Squamish /-m/ Constructions
Author(s): Michael Darnell

Please see “How to cite” in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via http://linguistics.berkeley.edu/bls/.

The Annual Proceedings of the Berkeley Linguistics Society is published online via eLanguage, the Linguistic Society of America's digital publishing platform.
Squamish /-m/ Constructions
Michael Darnell
University of Wisconsin- Milwaukee

1. Introduction

A verbal suffix found throughout the Salish language family, reconstructible as */-m/ in Proto-Salish, has been analyzed in a variety of ways: the Thompson Salish /-m/ as a middle voice marker, that could be an antipassive construction (Thompson, 1985), the Colville /-m/ as a middle voice marker (Mattina, 1973), the Lummi /h/ as passive (Jelinek and Demers, 1983), and the Lushootseed /-b/ as morpheme necessary to clauses with two lexical nominals, but which does not form passives (Hess, 1973). Finally, in Squamish, the construction in question has been analyzed by Kuipers (1967) in his grammar as an intransitivizing suffix that yields a passive when added to a transitive verb. These various analyses could, of course, reflect the fact that this suffix has come to denote different functions in each of these languages. It is, however, possible that /-m/ has a common function in these languages and that previous analyses have each only noted part of the picture, thus the conflicting analyses.

One common factor in all of the above studies is that the analyses are based on elicited sentences. Two problems may occur with this methodology. First, the actual function in context of such constructions may not be clear from the elicitations. Next, the tendency in typological investigations to concentrate on clauses with two lexical nominals may influence speakers to produce sentences not typical of discourse. This study seeks to avoid these problems by focusing on recorded texts for data and employing a methodology which notes not only the surface syntax of clauses, but also the functional aspects of verbal morphology within a given text. In order to accomplish a description of the latter, I use the topicality measures pioneered by Talmy Givon in *Topic Continuity in Discourse*. Briefly, the topicality of an argument can be determined by noting the frequency of its appearance in a discourse. Arguments which are topical are likely to have appeared more recently, as measured from a particular mention within the discourse (in Givonian terms 'referential distance'). Topical arguments are also more likely to appear in subsequent clauses as measured from a particular mention ('topic persistence'). By employing these measures the topicality of arguments in derived constructions such as passives, antipassives, and inverses can be compared to the topicality of arguments in active constructions. Such comparisons can provide an empirical validation of generalizations made about the topicality of arguments, for example - passives are used when the patient is more salient than the agent in following or preceding discourse.
The results of this study demonstrate that Squamish clauses marked by /-m/ are not best analyzed as middle. Also, considering that /-m/ appears in different types of intransitive constructions, it is not best analyzed as solely passive or antipassive. Rather /-m/ is involved in the demotion of core arguments in order to accommodate a grammatical prohibition in Squamish, first noted by Hess (1973) for Lushootseed, against a clause having two lexical nominals in the unmarked case. While it has been noted by DuBois (1987) that there is a universal constraint in spoken discourse against the appearance of two lexical nominals in a clause, I wish to differentiate this case. The prohibition here is grammatical rather than based on constraints regarding information flow. Note the constructed sentences in examples (1-5):

(1) p'i?i?-t-ϕ-as
grab-tr-3sgO-3sgS
He/she grabbed him/her/it.

(2) p'i?i?-t-ϕ-as kəcι sitn
grab-tr-3sgO-3sgS art basket
He/she grabbed the basket.

(3) *p'i?i?-t-ϕ-as kəcι manʔ kəcι sitn
grab-tr-3sgO-3sgS art child art basket
The child grabbed the basket.

(4) p'i?i?-m kəcι manʔ t-kəcι sitn
grab-intr art child obl-art basket
The child grabbed the basket.

(5) p'i?i?-t-m t-kəcι manʔ kəcι sitn
grab-tr-intr obl-art child art basket
The basket was grabbed by the child.

While (1) and (2) are acceptable sentences, (3) is not. Examples (4) and (5) are acceptable only due to the fact that /-m/ is suffixed to the verb. The appearance of the intransitive /-m/ demotes one of the core arguments to an oblique case. /-m/ occurs both as the only suffix on a verb, as in (4) and with transitive verbal suffixes, as in (5). Whether the semantic agent or patient is demoted, structurally, is determined by the co-occurrence of /-m/ with other transitivity suffixes. It is claimed here, that what motivates the choice of which argument is to be demoted is a referent's salience to the discourse at hand and that salience is reflected in the topicality measures of the argument.
2. Preliminaries

Several language-specific issues should be clarified before moving on: person/number agreement on the verb, case marking, the valency of verbs and suffixes, and the pro-dropping nature of Squamish.

