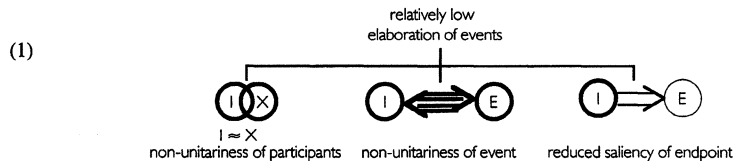


Unitariness of participant and event in the Bella Coola middle voice*

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1 Bella Coola -m

One of the most puzzling of the verbal affixes in Bella Coola is the suffix *-m*. Because of the many and varied uses of this morpheme, some researchers have posited that *-m* represents two (Davis & Saunders 1984) or more (Nater 1984) separate morphemes, based in part on the varied effects it has on the transitivity of its base: in some cases *-m* renders a transitive verb intransitive and in others it apparently transitivizes intransitive (even nominal) stems. More recent work (Davis & Saunders 1989, 1997), however, has argued for *-m* as a single morpheme with a unified meaning, one that cuts across issues of syntactic transitivity. In the paper that follows I will argue for a single *-m* as well—specifically, for *-m* as a marker of three facets of Kemmer's (1993) characterization of the middle voice as designating “relatively low elaboration of events”. These are illustrated in (1):



In its most frequently-attested use, *-m* marks the partial identification or non-unitariness of event participants (shown as circles)—in other words, *-m* appears in those clauses where the initiator (I) is considered to be approximately equivalent to some other event participant (X in the diagram above), most typically an endpoint (E); such situations hold, for example, when the initiator acts on a body part ($I \supset E$), when some part or property of the initiator acts on the initiator as a whole ($I \subset E$), or the initiator engages in some activity in which some subpart (again, typically a body part) serves as a mid-point (M), most frequently an instrument ($I \supset M$). In its second, and most cross-linguistically unusual use, *-m* appears in clauses which conflate the subcomponents of a complex interaction between participants, hence realizing non-unitariness of event. These clauses occur most frequently in situations in which the action of I on E is specified but its effect is not (applicatives). The third use of *-m* is with verbs denoting activities. This is a cross-linguistically very typical use of middle voice to mark the reduced saliency of a semantic endpoint, although it has a number of interesting features in Bella Coola. These constructions are consistently intransitive, while middles of the second type designating non-unitariness of event are transitive. Middles of the first type designating non-unitariness of participant are also syntactically transitive when they denote three-participant events, in spite of the fact that the stems to which *-m* attaches are in many cases underlyingly monovalent and intransitive. These transitivity alternations, it will be argued, stem not so much from the application of *-m*—which in itself serves only to mark a lower degree of semantic transitivity (Hopper & Thompson 1980)—as from the involvement in the event of a second, fully-individuable event-participant.

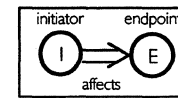
2 The middle voice

Traditional characterizations of the middle voice define it as a verb form which “serves to express that the subject is acting on herself/himself (reflexive) or for herself/himself” (Trask 1993: 171). Such definitions, however, do not entirely account for the full range of meanings associated with what is considered to be the middle morpheme in a great many languages. Based on extensive cross-linguistic comparison, Kemmer (1993) has put forward a new definition in terms of what she characterizes as the “relatively low elaboration of events”. According to Kemmer, an event can show low elaboration in one of two ways. The first and most typical is the failure of a clause to make a clear distinction between two event-participants, a characteristic she refers to as “low-participant distinguishability.” According to Kemmer, the middle voice lies, along with the reflexive, at an intermediary position on the scale of semantic transitivity (cf. Hopper & Thompson 1980) running between events that involve only one participant (prototypical intransitives) and those that involve two participants (prototypical transitives). The

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fully transitive event has two distinct, highly individuated participants which Kemmer refers to as the “initiator” (= “agent”) and the endpoint (= “patient” or “theme”). These can be represented schematically as in (2):

(2)

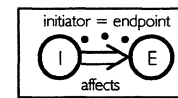


(based on Kemmer 1993: 50)

Event participants are represented here as circles while the arrow between the two represents an interaction of some sort (prototypically causality) originating with the initiator (I) and terminating at the endpoint (E), in the canonical case effecting in that endpoint a change of state.

At the opposite end of this scale lie prototypical intransitive events with only one participant that can be conceived of as neither initiator nor endpoint. Somewhere between prototypical transitive and intransitive events lie reflexives and middles. Although many languages fail to differentiate between these two types of clause and grammaticalize the mid-portion of the transitive-intransitive continuum with a single marker (e.g. Spanish *se*, Russian *-sja*), many languages, like Bella Coola, do make the distinction and fall into a class Kemmer designates “two-form languages”. In two-form languages, reflexives are typically represented in the same way as syntactically transitive events in which I and E are fully identified with one another through the use of a reflexive marker (commonly a pronoun, or a historical reflex of one). This can be represented as in (3), where the dotted arc signifies coreference:

(3)



(based on Kemmer 1993: 71)

Reflexive clauses are high on the scale of semantic transitivity and E may behave morphosyntactically as if it were an independent entity from I (e.g. as an object pronoun), thereby maintaining the distinguishability of event-participants in different semantic roles in the clause. In middle forms, on the other hand, distinguishability of participants is not maintained in that E is not treated as a separate entity from I and the middle marker does not have the same morphosyntactic status of full NP or pronoun usually accorded to the reflexive morpheme, resulting in a clause with relatively lower semantic transitivity. Such situations can be represented as in (4):

(4)



In such cases E can represent some portion of I (typically a body part), or I and E can be conceived of as separate portions of a common whole, as in cases where the will of the initiator acts so as to have an effect on I's body. Either case falls under the heading of what is referred to here as *partial identity*, wherein an event-participant is broken down conceptually into two subcomponents which are identified with one another as being parts of a single, non-unitary entity. While Kemmer does not take up this issue in any detail, it will be argued here that in Bella Coola it is the notion of non-unitariness of participants that makes for the most frequent distinction between middle and one-participant events.

This notion of non-unitariness also ties in to the second of type of low elaboration of events—the failure of a clause to fully treat subcomponents of a complex event as separate or fully specified entities. An example of this offered by Kemmer is the reciprocal, which typically expresses two or more subevents. Thus, the expression *John and Sally kissed one another* consists of two smaller, potentially separable events—*John kissed Sally* and *Sally kissed John*—which are not fully distinguished and which, in some two-form languages, may trigger middle-marking. In such cases, the appearance of the middle serves to indicate that the event expressed by the middle-marked verbs is being presented by the speaker as internally complex in spite of the fact that its expression is a single verb or a single clause.¹ In Bella Coola, middle-marking appears in cases where an event is presented as being non-unitary and divisible into components which are nevertheless parts of a single whole, just as middle-marking appears with non-unitary participants to signal the identification of parts within a single entity. Such constructions are syntactically transitive, and will be discussed in Section 4.2, following a review of the intransitive

¹Many verbs in natural language express complex events or confluences of smaller events (Talmy 1991); under normal circumstances, however, these are presented as if they were unitary processes.

uses of *-m* to express partial identify of participants and activity meanings (Section 3) and their transitive counterparts (Section 4.1).

3 Canonical middle uses: *-m* in intransitive clauses

The relationship of the suffix *-m* in Bella Coola to the middle voice is recognized both by Nater (1984: 61, under the heading of “medium”) and by Davis & Saunders (1989: 135), although middle is treated by these authors as only a subdomain of the full semantic range of *-m*. An examination of the various attested uses of *-m*, however, reveals that the majority of these represent fairly standard cross-linguistic uses of the middle voice in intransitive clauses as outlined by Kemmer (1993). These uses fall roughly into four categories: middles of body action, grooming, and speech (Section 3.1); middles of body posture, non-translational, and translational motion (Section 3.2); mediopassive/spontaneous-event middles (Section 3.3); and middles of activity (Section 3.4). As is typical of the middle voice across languages, the incidence of *-m* in Bella Coola is highest in intransitive clauses (184/348 instances of 72/131 stems in *Bella Coola Texts*),² and in many cases *-m* serves as a detransitiver of syntactically transitive stems. In what follows, I will draw on contextualized data in BCT, supplemented occasionally with examples from other works (most notably Davis & Saunders 1989 and Nater 1984, 1990), to support these claims and to try to sort out some of the intricacies of this highly lexicalized morpheme. In the absence of a larger corpus, no attempt has been made to sort out fossilized, idiomatic, or phraseologized forms from productive uses, except where the motivation for its appearance has been completely obscured. Thus, it may well be that many of the forms presented here represent fixed expressions whose use of *-m* is motivated only diachronically—nevertheless, in all of these cases the semantic contribution of the morpheme to the compositional meaning of the expression is recoverable and consistent with cross-linguistically attested uses of the middle voice.

3.1 Middles of body action, grooming, and speech

A relatively large group of middle-marked stems refer to actions of *l* directed towards *l*'s body, representing a subclass of partial identification in which *l* \supset *E*. Typically, such verbs are built on transitive roots and involve one or more suffixes denoting an affected body part, as in (5) (*-m* is underlined here and in subsequent examples):³

- (5) (a) $\text{?ic=ut=ank-m-s-k}^w\text{-ma-c}^n$?ax
 rub=body=front-[md]-[qtv]-[dub]-[impf] that-one
 ‘he must have rubbed his stomach’ (BCT 168, line 99)
- (b) $\text{?uc=uu-m-k}^w\text{-su-c}$ it
 uncover=body-[md]-[qtv]-[expb]-[perf] she
 ‘she undressed again’ (BCT 137, line 95)

In some languages such as Spanish, the affected body part in such constructions appears as a direct object whose relation to the subject (that is, that it belongs to the subject) is indicated by the use of a middle form *se*, as in

- (6) $\text{el niño se lavó las manos}$
 the boy [md] washed the hands
 ‘the boy washed his hands’

In Bella Coola, on the other hand, the affected body part surfaces as a lexical suffix. When *-m* appears in the such clauses, the expression becomes intransitive and the suffix is interpreted as referring to the affected body part of the subject, whereas when *-m* is absent the clause is transitive and the lexical suffix is taken to be a part of the direct object. This is illustrated by the forms in (7), based on the transitive verb *cp* ‘wipe [sth]’:

- (7) (a) cp=ak-m-c
 wipe=hand-[md]-1s
 ‘I am wiping my hand’ (Davis & Saunders 1973: 238)
- (b) cp=ak-cinu
 wipe=hand-2s.1s
 ‘I am wiping your hand’ (Davis & Saunders 1973: 232)

The presence of *-m* in (7a) serves as a mark of partial identity between *l* and *E*, indicating that the hand is *l*'s rather than *E*'s. Alternatively, the absence of *-m* in (7b) forces an interpretation of the event where *l* and *E* are separate; here the lexical suffix refers to the hand of the direct object rather than the hand of the syntactic subject and the verb takes transitive object-subject agreement.

