Changes in the alignment of arguments in transitive clauses* in ʔayʔaǰuθəm (Comox-Sliammon)

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Abstract: This paper traces a major shift in the alignment of overt (DP) arguments in ʔayʔaǰuθəm (Comox-Sliammon; Central Salish) over the last three generations. The shift, which results in overt post-predicative A(gent) DPs being completely banned in ergative-marked clauses, is driven by two factors: loss of oblique marking, and a narrowing of the function of ergative marking to allow only anaphoric (continuing topic) subjects. The latter change also affects the use of active and passive morphology in discourse contexts, so that passive is restricted to the role of introducing overt A DPs, and no longer serves to maintain topic continuity for a covert non-agent protagonist, as in other Central Salish languages. A textual comparison of two stages of ʔayʔaǰuθəm with Lushootseed and (Island) Halkomelem further reveals that though Lushootseed has undergone a partially parallel development to ʔayʔaǰuθəm, its system has not been radically realigned in the same way.

Keywords: ʔayʔaǰuθəm, Comox-Sliammon, Central Salish, ergative, passive, discourse

1 Introduction

In this paper, we discuss a significant and relatively recent shift in the syntactic organization of ʔayʔaǰuθəm (a.k.a Mainland Comox, Comox-Sliammon), the northernmost Central Salish language, spoken at present by a diminishing number of elderly first language speakers from the communities of Klahoose, Homalco, and Sliammon on the south-central coast of mainland British Columbia and adjacent islands. We trace the shift over three generations, beginning with speakers recorded by John Davis in the 1970s and ending with the youngest contemporary speakers, now in their sixties.

While the shift has a number of syntactic and morphosyntactic consequences, its clearest manifestations are in the distribution of overt DPs in transitive clauses. To cut a long story short, for the youngest generation of first language speakers,

* We are deeply grateful to our ʔayʔaǰuθəm consultants for sharing their language with us: especially Phyllis Dominick, Joanne Francis, and Elsie Paul. č̓ač̓ahatanapišť! In addition, we would like to thank the UBC Salish Working Group (Bruno Andreotti, Roger Lo, Gloria Mellesmoen, Daniel Reisinger and Kaining Xu) for helpful feedback, and acknowledge those whose previous work on the language has made this research possible: Susan Blake, John H. Davis, Paul Kroeber, and Honoré Watanabe. Last but by no means least, our current research on ʔayʔaǰuθəm owes a great deal to the tireless efforts of Betty Wilson. ?imot! Our work has been financially supported by grants from the Jacobs Research Funds to Marianne Huijsmans and by SSHRC Insight grant #435-2015-1694 to Henry Davis.

only empty pronouns (*pro*) are allowed to occupy the subject positions of ergative-marked clauses; these speakers must resort to passive any time it is necessary to mention an overt (DP) subject in a transitive clause. As we will show, there are also discourse repercussions to the changes we delineate: the restriction of ergative subjects to *pro* has resulted in a parallel restriction on passive-marked clauses in narrative contexts, such that they are now used almost exclusively with overt rather than covert agent DPs.

The paper is organized as follows: in Section 2, we outline three stages in the recent history of the language, corresponding to the three generations of speakers whose grammars we are examining. In Section 3, we turn to an explanation for the changes, focusing on two trends: loss of oblique marking (3.1), and the narrowing of the function of ergative marking (3.2). In Section 4, we turn to textual evidence, showing a remarkable reduction in the use of passive marking in narrative contexts between earlier and later stages of the language, concomitant with the restriction of ergative marking to *pro* subjects. Section 5 broadens the examination to other Central Salish languages, beginning in 5.1 with a syntactic comparison between ?ayʔaʔuʔəm and the superficially similar Lushootseed system, and going on in 5.2 to a three-way comparison of textual evidence from ?ayʔaʔuʔəm, Lushootseed and Island Halkomelem. Section 6 closes with some syntactic remarks on the relation of ?ayʔaʔuʔəm to the Pronominal Argument Hypothesis and the ergative~passive alternation. There are two appendices, the first devoted to an examination of a hitherto unreported AVO variant order in ?ayʔaʔuʔəm, the second to a discussion of the methodology employed in the investigation.