Kuipers (1967:85) presents paradigms for subject (including both transitive and intransitive subjects) and object affixes. The following pertinent observations are summarized from his detailed analysis. Generally, 1st and 2nd person subject suffixes will combine with the clitic /ē/ which is positioned either pre- or post-verbally. While the clitic can be considered a auxiliary diachronically, these clitic-suffix combinations are best viewed now as pronominal elements. The third person subject marker is always suffixed on the verb, as opposed to being attached to the clitic, but only occurs in transitive clauses, never appearing with intransitive verbs.

The case-marking of nominals in Squamish is binary. A nominal is either in the absolutive case (i.e. zero-marked) or the oblique case which is marked by two forms: /t-/ is prefixed to articles which appear only with nominals and /xa/ occurs with proper names. Kuipers states that both subjects and direct objects will appear in the absolutive; nominals in other grammatical roles appear in the oblique case. The textual evidence concurs with Kuipers’ analysis that intransitive subject and direct object nominals do appear in the absolutive case and in some restricted cases (verbs with object complements) transitive subjects may also. However, in the texts, there are no instances of both transitive subject and direct object nominals appearing in the absolutive case in the same clause. One or the other of these nominals always receives an oblique marking.

The semantic valence of verbs can be deduced from the uninflected forms of many verbs, while the syntactic valence can only be determined by the presence of certain verbal suffixes. I use the term verbal suffix here to refer to suffixes commonly noted in the literature as transitive or intransitive. While all of the four following suffixes have been traditionally called transitive, all of them do not appear to be 'transitivizers' in the sense that they change verb’s valence.

/-s/ is a causative suffix which is added to intransitive stems to increase both their semantic and syntactic valence to 2.

/-n/ (commonly called a transitivizer) is a suffix that may be added to transitive stems, but does not increase the valence. Rather, it is a 'control suffix', a term employed by Laurence Thompson (Thompson, 1985) to describe a suffix which indicates that the semantic role of the subject argument is agent.

/-nax/ is a suffix that co-occurs with only transitive stems and does not
increase a stem’s semantic valence, but it does indicate that a clause is syntactically transitive. /-nəxʷ/ denotes limited control, again as used by Thompson (1985).

/-t/ also co-occurs with transitive verbs, but has no effect on the control status of the predicate or the semantic valence. But like /-nəxʷ/ it denotes a syntactically transitive clause. Crucially, /-s/, /-nəxʷ/, and /-t/ can be differentiated from other suffixes by the fact that when they occur in transitive clauses the clause is considered syntactically transitive.

Finally, transitive and intransitive clauses can also be distinguished by which grammatical slot is available for third person zero anaphoric reference. If conditions of anaphora are met, then the third person intransitive subject can be rendered as zero. In transitive constructions, the transitive subject is always cross-referenced on the verb, whereas a third person direct object need not be overt.

The following examples exemplify the interaction of verbal valence, verbal suffixes, casemarking, and zero anaphoric reference.

(6) č-at mn namʔ nəxʷʔiʔaiʔu t-kəci snəxʷʔi
   cl-1plS cl go aboard obl-art canoe.
   We went aboard a canoe.

(7) namʔ-s č-xʷ ʔət i n-mənʔ
   go-cs cl-2sgS art-fem 1poss-child
   You take my daughter.

(8) na namʔ ʔəeq’qs
   cl go across water
   He went across the water.

(9) č-at mn ʔaʔ-n
   cl-1plS cl touch-ctl
   We approached.

(10a) ʔi kʷ na mn qʷə-nəxʷ-φ-as  kəci sitn
   cl cl cl pierce-lim-3sgO-3sgS art basket
   Until he pierced the basket.

b. na kʷəc-nəxʷ-φ-as
   cl see-lim-3sgO-3sgS
   Then he saw them.
Comparing (6) and (7), (6) can be analyzed as intransitive since /nam?/ 'go' is semantically intransitive and the oblique object 'canoe' appears in the oblique case. The transitivity of (7) is demonstrated by the increase of semantic valence (typical of causatives) and the absolutive case marking of the object 'child'. In (8) an example of zero anaphora in the case of an intransitive subject is attested.