In BCT, the following forms with *-m* denoting body actions and grooming are found:

- (8) Body action/grooming (15 instances of 10 stems)
- | | | | | | |
|-----------------------|---|---------------------------------------|------------------------------|---|-----------------------------|
| ?ic | > | ?ic=utank-m | $\text{q}^w\text{i-t}$ | > | $\text{q}^w\text{i=yuus-m}$ |
| ‘rub [sth]’ | | ‘rub belly (=utank)’ | ‘uncover [sth]’ ⁴ | | ‘show face (=yuus)’ |
| q^wut | > | $\text{nu-q}^w\text{ut=ak-m}^5$ | ?q | > | ?q=ak-m |
| ‘write [sth]’ | | ‘write on one’s hand (=ak)’ | ‘slap [sth]’ | | ‘clap hands (-ak)’ |
| cp | > | cp=at-m | ?c | > | ?c=at-m |
| ‘wipe [sth]’ | | ‘wipe foot (=at)’ | ‘rap [sth]’ | | ‘stomp foot (=at)’ |
| qaw | > | $\text{nu-qaw=ii}^w\text{-m}$ | ?uc | > | ?uc=uu-m |
| ‘store [sth]’ | | ‘put on head (=ii ^w)band’ | ‘uncover [sth]’ | | ‘undress’ ⁶ |
| ?ayaw | > | ?ayaw=s-m | $\text{k}^w\text{t=uc-m}$ | | (deponent) ⁷ |
| ‘trade, exchange’ | | ‘transform’ ⁸ | ‘trickle water into mouth’ | | |

In addition, Nater (1984: 62) provides the following forms:

- (9) s^x > $\text{s}^x=\text{aa}^w\text{uc-m}$ muk^w > muk=us-m
 ‘scrape [sth]’ ‘shave beard (=aa^wuc)’ ‘red’ ‘paint face (=us) red’
- ks > $\text{ks=aa}^w\text{-m}$ $\text{ks=ii}^w\text{-m}$
 ‘pull [sth]’ ‘take off shoes (=aa^w)’ ‘take off hat’⁹

Note that among these forms only muk^w ‘red’ appears to be an intransitive root (a stative verb, there being no true adjectives in the language—Beck 1996); as this word occurs nowhere else in the data at hand, it is not possible to ascertain if muk^w is used productively as a transitive verb meaning ‘to redden, to paint red’, although this seems unlikely as it is glossed in Nater (1990: 75) only as a colour term.

A related use of *-m* in Bella Coola is in verbs of speaking which contain the suffix =uc ‘mouth’:

- (10) (a) $\text{q}^w\text{x}^w=\text{uc-m-c-?i-ci-k}$ $\text{?uu}^w\text{-ti-xa}^w\text{qans+?ayx}$
 move=mouth-[md]-1s-[ccp]-[perf] P+D+crane+D
 ‘I’ll go on [to tell about] the crane’¹⁰ (BCT 38, line 108)
- (b) ... $\text{s-s}^q=\text{uc-m-aw}$?ayx^w $\text{s-ka-numyam}^w\text{-aw}$
 ... np-start=mouth-[md]-3p those-ones np-[irr]-sing-3p
 ‘... when they began to sing’ (BCT 222, line 164)

²The data used in this paper are drawn primarily from *Bella Coola Texts* (Davis & Saunders 1984, henceforth BCT) a collection of eighteen traditional stories consisting of some 2,000 lines of text. Among these are some 348 instances of *-m* used with 131 stems, all but 22 of which (18 stems) have been accounted for in the discussion below. Of these 21 instances, 12 (9 stems) appear to represent fossilized or idiomatic forms in many of which *-m* occurs closer to the root than it normally does with respect to other morphology; in addition, 5 occurrences (5 stems) of *-m* have been excluded at this stage of the game as they occur in conjunction with other morphology relevant to related semantic domains such as reflexivity and object-permutation, leaving a total of 5 instances of 4 separate roots which seem to be fair game but do not fit into the analysis presented below.

³The abbreviations used here are listed at the end of this paper.

⁴This stem is apparently rejected by consultants without the causative morpheme *-t(u)* or a lexical suffix (BCT: 300).

⁵*nu-* seems to be a classificatory prefix indicating that the subject is human and/or agentive.

⁶The lexical suffix =uu^w means ‘body’, giving this form a literal gloss of ‘uncover body’.

⁷Kemmer (1993) defines a deponent as a middle-marked verb which has no corresponding unmarked form. In Bella Coola many of these are historically complex stems whose meanings are not predictable from the sum of their parts. Following the practice of BCT, these stems will be parsed in interlinear glosses; compositionally opaque stems will be enclosed in parentheses.

⁸ =s is a reduced form of the lexical suffix =us ‘face’.

⁹The suffix =ii^w means ‘head’, but has been extended here to mean ‘head gear’ (cf. ‘put on headband’ in data set (8) above) just as the suffix =at ‘foot’ in the previous example has been extended to ‘footwear’.

¹⁰[ccp] ‘[contrastive-conjunctive]’ is a discontinuous morpheme, the second part of which is the verb final *-k*.

Intransitive verbs of speaking that appear in middle form in BCT, many of which are deponents, are listed in (11):

- (11) Speech events (17 instances of 5 stems)
- | | | | | | |
|----------------------|---|-------------------------|----------------------------|---|-------------------------|
| ʔiʔ | > | ʔiʔ=uc-m | qʷxʷ | > | qʷxʷ=uc-m |
| 'move [sth] | | 'go on (to next topic)' | 'move [sth]' ¹¹ | | 'change topic (speech)' |
| ʔxʷ=uc-m | | (deponent) | cikʷ | > | ckʷ=uc-m |
| 'make noise, chant' | | | 'move [sth]' ¹² | | 'start talking' |
| sqʷ=uc-m | | (deponent) | | | |
| 'begin vocal action' | | | | | |

All of the stems here are productive transitive verbs which parallel the forms illustrated in (8) and (9) above in that they show the incorporation of a body part (=uc 'mouth') representing an instrument or a midpoint (M) which is partially identified with I (the speaker) (I ⊃ M); qʷxʷ 'move [sth]' also appears (sans =uc) in a middle form of translational motion (see (16) below). Verbs of speech of this type have transitive counterparts in which the lexical suffix also represents an instrument; these forms will be discussed in more detail in Section 4.1.

3.2 Middles of body posture, non-translational, and translational motion

The next category of cross-linguistically typical middles comprises two groups of stems. The first group denotes body postures and non-translational motion—that is, motion which does not necessarily result in spatial displacement of the mover. These are based on both transitive (12a) and intransitive (12b) stems:

- (12) (a) ʔap-s-kʷ-c ta+nanmk+tʃ s-ka-liqʷ-m-s ʔat+tʃʷ ...
 go-3s-[qtv]-[perf] D+animal+D np-[irr]-roll-[md]-3s P+there
 'the animal began to roll there ...' (BCT 196, line 36)
- (b) ʔaxc-m-a-kʷ-c s-qux-lx-aw
 lying-down-[md]-3p-[qtv]-[perf] np-tired-[inc]-3p
 'they went to bed tired' (BCT 90, line 31)

Note that in (12a) the transitive verb *liqʷ* 'spin [sth]' has been detransitized. As in the previous types of middle, these stems present the action as one where E is I's body. The notion of non-unitariness comes into play in that in these expressions I's will is presented as acting on I as a whole (I ⊂ E) (Kemmer 1993). In total, there are seven stems attested in BCT that seem to fall into this class.

- (12) Body posture/non-translational motion (20 instances of 7 stems)
- | | | | | | |
|--------------------------------|---|--|--------------------|---|--------------|
| ʔaxc | > | ʔaxc-m | plik | > | plik-m |
| 'be lying down' | | 'lie down, go to bed' | 'turn [sth] over' | | 'capsize' |
| kʷt=us | > | kʷt=us-m | liqʷ | > | liqʷ-m |
| 'lower [s.o.'s] face to water' | | 'to lower one's face to water' ¹³ | 'roll, turn [sth]' | | 'roll, spin' |
| scux-m | | (deponent) | t-m | | (deponent) |
| 'jump' | | | 'stand' | | |
| nu-tkakʷ-m | | (deponent) | | | |
| 'fall backward' | | | | | |

Of these, the form *t-m* 'stand' is likely not synchronically analyzable. Semantically, it does not have the typical middle sense of "coming into" the posture or state of motion denoted by the stem, but instead has a purely stative meaning, as illustrated in sentences such as that in (14):

- (14) ʔat-it-m-kʷ-it-kʷu-k ʔax ʔat+tʃʷ
 [res]-(stand-[md])- [qtv]-[ccp]-[usit] that-one P+there
 'he would stand there'

(BCT 22, line 181)

It should also be noted that -m is not given as a separate morpheme from its root in the glossary, although it is parsed separately in the interlinear glosses as shown in (14).

Closely related to the notion of non-translational motion is that of translational motion—that is, motion which does result in spatial displacement. This represents an especially frequent use of -m, the bulk of the attestations in this class being of the three stems illustrated in (15):

- (15) (a) ʔxʷ-m-a-kʷ-cn ʔat+tʃʷ ʔat+ti+smt+ʔayx
 flee-[md]-3p-[qtv]-[impf] P+then P+D+mountain+D
 'they were running down from the mountain' (BCT 55, line 9)
- (b) cikʷ=at-m-a-kʷ-c ʔaxʷ
 start=foot-[md]-3p-[qtv]-[perf] those-ones
 'they started walking' (BCT 143, line 157)
- (c) qʷxʷ-m-aw-c
 move-[md]-3p-[perf]
 'they got moving' (BCT 221, line 162)

Together these three stems account for twenty-five of thirty-seven instances of middles of translational motion. The complete set of these verbs is given in (16).

- (16) Translational motion (37 instances of 9 stems)
- | | | | | | |
|-----------------------|---|---------------------------|-------------------------------|---|-----------------------------------|
| ʔliq | > | ʔliq=ik-m | qʷxʷ | > | qʷxʷ-m |
| 'turn around' | | 'go to other side (=ik)' | 'move [sth]' ¹⁴ | | 'be in motion' |
| puʔ | > | puʔ=us-m | nm | > | nm=at-m |
| 'come' | | 'show one's face (=us)' | 'spread' | | 'scatter, disperse' ¹⁵ |
| ʔxʷ-m | | (deponent) | cikʷ | > | cikʷ=at-m |
| 'flee' | | | 'move [sth]' ¹⁶ | | 'start out' |
| ʔxʷup | > | nu-xʷup=aaʃ-m | ʔp | > | ʔp=at-m |
| 'put [sth] into hole' | | 'get to mouth (of river)' | 'pinch, cut, break off [sth]' | | 'break from group' |
| caʃʷ-m | | (deponent) | | | |
| 'wade into water' | | | | | |

As with non-translational motion, the appearance of -m on motion verbs can be attributed to the fact that the initiator of the event is itself an endpoint, at least in the sense that I's body is set in motion by I itself. While this may seem to justify the occurrence of the middle-marker in only a trivial sense—that is, such events can not be construed with more than a single participant—some support for this can be found in the Bella Coola data in that -m seems only to apply to the motion of animate (volitional) objects. In such situations, the motive force behind the event is the will of the moving entity, which is then conceived of as I, the mover's body or entire being becoming E (I ⊂ E). Thus, the single participant in such an event is a non-unitary entity in precisely the same way that the initiator/endpoint of a body action or grooming event is—although in the former case it is the part affecting the whole, while in the latter the whole affects a part. Either way, a one-participant event can be construed as having both an initiator and an endpoint.

3.3 Medio-passive, spontaneous-event, and inchoative middles

Across languages, a common use of the middle voice is in the formation of mediopassive constructions, exemplified by Spanish expressions such as *aquí se venden libros* 'books are sold here'. According to Trask (1993), the mediopassive is defined as a construction in which a syntactically transitive verb is used intransitively and the affected semantic participant appears in subject position, with no agent expressed (or expressible) in the clause. In BCT, however, there are only two stems that conform to the standard definition, given in (17):

¹⁴See fn. 11 above.