2 Detecting syntactic change over three generations of ?ayʔaʔuʔəm speakers

Here we piece together what we believe are ongoing syntactic changes in the history of ?ayʔaʔuʔəm. Our story is gleaned from the early work of J. Davis (1973, 1978, 1980), subsequent research by Blake (1997), Kroeber (1999, 2002a,b), Watanabe (2003), and our own ongoing fieldwork. Davis worked nearly half a century ago with speakers of the Homalco (χʷum̕aʔ̓kʷu) dialect, some of who were already elderly at that point; some twenty years later, Blake and Watanabe worked mainly though not exclusively with speakers of the Sliammon (ləʔamin) dialect, while Kroeber worked mainly with Homalco speakers; and most recently, we have been working with the youngest fluent speakers of the Tla’amin, Homalco and Klahoose (t̓oʔ̓q̓ʷ) dialects, now in their sixties and seventies, as well as some of the remaining speakers from the previous generation.

Obviously, given the critically endangered state of ?ayʔaʔuʔəm, which has been losing first language speakers throughout the period we are investigating, our conclusions here are somewhat tentative. In particular, as is often the case with a language with a drastically diminished number of first language speakers, distinctions between dialects have become obscured as the language contracts, making it sometimes difficult to distinguish pre-existing geographical variation from diachronic change. Nevertheless, we are reasonably confident that the historical trajectory we trace here represents a genuine case of language change.
rather than a pathological side-effect of language decline, and moreover, one that
is powered by the internal dynamics of the system, as opposed to external
pressures from English.

2.1 Stage I (J. Davis 1973, 1978, 1980)

We begin with the pioneering syntactic work of John Davis, who worked
with speakers of the Homalco dialect in the community of Church House (ʔuʔ)
in the late 1960s and early 1970s.

Davis (1973) outlines the distribution of both direct and oblique-marked DPs
and their relation to pronominal inflection on the predicate. Here we focus on
formally transitive clauses, marked by one of the three principal transitivizing
suffixes -t ‘control, -ng ‘non-control’, and -stg ‘causative’.1

A first significant generalization (and one that has remained consistent
throughout the time period we are considering) is that ʔayʔajuθəm as spoken by
Davis’ consultants conforms to what is known in the Salish literature as the One
Nominal Interpretation condition (ONI), following Gerdt (1988: 57–59). As
described by Gerdt, the ONI expresses the following generalization:

(1) In the absence of marking for other persons, a single third person nominal is
interpreted as the absolutive.

In Davis’ data, just as in the contemporary language, the ONI holds systematically
for transitive predicates in 3-3 clauses marked by a third person object suffix
(usually zero) and the third person ergative suffix -as.2 In these cases, a single
post-predicative DP is always interpreted as the patient (henceforth O), never as
the agent (henceforth A).3

(2) səp-t-as-ul Ralph
hit-CTR-3ERG-PAST Ralph
‘S/he hit Ralph.’ (only interpretation)4 (J. Davis 1973: 2)

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1 There is also a fourth, lexically restricted transitivizer, -V (Watanabe 2003: 236).
2 In very recent work (Mellesmoen, this volume), Gloria Mellesmoen has argued that in
non-control transitives, ʔayʔajuθəm has innovated an overt third person object suffix
-xʷ. So that our glosses conform to the earlier work we are drawing on, we will ignore
this possibility here, and more generally, we will not mark third person objects unless
they are directly relevant to the discussion.
3 In line with the literature on ergativity, we use A and O here as convenient cover terms
for whatever thematic roles are assigned to the subject and object of a transitive verb,
respectively, without committing ourselves to claims about what those roles are. In
particular, we are not claiming that transitive subjects are always agentive.
4 Examples are given in the version of the American Phonetic Alphabet (APA) standardly
employed in Salish linguistics, including by those working on ʔayʔajuθəm (e.g., Watanabe
2003). Abbreviations are as follows: CLEFT = cleft particle, COP = copula, CTR = control
However, in transitive clauses with a first or second person object suffix, the ONI fails to hold; an overt post-predicative DP is interpreted as the A argument:

\[ \text{(3) } qəqəy-thi-s \quad \text{Joe} \]
\[ \text{IPFV•beat.up-CTR+2SG.OBJ-3ERG Joe} \]
\[ \text{‘Joe is beating you up.’} \]

Transitive verbs suffixed with the passive marker -(ə)m/-it also behave differently than ergative-marked verbs with respect to the ONI, as is typical of Salish languages. In Davis’ data, either a direct (unmarked) O or an oblique-marked A may follow a passivized verb, with a concomitant difference in interpretation:

\[ \text{(4) a. } səp-t-am-ul \quad \text{Ralph} \]
\[ \text{hit-CTR-PASS-PAST Ralph} \]
\[ \text{‘Ralph got hit (by someone).’} \]

\[ \text{(4) b. } səp-t-am-ul \quad ?ə=Ralph \]
\[ \text{hit-CTR-PASS-PAST OBL=Ralph} \]
\[ \text{‘S/he got hit by Ralph.’} \]

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transitivizer, DEM = demonstrative, DET = determiner, DIR = direct evidence marker, ERG = ergative (transitive subject), FUT = future tense, IND = independent pronoun, IPFV = imperfective, NCT = non-control (limited control) transitivizer, NMLZ = nominalizer, OBJ = object, OBL = oblique, PASS = passive, PASS.OBJ = passive object, PAST = past tense, PL = plural, POSS = possessive, PRT = ‘particle’, QUOT = quotative, RFLX = reflexive, SG = singular, SU = (indicative) subject, SUB.PASS = subordinate passive. A dash (-) is used to mark an affix, an equals sign (=) a clitic, a bullet (•) a reduplicant, and angle brackets (< >) for infixation into the root; + is used where two or more morphemes are fused and cannot be linearly separated, as with e.g., CTR+1/2SG.OBJ.

5 In neighbouring (and closely related) Central Salish languages, including Sechelt (Beaumont 1985: 91), Squamish (Jacobs 2013: 7), and Halkomelem (Galloway 1993: 179), the equivalents of sentences such as (4) are ungrammatical, due to an outright ban on transitive clauses with a second person object and a third person subject (*3>2); passive is triggered in these cases. (See Jelinek and Demers 1983 for an overview of person hierarchy effects in Central Salish). This ban does not hold in ʔayʔaǰuθəm, though independent changes have conspired to produce the same effect in recent stages of the language: see footnote 16.

6 In Davis (1973), this example is given as qəqəy-t-si-s Joe, with the transitivizer -t and 2nd person object marker -si written separately. This reflects their historical provenance, but not their realization in modern-day ʔayʔaǰuθəm, where they surface as the fused form -θi (see Davis 1978: 212 for discussion). We have altered Davis’ transcription to more accurately reflect the modern-day pronunciation, in line with e.g., Watanabe (2003).

7 We retain the traditional term ‘passive’, rather than adopting one of the various alternatives proposed in the Salish literature (e.g. ‘agent demotion’, as in Kroeber 1999); see 5.1, and Kinkade (1987) for a robust defense of the traditional label. The -(ə)m allomorph is employed (roughly) in main clauses, and the -it allomorph in subordinate clauses, though their distribution is considerably more complex: see Kroeber (2002a), Watanabe (2003) for details.
Turning to (formally) transitive clauses with two overt DPs, Davis records the existence of both ergative-marked and passive-marked variants. In the former case (5a), both DPs are unmarked; in the latter (5b), the A argument is oblique-marked, and the O argument unmarked:

(5) a. saʔ-ʃ-as-ul  Jim Joseph ʔə=šə=saʔʃə
hit-CTR-3ERG-PAST Jim Joseph OBL=DET=branch
‘Jim hit Joseph with a branch.’

b. saʔ-ʃ-am-ul ʔə=Jim Joseph ʔə=šə=saʔʃə
hit-CTR-PASS-PAST ΟBL=Jim Joseph OBL=DET=branch
‘Jim hit Joseph with a branch.’ (‘Joseph was hit by Jim with a branch.’)  
(J. Davis 1973: 2)

In both cases, VAO order is preferred, though Davis (1973: 3) notes that all permutations of the post-verbal constituents are possible in both ergative and passive variants of (5), leading to ambiguity between A and O in the ergative variant (5a). As for the difference in use between the ergative and passive variants, Davis (1973: 12, note 13) identifies the following factors: (i) avoidance of ambiguity, leading to a preference for the unambiguous passive variant (5b); (ii) the relative ‘power’ of A and O, with the active variant used when the A is relatively more powerful than O, and the passive variant when the O outranks the A (in more conventional terms, this would presumably correspond to an animacy hierarchy); and (iii), stylistic variation, sometimes involving the direct repetition of a passive clause in its active guise, as in (6a) and (b), which are taken from the same narrative:

(6) a. qəʔ-θi-m ʔə=təʔulʔay
die-CTR+2SG.OBJ-PASS OBL=DET=snake
‘You are killed by the snake.’

b. qəʔ-θi-s  təʔulʔay
die-CTR+2SG.OBJ-3ERG DET=snake
‘The snake kills you.’  
(Davis 1973: 13)

Like all Central Salish languages, ʔayʔaʔuθəm allows A'-extraction of an argument to a left peripheral pre-predicative position in WH-questions, clefts, and relative clauses. In Davis’ data, O arguments may extract from either ergative (active) or passive clauses; in the former case (7a), a direct (unmarked) A argument may appear post-predicatively, while in the latter case (7b), an oblique-marked A may appear post-predicatively.
A arguments also show two patterns of A'-extraction. In the first, typical of Central Salish, subject morphology is simply deleted (8). In the second, passive morphology is employed, with or without a post-predicative (unmarked) O argument (9).

(8)  (hɪl)  Jim (?ə=)səp̓-t-ul  Joseph ʔə=ʃə=saʔə
    (COP)  Jim (CLEFT=)hit-CTR-PAST  Joseph OBL=DET=branch
    ‘It was Jim who hit Joseph with a branch.’

(9)  (hɪl)  Joseph (?ə=)səp̓-t-am-ul  Jim ʔə=ʃə=saʔə
    (COP)  Joseph (CLEFT=)hit-CTR-PASS-PAST OBL=Jim OBL=DET=branch
    ‘It was Joseph who hit Jim with a branch.’

Table 1 summarizes these findings:

<table>
<thead>
<tr>
<th></th>
<th>ERGATIVE</th>
<th>PASSIVE</th>
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<tbody>
<tr>
<td>First/second person O with overt A?</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Two overt post-predicative arguments?</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Oblique-marking with post-predicative A?</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Flexible ordering of arguments?</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>A'-extraction of O argument with overt A?</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>A'-extraction of A argument?</td>
<td>no</td>
<td>yes</td>
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</tbody>
</table>

2.2  Stage II (Kroeber 1999, 2002a, b, Watanabe 2003)

The second and most important stage of the diachronic development we are tracing is characteristic of speakers who are approximately one generation younger than J. Davis’ consultants (though obviously, generational differences are gradient, so this is an idealization). Most previous work on ʔayʔajuʔəm has

8 The ‘proclitic ʔə= which introduces the remnant clause of a cleft introduced by  hɪl is homophonous with the general oblique marker, and like the latter, has recently undergone phonological erosion. Our youngest consultants do not use it at all, while older speakers tolerate it, occasionally employ it, but more often than not omit it.
concentrated on this generation of speakers; though its focus has been largely morphological, substantial syntactic information can be found in Kroeber (1999, 2002a, b) and Watanabe (2003). In addition, since some of these speakers are still with us, it has been possible to directly check some missing information.