Looking at the other examples the same absolutive case marking that appeared with the causative suffix can be seen in the cases of /-nəx'/ (in (10)a.) and /-t/ (in (11)a.), as well as the possibility of pro-dropping with these suffixes in (10)b. and (11)b., respectively. In (9) the verb suffixed only with /-n/ does not denote an object.

3.0 /-m/ Constructions in Squamish

In the following sections two very different constructions both involving the suffix /-m/ will be examined. The constructions can be compared in the sense that they both are marked with /-m/, but differentiated by the presence of other verbal suffixes. The first case, verbs suffixed only with /-m/, I will show to be antipassives. The second, those verbs with transitive verbal suffixes (/-s/, /- nəx'/, and /-t/) in addition to /m/, I will show to be passives. Each will be examined in turn and finally a coherent analysis of /-m/ which can account for both cases will be presented.

3.1 /-m/ as Antipassive

/-m/ in Squamish and its cognates in other Salish languages have often been analyzed as a middle voice suffixes due to their intransitivity and sometimes reflexive connotations. In Squamish, /-m/ as the only suffix on a verb does produce an intransitive clause and in some cases a reflexive construction.

(12) ni'ə ma♯ s-s mn cai-aq-m ta X.
   cl cl cl-cl cl follow-form-intr art X
   It was then X. (proper name) followed.

(13) sukt-um
    bathe-intr
    He bathed (himself).
(14) na taʔ-us-m t-ta niʔč
    cl look-face-intr obl-art sea
    He looked up at the sea.

(15) ?i na kʷ lixʷ-aiʔɬ-m
    cl cl cl put down-child-intr

    ta siʔamʔ t-ʔaɬi mənʔ-s
    art chief obl-fem child-3poss
    Again the chief gave his daughter in marriage.

In examples (12-15), the absolutive case marking of the subject nominals in (12) and (15), and the zero agreement marking on the verbs in all of the examples are both typical of 3rd person intransitive clauses. In (14) and (15) the oblique case marking of additional arguments is also indicative of intransitivity. So it can be concluded that verbs which are suffixed only with /-m/ are indeed intransitive. Furthermore, the clauses have been detransitivized. The semantic transitivity of the verbs in examples (12-15) can be demonstrated by their appearance in the texts in prototypically transitive clauses and/or their co-occurrence with lexical suffixes like /-us/, as in (14), which occur typically with transitive verbs.

Typically, transitive constructions that are detransitivized, and that denote events where the agent is affected by the action of the verb, have been called middle voice constructions. The detransitivization of these clauses by the addition of /-m/, coupled with the reflexive interpretation of (13), could argue for a middle voice analysis. However, (12), (14), and (15) are best analyzed as active constructions as the subjects in the clauses are not affected by the action. In these cases transitive verbs are reduced in valence by the addition of /-m/, but in the minority of cases are these constructions non-active.

Antipassive constructions, like middle voice constructions, have transitive verbs which are detransitivized. With antipassives, however, the agent is not, generally, affected by the action. Rather, the patient of the semantically transitive clause is demoted to an oblique case or deleted (c.f. Cooreman, 1990). In (14) and (15) the patient arguments have been demoted from direct object status (absolutive case marked) to oblique status (marked with the prefix /t-/). In the case of (12) the object, I would argue, has been subsequently deleted.

The surface syntax of these constructions argues for an antipassive analysis. The clauses can be considered intransitive: they do not co-occur with transitive verbal suffixes; subject nominals are in the absolutive case, and exhibit zero verb agreement; and additional arguments are marked with the oblique case marker. Also, they can be shown to be derived constructions as
the semantic valence of the verbs attested is 2.

3.2 /-m/ as Passive

Turning to now to those cases where /-m/ co-occurs with transitive suffixes, I analyze these constructions as passives.

(16) ua ia-n?-t-m ta staτuʔxʷ*
    cont be careful-ctl-tr-intr art children
    The children were continually warned.