¹⁵While this verb takes transitive endings in its single attestation in BCT, it is not clear what the second participant (the direct object) is, and the verb is glossed with a mediopassive reading, 'they scattered'; given the context, the object of scattering may be the (population of) a village which is under attack. -m is employed here as the scattering people (I) are partially identified with the village itself (E), which, of course, they made up. The root appears in Nater (1990: 80).

¹⁶Cf. fn. 12 above.

¹¹The transitive form of this verb is cited in Nater (1984: 61), but does not appear in BCT.

¹²This root is from Nater (1990: 137); it is marked as rejected by Davis & Saunders' consultants in BCT (268).

¹³This middle form appears in BCT, but the root and glosses are as in Nater (1990: 52); this stem might also be classifiable as a body action and be put into data set (8).

(17) Mediopassive (2 instances of 2 stems)

smsma > smsma-m
'tell story' 'be told (story)'

q^wilac > q^wilac-m
'crush, bruise [sth]' 'be bruised'¹⁷

The fact that the class of mediopassives in Bella Coola is small is not altogether surprising, as the definition depends on the inherent syntactic transitivity of the verbal root, whereas a great many roots in Bella Coola are inherently stative and/or intransitive. The remainder of sentences glossed as mediopassive in BCT fall into a range of syntactic classes, including the "anti-causative" (Comrie 1989: 168) or "decausative" (Mel'čuk 1997), as in:

(18) (a) p^s-ic ti+stn+tx
bend-3s-1s D+stick+D
'I'm bending the stick'

(b) p^s-m-ø ti+stn+tx
bend-[md]-3s D+stick+D
'the stick is bending'

(Davis & Saunders 1989: 133)

This form, however, is not attested in BCT. Nater (1984: 61) lists three forms which seem to fall into this group:

(19) xup > xup-m
'insert [sth]' 'sink (in mud)'¹⁸
sx^w > sx^w-m
'burn [sth]' 'be burning'

plik > plik-m
'tip over [sth]' 'capsize'

Of these three, however, *xupm* 'sink in mud' has a highly idiomatic meaning while *plikm* 'capsize' appears in both its instances in BCT in sentences such as (20):

(20) kan-nix-tu-tx^w ka-plik-m-t
meet-[l.o.c.]-[caus]-1p-2s [irr]-tip-over-[md]-1p
'you will cause us to capsize'

(BCT 151, line 233)

Here the subject of the middle clause is not the direct object of a transitive construction such as *they tipped over the canoe*, but rather corresponds to the transitive clause's subject. This suggests that *plikm* belongs with verbs of non-translational motion rather than with mediopassives, leaving us with only with *sx^wm* 'burn', indicating that, like true mediopassives, decausatives are a rather marginal class (at least in the current corpus).

Mediopassives and decausatives fall into a class of middles that Kemmer (1993) refers to as "spontaneous event middles"; she argues that they represent "relatively low elaboration of events" in that they depict events involving a change of state as taking place without overt agency or causality. For Kemmer, such verbs represent a rather marginal use of the middle voice, falling under the heading of the middle because they fail to distinguish the *l* from the *E* of the event (*l* = *E*). Like middle-marked verbs of translational motion, these forms seem to conform to the middle prototype in a trivial way, and the question arises of why such verbs—which represent prototypically non-volitional, single-participant events—are not simply realized as intransitive clauses. As noted by Davis & Saunders (1989), the appearance of the middle-maker with mediopassives and decausatives may stem from the fact that such constructions do, in fact, reflect a small degree of agency on the part of the subject in the sense that the properties of the subject are responsible for the event in a way that an agent-initiator normally is (cf. van Oosten 1977). Thus, forms such as those in (17) and in (19) and (21) below admit of the same type of analysis given previously for verbs of translational motion: some part of the grammatical subject is considered the *l* of a process or event which affects the subject as a whole (*l* ⊆ *E*). In this way, the initiator/endpoint is represented as an entity which is non-unitary but which is at the same time not separable into two individuable participants. There are five more stems in BCT that seem to fall under this heading:

(21) Spontaneous-event middles (13 instances of 5 stems)

pus > pus-m
'grow' 'swell up'

?ayk > ?ayk-m
'long time' 'be old, take long time'

¹⁷The gloss of the root is based on Nater (1990: 97).
¹⁸Cf. BCT *x^wup* 'put in hole'.

?alak^t
'be mistaken'
k^wał
'be safe'

> ?alak^t-m
'make a mistake'
> k^wał-am-m
'improve to the point of
being able to care for self'

xił
'be unstable (boat)'

> xił=aał-m
'rock unstably'

While the distinction between the middle and non-middle forms of some of these verbs is a subtle one (cf. pairs in Spanish such as *equivocar* 'err'/'equivocarse' 'make a mistake', discussed in Maldonado 1992), they all involve a shift from a stative reading to one of result or accomplishment achieved without direct agency on the part of *l*.

Also included under the heading of spontaneous events are middle-marked forms which show a non-middle/middle contrast wherein the unmarked form has an essentially stative reading, while the marked form takes on an event reading, reflecting a spontaneous or agentless change of state, as in the following examples formed on the intransitive stem *xm* 'broken':

(22) (a) xm-ø
broken-3s
'it's broken'

(b) xm-m-ø
broken-[md]-3s
'it broke/it's breaking'

(Davis & Saunders 1989: 134)

Such forms, which have an essentially inchoative meaning, suggest an alternate analysis of spontaneous event middles: what might be at stake is not the partial identification of *l* as a whole with some inherent property or characteristic, so much as the non-unitariness *l* over time—that is, the fact that the grammatical subject is not the same at the beginning and at the end of the described event may result in its being construed as a non-unitary entity. This construal of the single event-participant as a temporally non-unitary entity also seems to explain the event reading conferred on these stems by *-m*, in that the distinction between *l* at time₁ (*l*₁) and *l* at time₂ (*l*₂) allows the event to have both an initiator and an endpoint, avoiding the stative reading that seems to come with having a single, unitary participant in the clause. Inchoative-type middles are given in (23):

(23) Inchoative middles (28 instances of 9 stems)

xi	>	xi=us-m	cus-m	(deponent)
'be bright'		'shine out'	'get dark (nightfall)'	
tuin	>	tuin-m	q ^w p-m	(deponent)
'be visible'		'come into sight'	'form cloud'	
cs	>	cs-m	mucalx ^w =us-m	(deponent)
'be loud'		'make noise'	'be confusing' ¹⁹	
tłł=lqs-m		(deponent)	ninic	> nic-m
'breath gets stronger' ²⁰			'live, be alive'	'come to life' ²¹
xi ^w iq-m		(deponent)		
'squeak'				

All of these middle-forms denote a spontaneous or agentless change in a temporally non-unitary participant. This interpretation of spontaneous-event middles seems potentially applicable to the other forms in this class presented above as well, and has the advantage of allowing a single interpretation of *-m* in all forms of this type.

In addition to the instances of inchoative middles found in BCT, Nater (1984: 61) offers the following examples, all of which appear to be derived from nouns:

(24) k^way > k^way-m tup > tup-m
'snow' 'be snowing' 'foam' 'be bubbling'

¹⁹Davis & Saunders give the root of this verb as an unmarked intransitive *mucalx^w* 'be confusing'; however, this form is not attested in BCT, nor does it appear in Nater (1984); Nater (1990: 76) lists **mucm-* 'mistaken, confused' as a bound root. As a result, *mucalx^wum* (=us being the lexical suffix for 'face') is treated here as a deponent, though like verbs of cognition across languages it may admit both unmarked and middle-marked forms, depending on pragmatic and other factors (Kemmer 1993).

²⁰This form is further decomposable as *tł* 'strong' + *-łł* 'inchoative' + *=lqs* 'nose'.

²¹The form given for the unmarked stem is a reduplication, probably conferring a temporally continuative or imperfective aspect. The unreduplicated form without *-m* is marked in BCT (p. 292) as having been explicitly rejected by consultants.

pq ^w	>	pq ^w -m
'powder, powdery snow'		'blizzard'

If these stems are, in fact, exclusively nominal (*i.e.* if *kay-s* means 'it [is] snow' and not '*it is snowing') then they might better be classified with the next group to be discussed, middle-derived activities, although they differ from these as well in that they seem to preclude all but an expletive subject.

3.4 Middles of activity

Another use of *m*-forms that falls under the heading of cross-linguistically typical uses of the middle, but which represents a distinct sub-meaning of the morpheme from our previous examples, is the use of *-m* to form middles of activity, representing 52 instances of 25 stems. Rather than involving a partial identification of participants, activity middles involve the "defocusing" or reduced saliency of some participant other than the initiator, typically the endpoint.²² In Bella Coola, activity middles fall into two classes, one based on verbs and one based on nouns. The latter category is illustrated in (25):

- (25) (a) $\lambda\text{ap-aw}$ s-ka-sax^wa-m-aw a^t-t^w
go-3p np-[irr]-dipnet-[md]-3p P-then
'they went dragseining then' (BCT 62, line 36)
- (b) suk^t-tn-ut-m-a-k^w-c
(blow-[inst]-building)-[md]-3p-[qtv]-[perf]
'they had put up their tents' (BCT 239, line 83)

In (25a) the addition of the middle marker to the noun sax^wa 'dipnet' derives a typical activity for which dipnets are used, 'dragseining'; similarly, affixing the middle-marker to *suktnu^t* 'tent' in (25b) derives a verb meaning 'pitch a tent'. In BCT there are three nominal stems that take *-m* to form intransitive verbs of activity:

- (26) Denominal activities (5 instances of 3 stems)
- | | | | | | |
|---------------------|---|------------------------|--------------------|---|----------------------|
| slii ^w | > | slii ^w -m | sax ^w a | > | sax ^w a-m |
| 'fish (meat)' | | 'go fishing' | 'dipnet' | | 'go dragseining' |
| suktnu ^t | > | suktnu ^t -m | | | |
| 'tent' (see (27b)) | | 'put up tent' | | | |

Added to these are six examples given by Nater (1984: 61):

- (27)
- | | | | | | |
|-----------------------|---|-------------------------|----------------------|---|------------------------|
| sputx | > | sputx-m | ?at | > | ?at-m |
| 'euchalon' | | 'prepare euchalons' | 'herring eggs' | | 'gather herring eggs' |
| s ^x lik | > | s ^x lik-m | sacq ^w la | > | sacq ^w la-m |
| 'fish backbone' | | 'prepare fishbones' | 'raft' | | 'to raft' |
| suk ^w waat | > | suk ^w waat-m | ?aqs | > | ?aqs-m |
| 'cat's cradle' | | 'play cat's cradle' | 'halibut hook' | | 'use halibut hook' |

In general, these denominal forms denote culturally important activities.

The second category of activity middles contains forms based on verbs which in BCT are, for the most part, inherently transitive stems, with the following exceptions:

- (28) Activities formed on intransitive stems (6 instances of 3 stems)
- | | | | | |
|---------------|---|---|--|------------|
| tq | > | tq-m | nu-sq=aa ^x -m | (deponent) |
| 'wet' | | 'soak' ²³ | 'scream, begin to shout' ²⁴ | |
| yank | > | yankyanklayx-m | | |
| 'pole a boat' | | 'fool around poling a boat' ²⁵ | | |

²² Cf. Davis & Saunders (1989) who interpret this aspect of *-m* as an increase in a participant's PERIPHERALITY.

²³ Nater (1990: 62) glosses *tqm* as 'soak dried berries', which is consistent with its use in the texts.

²⁴ The suffix is =aa^x 'distributed'; the composition of this stem is rather opaque and its classification here is tentative.

²⁵ The form *yank* 'pole a boat' is from Nater (1990: 168); the suffix *-layx* is a lack of control morpheme.

