitional acts | unergative | unergative |
| A.2 Manner of speaking | unergative | unergative |
| A.3 Motion verbs | unergative | unergative |
| 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 | unaccusative? |
| B.3 Change of state: | unaccusative | unergative |
| B.4 Verbs of emission: | unergative | mixed |

We see that the Hål̥qmîmîn̥ 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 Hål̥qmîmîn̥ data deviate from L & RH’s predictions in two systematic ways. First, apparently all motion verbs in Hål̥qmîmîn̥ 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 principles 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 Hål̥qmîmîn̥, arguing that it arose as a reflexive construction and then spread to other uses. Hål̥qmîmîn̥ has a second, newer reflexive, the plain reflexive -m, 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. Kenner (1993:224) states this as an implicational hierarchy:

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

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

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

(120) a. with lexical suffix -as 'face'
   *asam 'face towards'
   *at*asam 'lift your face'
   na*asam 'face away, turn one's face away'
   qa*asam 'turn away'
   qa*asam 'look down'
   cha*asam 'look back, turn around'
   *at*asam 'face towards'

b. with lexical suffix -en 'foot'
   lam*x*ênam 'stomp feet on ground or floor'
   la*ênam 'pull your feet back'
   ma*ênam 'put your feet in the water'

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

Next, we would expect some verbs of change in body posture to take -m. We have seen several verbs with this meaning above, including ât*asam 'kneel', qewam 'kneel', and a*êt*acâm 'sit'. Next, we see middle morphology on verbs of translational motion, that is, verbs of self-induced motion of an animate entity along a path in space (Talmey 1985). Verbs of this meaning are well-attested in the above data. The motion verbs in A3 illustrate this category, for example, nem 'go', ët*acâm 'swim', and sii*âm 'wade out'. In fact, -m often contributes the meaning of motion, as seen in verbs formed from nouns, like wekênâm 'go by wagon', nekênâm 'visit', and other examples in (xx) and (xx) above. Finally, we see that many active one-participant verbs take middle morphology. The actions in A1 above illustrate this, for example, qewam 'drum', hôi*ên 'play', and qalâm 'camp'. Suffice it to say that Hâlqânfîshîh shows intransitive verbs with middle morphology from all positions of the hierarchy.

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

Also radiating from the reflexive according to Kenner (1993:18) are emotive speech acts. The data in Type A3 above would permit here, for example: ñ*ëcam 'scream, yell', ëc*en 'cry', and yam*om 'laugh'. Kenner (1993:19) notes that a prototypical speech act with emotional overtones would be the verb 'confess', which does in fact have middle morphology in Hâlqânfîshîh: ñit*ênam.

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 -om shows up productively on verbs of this type: ñ*am 'ask/call for', ëc*en 'beg/ask for', and ñam*om 'place an order for'. (61) above, we showed that these forms take an oblique object and alternate with a transitive with an applicative meaning. The verb ñi*în to 'claim land', which literally means 'to stick to something', also exemplifies indirect middle. Verbs with middle marking that denote natural reciprocal events include ñênd*om 'converse, discuss' and ñ*iz*om 'assemble, gather face to face'.

Finally, Kenner (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, ñ*am 'swell up' and ñ*ê*în 'rooting'. Also, forms like ñit*en 'park, come to a stop' and ñ*iz*om 'grow' fit in this category.

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

We are left with the question, what kind of verbs do not take middle morphology in
Halqam fian? Two classes mentioned by Kemmer are the emotional middle and the cognition middle. Neither of these seem to appear with -m in Halqam fian. These would include psychverbs like 'angry', 'sad', and 'happy', and cognitive verbs like 'think', 'ponder', and 'believe'. No verbs of this group appear with -m in Halqam fian.28 Also, as noted above, process unaccusatives tend to appear as bare stems and thus do not usually occur with middle morphology.

3. Conclusion: The view from the middle

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

28 We mentioned above the intensive /iyaram 'get happier' based on the form /iyar 'happy.'
References