(17) c’i-c’ic’-an-t-m-uiτ
    red-convulse-ctl-tr-intr-3plS
    They were thrown into convulsions.

(18) s-s mn ⁴ic’-it-m X’a T. kʷaci sitn
    cl-cl cl cut-tr-intr obl T. art basket
    The basket was cut by T.(proper name).

In examples (16-18) /-m/ has been added to semantically transitive verbs. But unlike the previous cases, these clauses are also marked for syntactic transitivity; in all of the examples the transitive suffix /-t/ appears. In these cases semantically transitive verbs have been detransitivized, but the patient arguments appear in the absolutive and must be considered the grammatical subject of the clauses. While in (16) and (17) only one nominal argument appears, in (18) a semantic agent appears in the oblique case. The constructions appear, structurally, to be passives. Comparing these examples to Shibatani’s (1985) prototype definition of passives, constructions with transitive verbal suffixes and /-m/ are good examples of passives. Shibatani claims the following are characteristic of prototypical passives: pragmatically - they defocus the agent; semantically - the inherent valence is two, and the subject is affected; syntactically - the patient is subject, no overt agent appears or it is an oblique, and the valence is reduced; and, finally, morphologically - they are marked constructions. Ignoring for the moment the pragmatics, these constructions fit the prototype quite well. Semantically, the verbs have valences of 2, and the subjects are the affected entities. Syntactically, the patients are subjects, the agents are deleted or are in an oblique case, and the syntactic valences have been reduced. The reduction in syntactic valence can be demonstrated by the verbal suffixes. In all three examples the transitive suffix /-t/ appears. As has been noted above the presence of /-t/ indicates a syntactic valence of 2; the addition of /-m/ detransitivizes the clause. Finally, morphologically, the construction is marked (by /-m/) in comparison to typical transitive clauses.

3.3 /-m/ as a Detransitivizing Morpheme

How then are we to characterize /-m/? At first blush it seems quite difficult
to come to a single analysis of a morpheme which is involved in two voice constructions which are very different. Looking at the various voice distinctions that can be made in languages, no two seem more dissimilar than passive and antipassive. However, if we limit our view of /-m/, calling it neither a passive or antipassive marker, but simply noting that it calls for the demotion of an argument, then a coherent analysis of these constructions can be made. Examples (19) and (20) can help clarify this situation. (19) is identical to (15) and is repeated here for convenience.

(19) ʔi na kə lixʷəiʔ-t-m
     cl cl cl put down-child-intr

     ta siʔamʔ tʔaʔi mənʔ-s
     art chief obl-fem child-3poss

     Again the chief gave his daughter in marriage.

(20) na lixʷ-t-m    X’a Q. kəəci sitn-s
     cl put down-tr-intr obl Q. art basket-3p

     Her basket was put down by Q.

In (19) the semantic agent is in the absolute case and the patient appears in the oblique. In (20) the opposite is true; the agent is oblique, the patient absolutive. The crucial difference between the two clauses is the presence of /-t/ in (20). In the absence of /-t/ (or another transitive suffix), it is the agent which is coded in the absolute. The other core argument is demoted by /-m/. In the presence of /-t/, it is the patient which is coded in the absolute, making the agent the core argument to be demoted. In this sense, the absolutive case is privileged in Squamish. Arguments which appear in the absolute, when not overt, are understood as zero anaphoric arguments, rather than being understood as deletions. This type of zero anaphora has been seen in antipassive cases in (14), and also appears in passives, as in (21) and (22).

(21) s-s mn p’iʔ-t-m    t-kəəci stalmaxʷ-t
     cl-cl cl grab-tr-intr obl-art Indian

     It was grabbed by the Indian.

(22) s-s mn cxə-t-m    txʷ-nuʔ t-ta iiʔu
     cl cl push-tr-intr loc-in obl-art fire

     She was pushed into the fire.

In both (21) and (22), the patient subject is understood to be an argument of the predicate, even though it is not overt. In (22), though, the agent is understood to be deleted.

So, in Squamish, /-m/ cannot be analyzed as a marker of any particular voice. Its function, in terms of surface syntax, is to demote one of the core
arguments to an oblique case. Which of the core arguments is available to be deleted, is determined by the presence or absence of transitive suffixes.