The remainder of the activity middles are detransitives denoting activities with unspecified endpoints, as in (29):

- (29) (a) wnc^t-m-a-k^w ?at+t^w
kill-[md]-3p-[qtv] P+then
'they killed some then' (BCT 223, line 181)
- (b) ciix^t-m-o-k^w ta+nu-maw+t^x
dig-hole-[md]-3s-[qtv] D+human-one+D
'one person was digging clams' (BCT 192, line 8)

Sentence (29a) shows an intransitive middle form of the verb *wnc^t* 'kill [sth]' in a clause which has no overt object and no specific semantic endpoint; similarly, (29b) shows a middle form based on *ciix^t* 'dig [sth] up' which undergoes an additional semantic shift to denote a typical (culturally important) digging activity with an unrealized endpoint. These examples contrast with the ordinary transitive uses of the stems, as in:

- (30) (a) wnc^t-it-k^w-c
kill-3s-3p-[qtv]-[perf]
'they killed it then' (BCT 47, line 46)
- (b) ... s-ka-ciix^t-is-k^w-alu-c ta+at-pu^x-ayc-s+t^x
np-[irr]-dig-hole-3s-3s-[qtv]-[att]-[perf] D+[res]-come-[l.o.c.]-3s+D
'... trying to dig up what he had caught' (BCT 189, line 36)

In total, there are nineteen detransitive stems with *-m* in BCT:

- (31) Detransitized forms (41 instances of 19 stems)
- | | | | | | |
|------------------------------|---|--|----------------------|---|--------------------------|
| kuuk ^w | > | kuuk ^w =uc-m | ks | > | ks=uc-m |
| 'cook [sth]' | | 'cook food for oneself' | 'fix, prepare [sth]' | | 'fix food' ²⁶ |
| kx | > | kx-m | nu ^w un | > | nu ^w un=aak-m |
| 'see [sth]' | | 'look around oneself' | 'check, test [sth]' | | 'practice' |
| wnc | > | wnc-m | ki ^x | > | ki ^x -m |
| 'kill [sth]' | | 'kill' | 'gnaw [sth]' | | 'gnaw' |
| k ^w n | > | k ^w n-m | mus | > | mus-m |
| 'carry [sth]' | | 'go get' | 'feel [sth]' | | 'spy' |
| yul | > | yul=ak-m | ?ip | > | ?ip=us-m |
| 'rub [sth]' | | 'beat for oneself (e.g. batter)' | 'grasp [sth]' | | 'hold on' ²⁷ |
| x ^w p | > | x ^w p=ak-m | t ^x an-m | > | (deponent) |
| 'unhook [sth]' | | 'let go' | 'go hunting' | | |
| x ^w up | > | x ^w ux ^w paa ^x alic-m | lq | > | lq-m |
| 'put [sth] into hole' | | 'put/hold between teeth' ²⁸ | 'think of [sth]' | | 'think over' |
| tq | > | tq-m | tq ^w | > | tq ^w -m |
| 'paste [sth]' | | 'make berry patties' | 'dig [sth] up' | | 'dig for roots' |
| tiix ^w | > | tiix ^w -m | ciix | > | ciix-m |
| 'hammer [sth]' ²⁹ | | 'drive netpoles' | 'dig up [sth]' | | 'dig for clams' |
| stqaa ^x uc | > | stqaa ^x ucak-m | | | |
| 'make [sth] larger, wider' | | 'add on, enlarge for oneself' | | | |

Nater (1984: 61) gives six more forms of this type, several of which he claims add the notion of continuous activity or 'be busy doing/occupied with' the activity denoted by the verb stem:

²⁶ Here and in the previous form the suffix =uc 'mouth, opening' means 'food'.

²⁷ =us means 'flat surface'. The full gloss given in BCT is 'support oneself by holding on', the object appearing in an optional PP.

²⁸ Note that one of the two instances of this form appears with what appears to be a (clause-final) direct object, although the verb itself is not marked for transitive agreement. The additional morphology is continuative reduplication, =aa^x 'distributed' and =alic 'tooth'.

²⁹ The transitive form of this verb does not appear in BCT, but is provided in Nater (1984: 61).

- | | | | | | | |
|------|----------------|---|------------------------|---------------|---|------------------|
| (32) | suq̣ | > | suq̣-m | ks | > | ks-m |
| | 'skin [sth]' | | 'strip bark from tree' | 'pull [sth]' | | 'pull in net' |
| | muck | > | muck-m | λat | > | λat-m |
| | 'count [sth]' | | 'be busy counting' | 'dry [food]' | | 'be busy drying' |
| | sx̣ | > | sx̣-m | qpst | > | qpst-m |
| | 'scrape [sth]' | | 'be busy scraping' | 'taste [sth]' | | 'be sampling' |

These forms resemble certain middles, mentioned only in passing in Kemmer (1993), dubbed "object-deletion" or "anti-passive" middles which allow for an indefinite or unelaborated semantic patient. According to Kemmer, such constructions are middles in "certain Australian languages", Georgian, and in Russian sentences like that in (33):

- (33) sobaka kus-ajet-sja
dog bite-3s-present-[md]
'the dog bites'

Kemmer argues that such middle uses are covered by her definition of the middle-marker as designating "low elaboration of events" in the sense that, while a sentence such as (33) clearly has an affected semantic endpoint, the identity of this endpoint is left completely unelaborated, making this construction the converse of the spontaneous-event middle, where the semantic agent rather than the affected participant is removed from the clause.

Unlike the Russian example in (33), however, detransitivized middles in Bella Coola do allow for an optional oblique object, introduced by a preposition, as in (34):

- (34) ... a+kix̣-m-ø ?at+tu+knum-aw+tx̣w
D+gnaw-[md]-3s P+D+dried-fish-3p+D
'... [the one who] gnaws at their dried fish'

(BCT 63, line 48)

This is an important point, one which relates some uses of the Bella Coola -m to its cognates in other Salishan languages, as in this middle form from Lushootseed, based on the intransitive stem q̣'əl 'ripe, ready to eat':

- (35) ?u-q̣'əl-b tsi luλ ?ə ti sʔuladx̣w
[pnt]-ripe-[md] Df old P D salmon
'the old woman roasted herself a salmon'

(Hess 1993: 43)

Here, as in (35), the clause denotes a semantically transitive event with a defocused endpoint, expressed as a PP in a syntactically intransitive construction. The principal function of the morpheme -b in Lushootseed is to increase the valency of the verb root by one and to shift the semantic role of the grammatical subject from that of affected participant to that of causative agent. This function has been related to that of the middle voice (Hess 1993, Beck 1996) in that in this use the verb also serves to express the action of the initiator/subject in its own self-interest, thereby conforming to traditional characterizations of the middle such as that offered by Trask (1993).³¹

Definitions of the middle in terms of subject-interest are also noted by Kemmer (1993), who argues that such uses conform to her definition of the middle in that subject-interest can be interpreted as an identification of the initiator/subject with the endpoint of the event. This point becomes a bit clearer when the middle use in (34) is compared with the "indirect reflexive" construction such as *he bought himself a hat*, shown in (36):



(based on Kemmer 1993: 76)

This construction makes use of the reflexive pronoun *himself* to indicate that the E of the event is equated with I; *hat* represents an intermediate point (M) in the causal chain, an entity whose purchase had some (indeterminate)

³⁰Nater glosses this as an intransitive activity verb; in BCT it appears as a stative, meaning simply 'dry'.

³¹Mei čuk (1997) notes that the middle, as a voice, does not usually serve to increase the valency of a stem—thus, we might want to add to this meaning of the middle a semantic component of causativity, which in Salishan languages is the typical motivation for the increment of the valency of a stem. A proposal along these lines is put forward in Beck (1996).

effect on the purchaser. In many languages like Lushootseed, the middle marker is used instead of the reflexive pronoun to indicate partial identity of I and E (E = I's interests). As a result of treating I's interests as the semantic endpoint of the clause, M in these constructions is defocused or accorded reduced saliency and realized as an oblique rather than a direct object. Given Hopper & Thompson's (1980) observation that one of the primary focuses of a semantically transitive event is the affectedness of the semantic patient, the syntactic detransitivization of a clause that defocuses this participant is a plausible, although not inevitable, outcome. For Bella Coola, Davis & Saunders (1989) note that oblique objects such as that illustrated in (34b) show the same kind of reduced saliency that their Lushootseed counterparts do in middle constructions—although the parallel is not complete (at least synchronically) in that, in the Bella Coola detransitive forms, the reading of the event as an activity of I performed on an indeterminate or defocused object seems to overshadow the self-interest reading.

Although it is not particularly strong, the notion of self-interest or subject affectedness is still not entirely absent from Bella Coola middles. Self-interest is contained implicitly in many uses of -m such as body-actions and it appears overtly in the glosses of a few of the stems listed in (31) (e.g. *kuuḳ'ucm* 'cook [sth] for oneself'). Nater (1984: 65) notes the appearance of -m in some affix-strings which carry self-interest and related meanings, while Davis & Saunders (1989) point out that self-interest plays a role in middle uses such as (38):

- (37) (a) ḳ'c=ant-it
wash=cloth-3s-1p
'we washed clothes'
- (b) ḳ'c=ant-cut-it
wash=cloth-[refl]-1p
'we washed our (collective) clothes'
- (c) ḳ'c=ant-mi-cut-it
wash=cloth-[md]-[refl]-1p
'we each washed our own clothes'

(Davis & Saunders 1989: 135)

In the sentence in (37a), I is presented as merely washing clothes of indeterminate ownership, while in (b) the clothes belong to the collective I, but the washing takes place without regard to which particular member of the group washes whose clothes. In (37c), on the other hand, each individual member of the group washes their own clothes, -m marking that each acts in their own—as opposed to someone else's—interests. Such self-interest readings also contrast with ordinary reflexives in examples such as

- (38) (a) tx=ak-cut-c
cut=hand-[refl]-1s
'I'm going to cut my hand'
(lit. 'I am going to hand-cut myself')
- (b) tx=ak-m-c
cut=hand-[md]-1s
'I'm going to go out and cut my hand'

(Davis & Saunders 1989: 132)

In the sentence in (38a), the event is expressed as an ordinary reflexive in which I is equated completely with E (hence, the alternative gloss); in (38b), however, I and E are treated as only partially equivalent (E being a subpart of I) and -m appears marking their partial identification. In addition, Davis & Saunders (1989) argue that the presence of -m in the example in (38b) in some way distances the subject/agent from the event, which in some cases leads them to provide "translocative" (i.e. 'going to go out and X') glosses of transitive verbs with -m. The translocative glosses create this effect, and the concomitant sense of the event as an activity rather than a temporally bounded event, just as do expressions like *go shopping*, *go fishing/birding*, or (*à la* (38b)) *go hand-cutting*.³²

Another fairly obvious use of -m to express action for/in the initiator's interests is found in a limited number of expressions where, as in the examples in (25) – (28) above, -m is affixed to nouns and intransitive verbs, although in these cases the result is a syntactically transitive clause:

³²This seems to tie in to an observation in Nater (1984) that transitive verbs with -m always have a present progressive reading. Many examples in BCT, however, are past events or have perfective aspect—still, it may be that the progressive sense that Nater picked up on lies in the activity as opposed to event reading of stems in this construction.

- (39) (a) *smatmx-ø* *ti+?imlk+tx* *?ut+ti+?immlk-ii+tx*
 friend-3s D+man+D P+D+(rdp)man-[dim]+D
 'the man [is] a friend to the boy'
- (b) *smatmx-m-is* *ti+?imlk+tx* *ti+?immlk-ii+tx*
 friend-[md]-3s-3s D+man+D D+(rdp)man-[dim]+D
 'the man took the boy as a friend'
- (c) *?anayk-ø* *?al+a+su+tc*
 like-3s P+D+house+D
 'Snac likes the house'
- (d) *?anayk-m-is* *a+su+tc*
 like-[md]-3s-3s D+house+D
 'Snac wants the house'
 (i.e. 'Snac likes the house for himself')

(Davis & Saunders 1989: 124 – 126)

The addition of *-m* to a nominal root in (39b) yields a typical event or activity associated with the meaning of the root, although in this case the involvement of a second, fully individuable entity results in a syntactically transitive clause (see Section 4 below). In this case, the event described represents not so much an instance of an I effecting a change in some E as it does a change in attitude on the part of I towards E, the affected entity being I's interests and the network of social/affective relations surrounding I. Similarly, (39d) represents a shift from the interest-neutral reading of *?anayk* 'like' in (39c)—which expresses an appreciation for an object on the part of I without reference to I himself—to a reading where the object is evaluated with reference to I and I's interests or needs. This type of middle use is attested for only five stems in BCT:³³

(40) Transitive middles of interest (14 instances of 5 stems)

<i>smatmx</i>	>	<i>smatix-m</i>	<i>mna</i>	>	<i>mna-m</i>
'friend'		'take [s.o.] as a friend'	'offspring'		'adopt [s.o.]'
<i>?asqayał</i>	>	<i>?asqayał-m</i>	<i>?ax"santa</i>	>	<i>?ax"santa-m</i>
'totem'		'have [sth] as a totem'	'guide'		'take [s.o.] as guide'
<i>?anayk</i>	>	<i>?anayk-m</i>			
'like'		'want [sth]'			

To this list we might also add *talaws* 'be married' > *talawsm* 'marry [s.o.]' (Davis & Saunders 1989).

While there are certainly traces of the self-interest reading of *-m* that link it, at least diachronically, to middles in other Salish languages like Lushootseed, it remains unclear to what extent the self-interest reading persists synchronically in Bella Coola outside of the contexts cited here in examples (37) through (40). Even in its absence, however, the activity use of *-m* conforms to the most abstract characterization of the middle voice in that the defocusing of an object involves the reduced elaboration of participants of an event. Whether this is sufficient to classify the morpheme used to form activity-middles as the same morpheme as that used to express meanings based on partial identification, or whether it is different enough to require analysis of the two as a separate *-m*'s is a matter to be taken up in the conclusion to this paper.

4 *-m* and transitivity

One of the principal characteristics of the semantically transitive event across languages is the presence of two highly individuated participants, and such events are typically realized syntactically as transitive clauses, whereas clauses which do not clearly distinguish two participants tend to be realized as syntactically intransitive (Hopper & Thompson 1980). Because of this, in many languages the middle marker—which serves to mark the reduced individuation of event-participants—functions as a detransitivizer, forming intransitive verbs from transitive bases (Kemmer 1993). While most of the Bella Coola data considered up to now seem to conform to this pattern, there are a relatively large number of instances in the data (based on a proportionally small set of stems) where middle forms appear in syntactically transitive clauses, in some cases apparently triggering the transitivity of an otherwise intransitive stem. This fact has led some writers (including Davis & Saunders at the time of BCT) to posit

separate meanings for the two types of *-m*—a mediopassive meaning for *-m* in its uses as discussed above, and a transitivity meaning for those uses to be discussed in the section that follows.

One reason to doubt that the meanings of *-m* can be divided neatly along the lines of syntactic transitivity is the fact that in some cases the presence or absence of *-m* appears to have no direct effect on the clause's transitivity: with a few stems *-m* seems to allow the formation of both syntactically transitive and intransitive clauses:

- (41) (a) *tay-is* *snac* *ti+pucq+tx*
 pound-3s-3s Snac D+hellebore+D
 'Snac pounded hellebore'
- (b) *tay-m-is* *ti+pucq+tx*
 pound-[md]-3s-3s D+hellebore+D
 'he went to pound the hellebore'
- (c) *tay-m-ø*
 pound-[md]-3s
 'he went routinely to pound [sth]'
- (d) **tay-ø*
 pound-3s

(Davis & Saunders 1989: 120 – 121)

The sentence in (41a) is an ordinary transitive clause, marked by the transitive object-subject agreement paradigm, as is the *m*-form in (b). The sentence in (41c), on the other hand, shows intransitive subject agreement and this sentence is clearly an instance of the activity reading seen in the detransitized clauses illustrated in (29) above. According to Davis & Saunders (1989), the semantic distinction between (41a) and (b) is a defocusing of the endpoint/direct object (in their terms, the "Experiencer") and a lessening of its affectedness; Davis & Saunders go on to note that sentences (41b) and (c) also seem to have a reduced sense of performance and immediacy, which, as discussed in Section 3.4, may indicate that we are not dealing here so much with a literal translocative meaning as an activity reading—a "going-pounding". If this is indeed the case, then the function of *-m* in (41b) is also clearly related to the detransitivizing use of the morpheme, the crucial difference between (b) and (c) being the *presence in the clause of a completely individuated second participant*—an important feature of semantic transitivity, according to Hopper & Thompson (1980)—rather than the presence or absence of a particular *-m* (although the presence of *-m* is not completely irrelevant to syntactic transitivity, as shown by the ungrammaticality of (d)).

Some further evidence for the relative independence of morphosyntactic transitivity from the presence/absence of *-m* can be seen when verbs that obligatorily appear in middle form turn up in transitive clauses, as in (42):

- (42) (a) *łap=uc-a-k"č* *s-ka-nunu-łx"=uc-m-aw*
 go=mouth-3p-[qtv]-[perf] np-[irr]-((rdp)[agt]-chant=mouth-[md])-3s
 'they began chanting'
- (b) *nu-łx"=uc-m-tim-k"č* *wa+xałaq+ac*
 ([agt]-chant=mouth)-[md]-3p-pass D+goose+D
 'the geese are chanted to'

(BCT 44, line 15)

(BCT 52, line 93)

Here, the deponent middle form *nułx"ucm* 'to make noise, chant' appears in (42a) in an intransitive clause, the middle-marker's presence being required by the partial identification of the event's initiator (the chanters) with some other event-participant, in this case an instrument (the chanters' mouths, represented by the lexical suffix =*uc*). In (b), the same verb—presumably with the same *-m*, motivated by the same considerations—appears in a syntactically transitive clause, showing transitive (or, more precisely, passive) agreement with the passive subject, the geese (presumably the direct object of the corresponding active clause). Given the probable identity of the two instances of *-m* in the transitive/intransitive pair in (42) and the semantic similarity of its uses in (14), it does seem likely that *-m* can be analyzed as a middle marker both in its detransitivizing and its "transitivity-neutral" use. In the latter case *-m* appears to signal a relatively lower semantic transitivity, which in itself may not be enough to force an inherently transitive root such as *tay* in (41) to become syntactically intransitive, but which may allow for syntactic detransitivization in clauses lacking other features of semantic transitivity as well—specifically, the involvement of another, highly individuated participant.

³³I am indebted to Igor Mel'čuk for pointing out the strong self-interest readings implicit in these forms.

In addition to its transitivity-neutral uses, *-m* shows up in a number of other instances where it seems to trigger transitivity of an otherwise intransitive stem, as in the forms in (39) and (40) above, and (43):

- (43) (a) $\text{pu}^{\text{A}} \text{ti}+?imilk+tx \text{ ?ul}+ti+nus?uul\dot{x}+tx$
 come D+man+D P+D+thief+D
 'the man came to/at the thief'
 (b) $\text{pu}^{\text{A}}\text{-}\dot{m}\text{-is} \text{ ti}+?imilk+tx \text{ ti}+nus?uul\dot{x}+tx$
 come-[md]-3s-3s D+man+D D+thief+D
 'the man attacked the thief'

(Davis & Saunders 1989: 124)

According to Davis & Saunders (1989), the appearance of *-m* in transitivized clauses such as those in (43b) and (39) above represents oblique-object or adjunct promotion, the presence of *-m* allowing the incorporation of an element which is usually peripheral to the event into the "nucleus" of the "proposition"—that is, the syntactic advancement of a participant in a less-salient thematic role to subject or object position in the clause. In effect, *-m* in such uses is said to serve as the mark of the semantic peripherality of an element occupying a syntactic position normally held by a participant in a more salient role. Conversely, in detransitive uses such as those discussed in the previous section, *-m* is used to mark the syntactic ("propositional") peripherality of a semantically "central" or salient role ordinarily realized as subject or direct object, but which in detransitivized forms is omitted from the clause altogether. Thus, for Davis & Saunders, *-m* indicates a marked situation with respect to the ordinary mapping of semantic roles to syntactic positions and so appears in clauses that depart from the expected pairings of semantically salient roles to syntactically nuclear positions.

As ingenious as this analysis is, it is unsatisfying from a cognitive or functional/typological perspective on a number of counts. The first of these is that it, in effect, reduces the status of *-m* to that of a syntactic process morpheme—that is, it attributes to *-m* no semantic content of its own, but instead posits it as a marker of a particular process in the syntactic machinery which in itself does not seem to have any clear meaning. By maintaining that *-m* is a mark of the *continued* semantic peripherality of an event-participant that has been syntactically promoted to a nuclear position (or vice versa), Davis & Saunders seem to be arguing against the position common in the cognitive literature that syntactic promotion of an event participant is in itself a mark of *increased* semantic saliency. If *-m* is the mark of unchanged saliency, what is the semantic effect of object promotion in (43), and—if *-m* itself has no effect on object-saliency—on what basis can we ascribe to *-m* the apparent change in meaning of the sentence? A even more serious objection, however, is that any such analysis of *-m* overlooks the fact that, at least in its intransitive and detransitive uses (which account for the bulk of the forms in the data), the meanings of the Bella Coola *-m* correspond to the meanings of the middle marker recognized in language after language. This in itself seems to be motive for further investigation, and in the next section I will examine the instances of *-m* in syntactically transitive clauses and try to show that these, too, can be classified as middle uses in the same way as other *m*-forms in the language can, by making use of the notion of "relative elaboration" and the principle of non-unitariness of events and of event-participants.