4.0 Pragmatics of /-m/ Constructions

In the following sections I will discuss the pragmatics of /-m/ constructions in Squamish. In those clauses where the sole verbal suffix attached to the verb is /-m/, the antipassives, their function correlates with the expectations we would have about antipassives. Antipassives are used when the patient is less topical that the typical patient in a transitive clause. In those clauses where /-m/ co-occurs with transitive suffixes, the passives, their function generally correlates with Shibatani’s claim that passives defocus agents.

4.1 Antipassives

Antipassives, being almost the mirror image of passives, we would expect to be employed when the patient, as opposed to the agent, is non-topical. If the topicality measures of direct objects in transitive clauses are compared to those of demoted objects in antipassives, the antipassive objects should be less topical. The first table notes the referential distance and topic persistence figures for clauses without /-m/. Referential distance (RD) was measured by counting the number of clauses since a referent was last mentioned. Topic persistence (TP) was measured by noting the number of consecutive clauses a referent continued to be mentioned in. The measures in the table represent the mean and median in number of clauses (mean/median). The number of examples is expressed as n=x. The difference in the number of examples for transitive subjects and direct objects is due to the appearance of object complements in the data.

**Clauses without /-m/**

<table>
<thead>
<tr>
<th>Type of Subject</th>
<th>RD</th>
<th>TP</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intransitive Sub.s</td>
<td>6.0 / 2</td>
<td>1.3 / 1</td>
<td>153</td>
</tr>
<tr>
<td>Transitive Sub.s</td>
<td>2.48 / 1</td>
<td>1.34 / 1</td>
<td>138</td>
</tr>
<tr>
<td>Direct Obj.s</td>
<td>10.6 / 3</td>
<td>0.4 / 0</td>
<td>103</td>
</tr>
</tbody>
</table>

These figures demonstrate that Squamish follows the pattern found in many other languages (c.f. Givon, 1983 and DuBois, 1987). All subjects are more topical in that they persist longer in the discourse (1.3 subsequent clauses for intransitive subjects and 1.34 for transitive subjects as opposed to less than a clause for direct objects). Subjects of transitive and intransitive clauses differ in the fact that transitive subjects have less referential distance. Whereas intransitives introduce topical arguments, transitive subjects are most likely to be given. Direct objects in general are the least topical of the core arguments. The high degree of topicality represented by the median (RD) measures for direct objects may be due to the fact that the texts concern primarily two characters, which necessarily act upon each other. Notice, however, that the persistence of such arguments is still not high.
If antipassives do indeed code less topical patients, this failure to be topical should be reflected in higher referential distances and lower topic persistence measures. The table entitled 'Antipassives' notes the topicality of arguments in constructions in which /-m/ appears as the only verbal suffix. The difference in the number of examples reflects the fact that in 13 cases no overt oblique object appeared in the clauses.

**Antipassives, /-m/ - only clauses**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>RD</th>
<th>TP</th>
<th>n=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demoted Patients</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

The topicality of subjects in these clauses is quite comparable to transitive subjects, but the topicality of the objects is effectively nil. In every case the object is a new mention (indicated by a referential distance of 20, c.f. Givon, 1983) and fails to be an argument in following consecutive clauses (indicated by a topic persistence of 0).

4.2 Passives

Recalling Shibatani's prototype definition of passives, the topicality measures of clauses where /-m/ co-occurs with transitive verb morphology should reflect the fact that the patients of such clauses are topical, whereas the agents should be defocused. The topicality of arguments in agentless passives, such as (16) and (17), fit this definition. There are no overt agents in these clauses and the topicality of the patients is similar to those of intransitive subjects, but noticeably different from patients in the direct object slot in transitive clauses.