4.1 The non-unitariness of participants

In a number of cases (62 instances of 17 stems), the use of *-m* in transitive constructions corresponds in some obvious way to one of the uses of *-m* discussed above. One of the less frequent of these expresses actions that directly affect or pertain to I's body or person, as in (44), which shows two examples of middle-marked verbs bearing affixes from the transitive object-subject paradigm:

- (44) (a) $\text{?icama}\text{-}\dot{m}\text{-is}\text{-k}^w\text{-}\dot{c}$ $\text{it?ayl} \text{ ta}+\text{nanmk}^{\text{A}}+\text{tx}$
 blanket-[md]-3s-3s-[qtv]-[perf] she D+animal+D
 'she had put on the hide of an animal'
 (b) $\text{nu}\text{-?almk}\text{-}\dot{m}\text{-is}\text{-k}^w$
 [agt]-pole-canoe-[md]-3s-3s-[qtv]
 'he was poling his canoe'

(BCT 137, line 90)

(BCT 68, line 90)

The form in (44a) expresses an action akin to dressing in which E is I's body and the direct object is more of an instrument than a patient; the relation to the body action and grooming forms in (5) is obvious, as is the potential historical relation to the self-interest uses of the middle marker in Lushootseed. In the case of (44b), the use of *-m*

seems to be related to intransitive middles of translational motion, and the appearance of *-m* in this construction is a good parallel to its uses in expressions such as those illustrated in (15) above. The direct object (the canoe) represents another case of an object that is not, in fact, an endpoint of the event, the canoe serving as a means to an end (the motion of the initiator) and so taking up a role as a midpoint in the event (cf. the diagram in (36) above). In total there are three stems that make use of *-m* in transitive clauses as an indicator of I or I's body as E of the event in question (I \supset E); these are given in (45):

- (45) Transitive body actions/translational motion (5 instances, 3 stems)
- | | | | | | | |
|--------------------|---|--------------------------------------|--|----------------|---|-------------------------------|
| ?icama | > | $\text{?icama}\text{-}\dot{m}$ | | ?almk | > | $\text{?almk}\text{-}\dot{m}$ |
| 'blanket' | | 'put on blanket' | | 'pole upriver' | | 'pole [sth]' |
| $\dot{t}\dot{c}ma$ | > | $\dot{t}\dot{c}ma\text{-}\dot{m}$ | | | | |
| 'belt' | | 'carry [sth] on belt, belt [sth] on' | | | | |

A similar alternation $\text{qaax}\dot{t}la$ 'take a drink' > $\text{qaax}\dot{t}lam$ 'drink [sth]' can be found in Nater (1984: 62). Here again, as in Spanish expressions like *comerse* 'eat [sth] up', the actual E of the event can be construed as I, I's body, or I's interests, giving us a prototypical middle meaning marking the partial identification of E and I. Each of these stems correspond to one of the sets of intransitive middles discussed in Section 3 above, the difference being the presence in the event expressed by the stem of a second, fully-individuable event participant.

This rather infrequent use of *-m* is closely related to another middle use that I will refer to as an "instrumental middle". In this highly productive construction, a (usually intransitive) verb is affixed with both *-m* and a lexical suffix representing a part of I's body used an instrument. Thus, adding *-m* and a lexical suffix to an intransitive stem such as $\text{q}^w\dot{a}la$ 'be no more' in (46a) causativizes it and yields transitive forms as in (46b) and (c):

- (46) (a) ... $\text{s-q}^w\dot{a}la\text{-s}$ $\dot{t}ax$
 np-be-no-more-3s that-one
 'until he was all gone' (BCT 189 – 90, line 42)
 (b) ... si-xi=yak-nu $\text{s-q}^w\dot{a}la=\text{yak}\text{-}\dot{m}\text{-tix}^w$
 np-fast=hand-2s np-be-no-more=hand-[md]-3p-2s
 '... that you use them up so fast' (BCT 114, line 179)
 (c) $\dot{c}x\dot{t}mayx$ $\text{s-q}^w\dot{a}la=\text{yuc}\text{-}\dot{m}\text{-is}$ $\dot{c}awcx$ $\text{ta}+\text{sta}\text{-apsut}\text{-}\dot{t}+\dot{t}$...
 true np-be-no-more=mouth-[md]-3s-3s this-one D+co-village+3po+D
 'she truly ate up our whole village ...' (BCT 149, line 206)

In such clauses, the middle seems to be performing its familiar function of marking partial identity of two event-participants, although here—rather than marking partial identity of I and E—it marks partial identity of initiator and midpoint, in this case an instrument which is part of I's body (I \supset M). This can also be seen in the contrast between the sentences in (47), where syntactic transitivity seems to be the result purely of the presence in the event of a second, fully individuated participant:

- (47) (a) $\text{cp}=\text{ak}\text{-cinu}$
 wipe=hand-2s-1s
 'I wipe your hand' (Davis & Saunders 1975: 361)
 (b) $\text{cp}=\text{ak}\text{-}\dot{m}\text{-c}$
 wipe=hand-[md]-1s
 'I am wiping my hand.' (Davis & Saunders 1973: 238)
 (c) $\text{cp}=\text{ak}\text{-}\dot{m}\text{-ic}$
 wipe=hand-[md]-3s-1s
 'I wipe it with my hand'
 *'I wipe my hand' (Davis & Saunders 1975: 358)

The first sentence here shows the normal transitive use of the verb *cp* 'wipe [sth]' in which there are two event participants and the lexical suffix $=ak$ 'hand' is interpreted as referring to the hand of the affected event-participant,

'you'. In (47b) (taken from (7b) above), *cp* appears as an ordinary intransitive middle of body action and *=ak* refers to the hand of *l*, with which it is partially identified ($l \supset E$). In (47c), however, the event is presented as having two participants, the wiper and the object wiped, and so the verb bears transitive agreement, just as in (47a). As it is in ordinary intransitive middles, however, the appearance of *-m* in (47c) signals the partial identification of *l* with some other event-participant, in this case an instrumental midpoint (*M*) realized by the lexical suffix *=ak* ($l \supset M$) (cf. verbs of speaking with *=uc* 'mouth' and verbs of motion/travel with *=at* 'foot').

Other instrumental forms found in BCT are listed in (48):

(48) **Instrumental middle (50 instances of 12 stems)**

<i>cn̄t</i>	>	<i>cn̄t=ak-m</i>	<i>?amat</i>	>	<i>?amat=ak-m</i>
'oneself'		'do [sth] oneself'	'be located, stay'		'put, leave [s.o.]'
<i>xīt</i>	>	<i>xīt=uc-m</i>	<i>qay</i>	>	<i>qay=uc-m</i>
'be many'		'tell [sth] many times'	'poor'		'bad mouth [s.o.]'
<i>?aw̄t</i>	>	<i>?aw̄t-t̄x̄=uc-m</i>	<i>cay=ak</i>	>	<i>cay=ak-m</i>
'follow [s.o.]'		'yell after [s.o.]' ³⁴	'finish handiwork'		'finish with [sth]'
<i>kal</i>	>	<i>kal=aq̄-s-m</i>	<i>kal=at-m</i>		<i>kal=us-m</i>
'go to meet [s.o.]'		'spy [sth]'	'come upon [sth]'		'meet with [s.o.]' ³⁵
<i>q̄w̄ala</i>	>	<i>q̄w̄ala=yak-m</i>	<i>q̄w̄ala=yuc-m</i>		
'be no more'		'use [sth] up'	'eat [sth] all up'		
<i>?ay</i>	>	<i>?ay=ak-m</i>	<i>?ay=uc-m</i>		
'happen'		'do, get [sth]'	'say [sth]' ³⁶		

These forms tend to have rather idiomatic uses, and in many of these the literal somatic meaning of the lexical suffix seems to be giving way to a more grammaticalized sense of the typical action performed by that body part (hence, *=ak* 'hand' > 'use, do' and *=uc* 'mouth' > 'eat, speak' or 'food'). The transitivity of the verbal root in such constructions may be as much a result of this process of grammaticalization—wherein the lexical suffixes become causative-like verb extensions—as it is the result of the use of *-m*, although the appearance of the somatic suffix in itself, even in lexicalized expressions, does not appear to transitivity the verb, as shown in (49):

- (49) (a) *wix-k̄w̄-i-lu-č̄i-k* *s-cay=ak-s* *ta+nucak̄aāx̄+t̄x̄*
 be-then-[qtv]-[ccp]-[expv]-[perf] np-finish=hand-3s D+wolf+D
s-nu-č̄īx̄-is *tāx̄* *way*
 np-[agt]-bury-3s-3s that-one okay
 'it was when the wolf finished [digging the hole] that he buried it all right'

(BCT 187, line 19)

- (b) ... *s-cay=aak-m-tit*
 np-finish=hand-[md]-3p-3p
 '... when they had finished with them'

(BCT 224 – 25, line 199)

Thus, it is the combination of the middle marker and the lexical suffix which allows for the formation of the syntactically transitive clause, the lexical suffix introducing an additional participant and the middle-marker ensuring that the new participant is an instrument partially identified with *l*, as shown in (47) above.

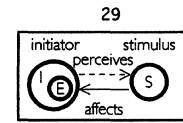
Another use of *-m* in transitive clauses is found with events of mental activity or cognition, as in (50):

- (50) *wix-k̄w̄* *s-?ay-tu-tis* *ta+s-λ̄msta-nalus+t̄x̄* *s-sx=likt-m-tis*
 be-it-[qtv] np-do-[caus]-3p-3s D+np-person-become+D np-(bad=personality-[md])-3p-3s
 'he did this to the human beings because he was angry at them'

(BCT 122, line 249)

According to Kemmer (1993), verbs of cognition and emotion such as *sxliktm* 'get angry at [s.o.]' bear middle-marking because they present *l* as being in some way separate from *l*'s cognitive/emotive faculties—that is, *E* is *l*'s mind ($l \supset E$). (51) shows the prototypical mental event as the interaction of *l* with some stimulus (*S*):

(51)



(based on Kemmer 1993: 128)

Here, *l* turns its attention (the dashed arrow) to the stimulus, which in turn affects *E*, *l*'s psyche. Seen in this way the stimulus is clearly not an *E* of the interaction but an intermediary link between initiator and endpoint; such processes identify *l* and *E* without designating them as a unitary entity (the thinker is not the thought)—hence, the presence of *-m*. Note that, given the prominent role of the stimulus in such events, verbs of cognition naturally lend themselves to realization as syntactically transitive clauses, at least to the extent that *S* is presented as an individuable entity in its own right. Middles of this type are listed in (52):

(52) **Transitive mental events (7 instances of 5 stems)**

<i>nanix</i>	<i>nu-nanix-ik-m</i>	<i>tūnixuus-m</i>	(deponent)
'mourn [s.o.]'	'forget [sth]' ³⁷	'realize [sth]' ³⁸	
<i>mn̄tat</i>	<i>nu-mn̄tat-ik-m</i>	<i>cayam=us-m</i>	(deponent)
'measure [sth]'	'figure [sth] out'	'listen to [s.o.]' ³⁹	
<i>sx=likt-m</i>	(deponent)		
'get angry at [s.o.]'			

The last form shown here, *sxliktm* 'get angry at [s.o.]', has a closely related intransitive counterpart, *sxl̄liktm* 'be angry at everything, get angry and take off' (8 instances) formed with the inchoative suffix *-lx*; the intransitivity of this second form seems to follow from the lack of a definable, individuable endpoint in the event. Note that all of the middles of this type are formed on historically complex stems and are compositionally opaque, making this a rather marginal (if cross-linguistically typical) use of the middle voice.

4.2 The non-unitariness of events

Up until this point in the discussion, the meaning of *-m* has centred on the partial identification of a participant playing one semantic role in an event with another participant playing another role. The two are seen to be the same entity but not exactly equivalent—one representing, say, a particular body part or property of the other—and in this sense the two participants are construed as representing a single but non-unitary entity. There is, however, another way in which aspects of an event can be non-unitary: the event itself—that is, the temporal processes expressed by the verb—can be presented as non-unitary in that it may consist of smaller sub-events which are not fully distinguished from one another by the speaker. Consider, for instance, the pair in (53):

- (53) (a) *k̄w̄nk̄anaat-tmax̄-aw-č̄*
 (rdp)cry-[rcp]-3p-[perf]
 'they were making each other cry'

(BCT 7, line 23)

- (b) ... *s-kal-tmax̄-m-is* *ta+λ̄msta+t̄x̄*
 np-meet-[rcp]-[md]-3s-3s D+person+D
 '... when she met a man'

(BCT 128, line 12)

(53a) is an example of a typical reciprocal event which can be broken down into two fully distinguishable sub-events—that is, it can be subdivided into two separate sub-events *A makes B cry* and *B makes A cry*. While (53a) presents both events as a part of a whole, its components represent discrete actions—e.g. *A* insults *B* and *B* insults *A*, *A*'s insult causing *B* to cry and *B*'s insult causing *A* to cry. The event in (53b), however, is not fully distinguishable into two separate sub-events in that *meeting* is an inherently reciprocal action: if *A meets B*, then necessarily *B meets A* and the event described by the first statement is necessarily the same event described by the second. Thus, even though (53b) has two components in that, from the point of view of each of the participants, there are two meetings (or mental events of first-encounter), these meetings are in fact part and parcel of the same event (the crossing of paths of the two characters involved) and so can not be fully distinguished. In this sense, an

³⁴The morpheme *-t̄x̄* means 'distant'.

³⁵Literally, these last three forms are, respectively, 'meet-eye', 'meet-foot', and 'meet-face'; the last form obligatorily bears the reciprocal suffix *-tmax̄* (see the discussion of (53) below).

³⁶This last form is especially numerous in BCT, accounting for twenty-three separate instances of the instrumental *-m*.

³⁷Nater (1990: 34) glosses the circumfix *nu-ik* as 'mind'.

³⁸Nater (1990: 65) gives the bound root *tūt-* 'informed'. *-nix* is a lack of control morpheme and *=uus* is the lexical suffix 'face'.

³⁹The root of this form is not glossed in BCT; the other two morphemes are *-am* '[controlled development]' and *=us* 'face'. There is a root *cay* 'stop, finish; all', though it is hard to reconcile this meaning with the full form given here.

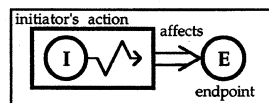
event such as (53b) is non-unitary and the verb *kal* 'go to meet [s.o.]' appears suffixed with both the reciprocal suffix *-tmax* 'each-other' and *-m* to give the reading 'meet [s.o.]'.

In actual fact, verbs which express inherently non-unitary events account for only a small fraction of instances of *-m* in the corpus. In BCT, the conflation of two non-unitary events into a single clause most consistently receives middle marking in situations that seem best described as applicatives, constructions which take an oblique object or PP expressing a goal and promote it to direct object, as shown in (43), repeated here in (54):

- (54) (a) $\text{pu}^{\lambda} \text{ ti}+?imilk+tx \text{ ?ut}+ti+nus?uul\dot{x}+tx$
 come D+man+D P+D+thief+D
 'the man came to the thief'
- (b) $\text{pu}^{\lambda} \text{ -m-is} \text{ ti}+?imilk+tx \text{ ti+nus?uul\dot{x}+tx}$
 come-[md]-3s:3s D+man+D D+thief+D
 'the man attacked the thief'

In the sentence in (54a) we have an example of a simple intransitive verb of motion with a goal phrase; in (54b) the same verb affixed with *-m* becomes syntactically transitive, taking a direct object designating the goal of the motion. Following an analysis by Tuggy (1988), applicatives such as these, formed on intransitive predicates, denote a complex event in which I performs a specific action that has a potential but unspecified effect on E. What I does is fully specified by the stem of the verb to which the applicative morpheme is attached, but the effect on E (which, by dint of being an individuated entity not identified with I, is realized as a direct object) is unstated and left for contextual or pragmatic factors to decide. This pattern is represented in (55).

(55)



(based on Tuggy 1988)

Here, the applicative event is shown as consisting of two separate components, I's action (jagged arrow) and the effect on E, which remains unstated. This implies a certain non-unitariness—not of endpoint or initiator, but of event. The middle in (54b) thus marks this non-unitariness of an event that is nonetheless realized as a single clause in the same way that the middle in earlier examples marks the non-unitariness of an event-participant realized as a single NP or pronoun.

In all, this applicative use of *-m* in BCT appears with seven different stems:

- (56) Applicative uses (16 instances of 7 stems)
- | | | | | | |
|----------------------------------|---|---------------------------------------|---|---|--------------------------------------|
| $\dot{\lambda}ap$ | > | $\dot{\lambda}ap-m$ | pu^{λ} | > | $\text{pu}^{\lambda}-m$ |
| 'go' | | 'go to [s.o.]' | 'come' | | 'come at [s.o.]' |
| $?n\dot{\lambda}=a\dot{\lambda}$ | > | $?n\dot{\lambda}=a\dot{\lambda}-m$ | $\dot{c}kta$ | > | $\dot{c}kt=ak-m$ |
| 'travel at night' | | 'visit [s.o.] by night' ⁴⁰ | 'arrive, reach' | | 'attack [s.o.]' ⁴¹ |
| $yaya\dot{x}-m$ | | (deponent) | $\dot{k}^w\dot{a}\dot{\lambda}$ | > | $\dot{k}^w\dot{a}\dot{\lambda}iwa-m$ |
| 'play a trick on [s.o.]' | | | 'be safe' | | 'make [s.o.] safe' |
| cay | > | $cayliwa-m$ | $caylx=ak-m$ | | |
| 'finished' | | 'finish with [s.o.]' | 'leave [s.o.] alone, give up on [s.o.]' ⁴² | | |

Most of these forms are based on verbs of motion, which are a common base for applicatives across languages.

Another use of *-m* which seems to be closely related to the applicative is found quite frequently in association with transitivized verbs of speaking; in such uses, an intransitive verb denoting a speech act becomes a syntactically transitive verb whose object is the person spoken to. Compare the sentences in (57a) and (b):

- (57) (a) $?a\dot{\lambda}-?a\dot{\lambda}ma-ku-\dot{c}i-k\dot{s}$ cut-s-k^w $?i\dot{\lambda}+?msta+y\dot{\lambda}$ $?ut+i\dot{\lambda}+mna-s+i\dot{\lambda}$
 [res]-die-[dub]-[surp]-[perf]-[ind] say-3s-[qtv] D+person+D P+D+child-3po+D
 'But she must be dead now,' the woman said to her daughter'

(BCT 111, line 149)

⁴⁰This verb can be further broken down into $?n\dot{\lambda}$ 'night' + $=a\dot{\lambda}$ 'foot'.

⁴¹Literally, 'arrive-hand' (cf. English 'raise one's hand against [s.o.]').

⁴²The additional suffixes in this and the previous forms are *-liwa* '[semblative]' and *-lx* '[inchoative]'.

- (b) $yaya-liwa-timut-\dot{x}$ cucut-m-is-k^w $a\dot{\lambda}+t\dot{x}^w$ $ta+mna-s+t\dot{x}$
 good-[sem]-[caus-refl]-[imp] say-[md]-3s:3s P+then D+child-3po+D
 'Be brave,' he told his son then'

(BCT 118, line 212)

The verb in (57a) is the intransitive verb *cut* 'speak', which—like its English gloss—may express a listener in a PP; in (57b), the verb (here in reduplicated form) is affixed with *-m*, becoming syntactically transitive, and the listener is promoted to direct object, just as in (54). Other verbs of speaking which show this pattern are:

(58) Transitive speech events (20 instances of 3 stems)

$?ax^w\dot{s}$	>	$?ax^w\dot{s}-m$	cut	>	cut-m
'holler'		'yell at [s.o.]'	'speak'		'speak to [s.o.]'
$waylit^{43}$	>	$waylit-m$			
'assent, agree'		'assent to, agree with [s.o.]'			

The forms given here show a syntactic pattern that looks to be the equivalent of the applicative—the promotion of an oblique object or goal to a direct object in the clause. In a true applicative, however, the second event participant is construed as having been in some way affected or potentially affected by the action of I, although the exact nature of that affectedness may merely be implicit in the nature of the action or in discourse. In the case of speech acts, it is not as clear to what extent the listener is affected by what is said or by the act of speaking itself, although it certainly could be argued that I's action, speaking, does have an effect (or a potential effect) on the psyche of the listener. Like more ordinary applicatives, speech events can thus be seen as consisting of two separate components—the speech act of I and the perception of that speech by the listener—and so conform to the Bella Coola middle pattern in the same way that the applicative does, representing the conflation of two events which are intimately connected but not entirely unitary.

The final middle use to be discussed here is also related to the notion of the non-unitariness of events and is associated with certain specific verbs that participate in what are commonly called raising constructions, structures in which a transitive verb takes as its direct object an actant (syntactic argument) of an embedded clause. In Bella Coola, raising takes place out of morphologically nominalized clauses, roughly the equivalents of English *that*-phrases in sentences like *we know that he is going*, as in (59):

- (59) (a) $?a\dot{\lambda}nap-ti\dot{\lambda}$ $wa+?imilk-uks+c$ $s-\dot{\lambda}ap-aw$
 know-3p:1p D+men-[plural]+D np-go-3p
 'we know the men [and] that they are going'

(Davis & Saunders 1978: 42)

In this sentence, the matrix verb, $?a\dot{\lambda}nap$ 'know', shows object agreement for the person and number of one of the actants in the embedded clause, in this case the subject, and the utterance as a whole represents two separate, non-conflated events. There are, however, a few verbs which appear with *-m* in similar constructions and give a conflated-event reading. One of the most common of these is $\dot{\lambda}ap$ 'go', which forms expressions with the meaning of 'begin to':

- (60) (a) $\dot{\lambda}ap=ak-m-it$ $?a\dot{\lambda}+t\dot{x}^w$ $s-ka-?istux-it$
 go=hand-[md]-3s:3p P+then np-[irr]-skin-3s:3p
 'they started to skin him then'

(BCT 135, line 77)

- (b) $\dot{\lambda}ap-m-im-k^w-\dot{k}^w$ $ta+qiiqtii+t\dot{x}$ $s-ka-?a\dot{\lambda}-liq^w-im$
 go-[md]-3s:pass-[qtv]-[usit] D+youth+D np-[irr]-[res]-roll-3s:pass
 $x+tu+stam-x^wism-s+t\dot{x}^w$
 P+D+co-play-3po+D
 'the youth began to be rolled every now and then by his playmates'

(BCT 112, line 162)

Sentence (60a) uses two clauses to represent a single event; the matrix verb agrees with both the subject and the object of the embedded clause, the subjects of the two clauses necessarily being coreferential. In (60b), the same structure is given formed on passives of the matrix and the embedded clause. There are three stems that appear in such constructions in the BCT (one of which, $\dot{\lambda}ap$ 'go', is also involved in applicatives):

⁴³This form is further decomposable into *way* 'okay' and *-lit* 'say, go like'.

(61) Event-conflating verbs (17 instances of 3 stems)

niɾic 'be alive'	>	niɾic-m 'survive by [doing sth]' (deponent)	λap 'go'	>	λap-m 'start to [do sth]'
calɬiwa-m 'give up [doing sth]'					

These uses of *-m* qualify as middle uses because they subdivide an event into two components which, like the components of the applicative event, can be identified with one another and which share the same participants, but which are not completely equivalent and are realized in separate clauses (although unlike the applicative event, both components are fully specified). Thus, verbs of this type are like applicatives and transitive verbs of speech in that they give us a construal of a single event composed of two sub-events whose partial identity is indicated by the middle-marker *-m*. Partial identification of sub-events is thus subsumed along with partial identification of event-participants under the general heading of relative elaboration and it is over these two domains that the bulk of the instances of the Bella Coola *-m* range, making it an excellent candidate for a middle marker.