**Passive Subjects vs. Other Grammatical Roles**

<table>
<thead>
<tr>
<th></th>
<th>RD</th>
<th>TP</th>
<th>n=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intransitive Sub.s</td>
<td>6</td>
<td>2</td>
<td>153</td>
</tr>
<tr>
<td>Direct Objects</td>
<td>10.6</td>
<td>3</td>
<td>103</td>
</tr>
<tr>
<td>Passives Sub.s</td>
<td>8.36</td>
<td>2</td>
<td>11</td>
</tr>
</tbody>
</table>

However, these constructions are not always agentless. Agentful constructions as in (18) accounted for more than half of these constructions found in the texts. Constructions like (18), while differing from the prototypical passive only in the appearance of an overt agent, behave functionally like inverse constructions (c.f. Chad Thompson, ms) that increase the topicality of the patient, yet do not affect the topicality of the agent as greatly as passives.
Agentful Passives

<table>
<thead>
<tr>
<th></th>
<th>RD</th>
<th>TP</th>
<th>n=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agents</td>
<td>5.15 / 2</td>
<td>1.2 / 1</td>
<td>13</td>
</tr>
<tr>
<td>Patients</td>
<td>5.15 / 1</td>
<td>0.69 / 1</td>
<td>13</td>
</tr>
</tbody>
</table>

The patient argument increases in topicality, in comparison to the patients in object roles in prototypically transitive clauses. The agent argument, on the other hand, differs from transitive subjects only clearly in the referential distance. While the syntactic coding of these clauses is clearly passive, the function seems akin to inverse constructions. These agentful passives appear in discourse situations where the agent cannot be unambiguously marked by the 3rd person transitive subject marker. Also in these cases patients have some topical prominence beyond the norm in prototypical transitive events. The clause in (18) is just such a discourse situation. The semantic agent cannot be referenced anaphorically, despite a referential distance of 1, due to potential ambiguity of reference. It must appear as a full nominal. But it also persists for 3 subsequent clauses, a highly topical argument. However, the patient here is an argument that is the center of the action for several clauses (the referent has a TP measure of 3). The topicality of the patient in the discourse rules out the antipassive construction. The topicality of the agent rules out the agentless passive. The syntactic coding of passive allows the recoverability of the oblique marked nominal as agent. Its pragmatic function, however, does not seem to be to defocus agents, but rather to present agents as nominals alongside of nominal patients.

5. Conclusions

/-m/ has been shown to be involved in the demotion of core arguments. Uniquely (in the sense that it is quite productive, and in comparison to non-Salish languages), it signals the possible demotion of either initial subjects or objects in clauses. In the case of antipassives, the lack of verbal suffixes, other than /-m/, places the agent in the privileged grammatical slot, and demands the demotion of the patient. In the case of agentless passives, /-m/ co-occurs with other verbal suffixes. Crucially, the transitive verbal suffixes place the patient in the privileged grammatical slot, while /-m/ then relegates the agent argument to deletable status. Lastly, in agentful passives, agents are roughly equivalent, in topicality, to promoted patients. Thus agentful passives abide by the grammatical constraint of only one lexical argument in the unmarked case, but do not appear to particularly defocus agents. In discourse a single morpheme in Squamish allows speakers to abide by the prohibition against two unmarked nominals in a clause, and other verbal morphology allows them to place the salient argument in the unmarked case.
NOTES

1. A full discussion of the underlying tenets of this methodology may be found in Givon (1983), and a complete account of the methodology’s application to Squamish is presented in Darnell (1989).

2. The following abbreviations are used here: sg = singular, pl = plural, S = subject, O = direct object, obl = oblique case marker, fem = feminine article, tr = transitive, intr = intransitive, red = reduplication, ctl = control suffix, lim = limited control suffix, p or poss = possessive, cl = clitic. Squamish has several clitics which can be combined to create various meanings, or express continual action as does /ua/, glossed as 'cont'. In none of the examples here are they involved in subordination and particular combinations have been translated to reflect the sense of the combinations. For example, in (12) the combination 'copular and emphatic' is rendered as 'It was then...'.

3. The abbreviation 'form' is used for suffixes assigned no clear meaning by Kuipers.

4. For both referential distance and topic persistence, a countable mention of a referent was constituted by its appearance as a semantic argument of a clause, whether it appeared as a nominal, affixal, or zero anaphoric mention.

5. The topicality measures used in this paper cannot be directly compared to those used by Chad Thompson. The methodology here is taken directly from Givon (1983). Thompson uses a revised version of this methodology which counts the number of times referent appears in the next ten clauses as the referent’s topic persistence. Here, topic persistence measures the number of consecutive clauses in which a referent continues to appear.

REFERENCES


Darnell, Michael. 1989. Control and ergativity in Squamish. ms


Benjamins.


Thompson, Chad. 1990. Passive and inverse constructions. ms.