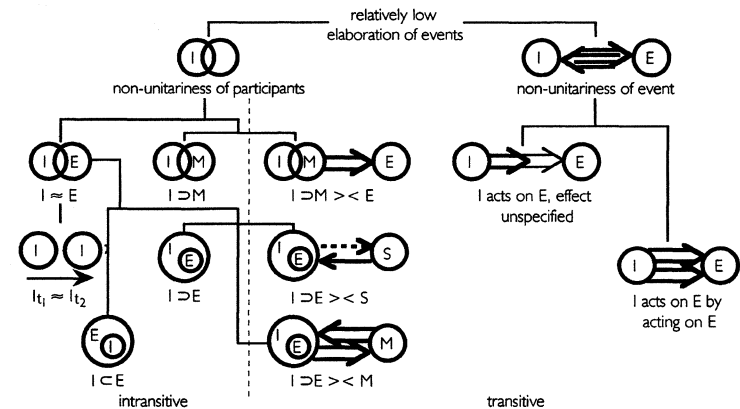
5 Transitivity and the continuum of unitariness

In conclusion, it seems that the majority of uses of *-m* (246 instances of 89 stems) conforms closely enough to well-known and widely recognized properties of middle-morphemes in the broad sample of languages examined by Kemmer (1993) that it can be safely labeled as a marker of middle voice. Like the middle in many languages, *-m* appears in syntactically intransitive clauses denoting grooming and other actions directed towards the initiator's own body ($I \supset E$); it appears in verbs denoting speech events ($I \supset M$), and in verbs of body posture, translational, and non-translational motion ($I \subset E$); and, as in many languages, it is used to form mediopassives and verbs expressing spontaneous events ($I \subset E$), this last meaning having been extended somewhat to a cross-linguistically more unusual use in the formation of inchoative-like expressions ($I_1 \approx I_2$). In addition to these standard uses of the middle-marker, Bella Coola makes use of *-m* in some syntactically transitive clauses, including those in which an intermediary event-participant such as an instrument is partially identified with the initiator ($I \supset M \times E$) of a semantically transitive event; events where the initiator interacts with an individuable midpoint (*M*) and the endpoint is *I*'s own self-interest ($I \supset E \times M$), and events where *I* interacts with some external stimulus (*S*) and the endpoint is *I*'s own psyche ($I \supset E \times S$). Bella Coola also applies *-m* to the formation of syntactically transitive clauses in certain applicative and applicative-like expressions in which, as discussed in Section 4.2, it serves to mark the non-unitariness of an event expressed as a single clause. *-m* also appears associated with what resemble raising constructions where it indicates the non-unitariness of events whose partial identification with one another is reinforced by the sharing of arguments across clausal boundaries. The common thread linking all of these uses of *-m* (accounting for 248 instances of 79 stems) seems to be the notions of unitariness and partial identification, as summarized in (62) on the next page. The most variegated use of the middle occurs where a clause presents a single-event participant as a non-unitary whole, one part functioning as the initiator of an event or process, another part serving as a stimulus (*S*), midpoint (*M*), or endpoint (*E*) (194 instances of 64 stems).

Unitariness of participants forms a continuum, as in (63), also on the next page. At the lower end of the continuum we have events with a single, unitary participant, whereas at the other extreme we have a two-participant event involving two highly individuable (and in themselves unitary) participants. The centre portion of the continuum is divided between reflexives—where there is a single participant treated as if it occupied two distinct and separate semantic roles—and middles, in which some event-participant is conceived of as a non-unitary whole, parts of which fill distinct semantic roles in the clause. Typically, one of these semantic roles must be that of initiator, but—in Bella Coola, at any rate—the role with which *I* is partially identified need not be *E*, but can be an intermediary point (*M*) such as an instrument or the stimulus (*S*) in an event of cognition. Another interesting feature of Bella Coola with respect to this scale is that the minimal criteria for the occurrence of the transitive agreement paradigm with a stem seems to be the construal of the event as having two fully individuable participants rather than the realization of a particular semantic role as *E*; reflexive clauses are marked with intransitive agreement suffixes, restricting syntactic transitivity to the high end of the scale of unitariness.

There is, however, one use of *-m* that does not quite fit the characterization of the middle as marking partial identification of event participants—although, oddly enough, it is not one of the unusual-looking transitivity uses that is the problem, but the apparently more mundane use of *-m* as a detransitivizer discussed in Section 3.4. In this use, *-m* is affixed to a syntactically transitive verb and renders it intransitive, showing a pattern reminiscent of what Kemmer (1993) calls an object-deletion middle. Although they are not obviously markers of non-unitariness, many of these cases still conform to the cross-linguistic definition of the middle in that object-deletion represents a relatively lower elaboration of events than the corresponding transitive form of the verb with a direct

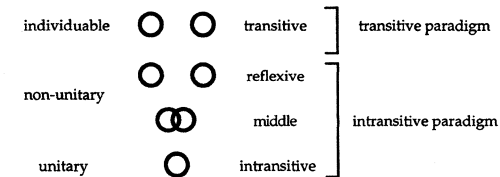
(62) Non-unitariness of event and participant as subschemas of the middle voice



object. A number of direct-object deleting or activity middles, however, do appear with objects in the same clause, albeit oblique objects in a prepositional phrase: it is not clear in what way precisely a clause with an oblique, referential, and totally individuable oblique object constitutes a lower elaboration of events than does the same clause with a direct object. Certainly the "demotion" of an event-participant to an oblique syntactic role in a clause (in other words, the clause's syntactic detransitivization) can be taken as a sign of reduced *saliency* of that participant, and hence as a sign of relatively lower semantic transitivity. However, as we have seen in the discussion above, syntactic detransitivization is not a one-to-one correlate of reduced event-elaboration: the two are connected in that a syntactically transitive event tends to be highly elaborated, but a number of constructions in Bella Coola are both syntactically transitive and middles (indicating some degree of reduced elaboration), whereas other monovalent constructions fully elaborate a single event-participant and, hence, are syntactically intransitive.

There is, of course, a potential diachronic explanation of this use of *-m* in that it may be connected to the self-interest middle found in related languages such as Lushootseed. These form syntactically intransitive clauses with oblique—and presumably less salient—objects, but also give a sense of acting in the interest of the subject that has apparently eroded in Bella Coola, leaving these uses of *-m* with only the meaning of 'reduced saliency of object'. As an issue of synchronic grammar, however, the question remains as to whether the activity uses of *-m* can still be comfortably classified as uses of the same *-m* or whether we are required to posit a two separate meanings for this morpheme—'non-unitary participant/event' and 'reduced saliency of object'. This is not a trivial problem, touching as it does on central issues of the representation meaning in cognitive linguistics, language description in general, and grammaticalization theory, and it is likely a question that does not lend itself to a definitive solution. Given that the meanings of morphemes evolve along continua or clines that cut across synchronic grammatical categories, it is not unexpected that at any given point in the development of a language a morpheme, or a subschematic meaning of a morpheme, may occupy an intermediary position on that cline. In the case of Bella Coola, *-m* appears to be highly grammaticized and the morpheme appears not only in a large number of fossilized expressions (9 stems) and deponents (22 stems), but also in a number of idiomatic expressions (e.g. *kal=aq* 'spy [sth]' (lit. 'meet-eye'), *kal=at* 'come upon [sth]' (lit. 'meet-foot')) whose meanings are not strictly compositional (although the motivation for the presence of a middle-marker is still transparent). As a result of being highly

(63) The continuum of unitariness



⁴⁴This form can be broken down as follows: *cay* 'finish' + *-lx* '[inchoative]' + *-liwa* '[semblative]'.

lexicalized, the subschematic meanings of *-m* seem both to have been extended over an unusually broad area of the cross-linguistic domain of the middle voice and to have bifurcated, possibly through the loss of the self-interest reading, into two separable sub-domains. The first of these, non-unitariness, is standard and well-attested middle meaning across languages, while the second, reduced participant saliency, corresponds in part to other relatively well-known types of middle—the activity and object-deletion middle—and in part to a more novel form which allows for the realization of an oblique object and so falls slightly outside the realm of “reduced elaboration of participants”—and, like its transitivizing uses, serves as an example of the varied and innovative uses of *-m*.

List of Abbreviations

=	lexical suffix boundary	expv	expectative	pass	passive
1	first person	f	feminine	perf	perfective
2	second person	hab	habitual	pnt	punctual
3	third person	idb	inferential dubitative	po	possessive
agt	agent	imp	imperative	prog	progressive
appl	applicative	impf	imperfective	prt	particle
att	attemptive	in	internal	qtv	quotative
caus	causative	inc	inchoative	rcp	reciprocal
ccp	contrastive-conjunctive	ind	individuative	rdp	reduplication
circ	circumstantive	inst	instrumental	refl	reflexive
cnf	confirmative	int	interrogative	res	resultative
comp	completive	irr	irrealis	s	singular
D	deictic	l.o.c.	lack of control	s.o.	someone
dim	diminutive	md	middle	sem	semblative
dir	directional	neg	negative	stat	stative
dist	distributive	np	nominalizing prefix	sth	something
dub	dubitative	P	preposition	surp	surprisative
expb	expectable	p	plural	usit	usitative

References

- Beck, D. (1995). A comparative conceptual grammar of Bella Coola and Lushootseed. MA thesis, UVic.
 (1996). Transitivity and causation in Lushootseed morphology. *Canadian Journal of Linguistics* 41, 109 – 40.
 Comrie, B. (1989). *Language universals and linguistic typology: Syntax and morphology*. Oxford: Blackwell.
 Davis, P.W., & Saunders, R. (1973). Lexical suffix copying in Bella Coola. *Glossa* 7, 231 – 51.
 (1975). Bella Coola referential suffixes. *IJAL* 41, 355 – 68.
 (1978). Bella Coola syntax. In E. Cook & J. Kaye (Eds.), *Linguistic studies of native Canada*, 37 – 65. Vancouver: UBC Press.
 (1980). *Bella Coola texts*. Victoria: British Columbia Provincial Museum.
 (1986). Control and development in Bella Coola. *IJAL* 52, 212 – 26.
 (1989). Language and intelligence: The semantic unity of *-m-* in Bella Coola. *Lingua* 78, 113 – 58.
 (1997). *A grammar of Bella Coola*. Missoula: University of Montana.
 Hess, T.M. (1993). *Lushootseed reader, Vol. 1—Four stories from Edward Sam*. Victoria: Tulalip.
 Hopper, P., & Thompson, S. A. (1980). Transitivity in grammar and discourse. *Language* 56, 251 – 99.
 Kemmer, S. (1993). *The middle voice*. Amsterdam: Benjamins.
 Mel'čuk, I.A. (1997). Grammatical cases, basic verbal constructions, and voice in Maasai: Towards a better analysis of the concepts. In W.U. Dressler, M. Prinzhorn, & J.R. Rennison (Eds.), *Advances in morphology*, 132 – 70. New York: Mouton.
 Langacker, R.W. (1991). *Foundations of Cognitive Grammar: Descriptive applications*. Stanford: Stanford University Press.
 Maldonado, R. (1992). Middle voice: The case of the Spanish 'se'. Ph.D. dissertation, UC San Diego.
 Nater, H. F. (1984). *The Bella Coola language*. Ottawa: National Museum of Man.
 (1990). *A concise Nuxalk – English dictionary*. Hull: Canadian Museum of Civilization.
 Newman, S. (1969). Bella Coola grammatical processes and form classes. *IJAL* 35, 175 – 79.
 Talmy, L. (1991). Path to realization: a typology of event conflation. *Berkeley Linguistics Society* 17.
 Trask, R.L. (1993). *A dictionary of grammatical terms in linguistics*. London: Routledge.
 Tuggy, D. (1988). Náhuatl causative/applicatives in Cognitive Grammar. In B. Rudzka-Ostyn (Ed.), *Topics in cognitive linguistics*, 587 – 618. Amsterdam: Benjamins.
 van Oosten, J. (1977). Subjects and agenthood in English. *Chicago Linguistics Society* 13, 459 – 71.