We will focus on changes to the system recorded by J. Davis; unless mentioned here, the systems are otherwise the same.

The first change is that ergative-marked transitive clauses with an A DP may no longer occur with a first or second person object suffix (10a). Passive is used to circumvent this prohibition (10b).

(10) a. * č̓ag-aθ-as-ul Devin
help-CTR+1SG.OBJ-3ERG-PAST Devin
‘Devin helped me.’

b. č̓ag-aθay-am Devin
help-CTR+1SG.PASS.OBJ-PASS Devin
‘Devin helped me.’ (lit: ‘I was helped by Devin.’) (EP)

Watanabe (2003: 288) gives a particularly illuminating spontaneous example of the avoidance of first and second person object suffixes with an overt agent from a conversational text, where the speaker switches from an ergative- to a passive-marked verb when introducing an overt A argument:

(11) niʔ-iθ-as, niʔ-iθay-om (ʔə=)Johnny
say-CTR+1SG.OBJ-3ERG say-CTR+1SG.PASS.OBJ-PASS (OBL=)Johnny
‘…he said to me, Johnny said to me…’

The second and perhaps most striking change is that at Stage II, ergative-marked transitive clauses no longer allow two overt DPs: passive is obligatory whenever a transitive verb occurs with two overt arguments. See also Watanabe 2003: 286–287.

(12) a. * q̓ay<i>kw̓-at-as ta=mimawa ta=čanu
scratch<PL>-CTR-3ERG DET=cat DET=dog

b. q̓ay<i>kw̓-at-om (ʔə=)ta=mimawa ta=čanu
scratch<PL>-CTR-PASS (OBL=)DET=cat DET=dog
‘The cat scratched the dog.’ (EP)

Third, while still apparently present at an underlying level, the oblique marker is frequently dropped at Stage II, as noted by both Kroeber (2002a) and Watanabe (2003).³ This can be seen in the examples above, and is a striking

³Kroeber (2002a, b) speculates that deletion of the oblique marker may be subject to dialect variation, with Homalco speakers (including his consultants) more likely to drop it than
feature of the texts appended to Watanabe (2003), where the oblique marker is usually elided but can be reinserted in appropriate contexts: see Watanabe (2003: 539, footnote 429).

Fourth, word order with two post-predicative arguments (now confined to passive-marked clauses) is no longer flexible: the (optionally) oblique-marked A argument always precedes the unmarked O:

(13)  

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<tbody>
<tr>
<td>a.</td>
<td>* ja-q-at-om</td>
<td>ta=jajə</td>
<td>?ə=ta=tumis</td>
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<tr>
<td></td>
<td>fall-CTR-PASS</td>
<td>DET=tree</td>
<td>OBL=DET=man</td>
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<tr>
<td>b.</td>
<td>ja-q-at-om</td>
<td>?ə=ta=tumis</td>
<td>ta=jajə</td>
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<tr>
<td></td>
<td>fall-CTR-PASS</td>
<td>OBL=DET=man</td>
<td>DET=tree</td>
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</table>

‘The man felled the tree.’ (EP)

Elision of the oblique marker also occurs before locative adjuncts, which show a similar development with respect to word order. Adjuncts introduced by an (optionally null) oblique marker may not be re-ordered with arguments at Stage II (14). Recall that speakers at Stage I, on the other hand, freely allow re-ordering of arguments with post-predicative adjuncts introduced by the oblique marker (see (5) above).

(14)  

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<tbody>
<tr>
<td>a.</td>
<td>??kʷə-t=gi</td>
<td>ta=čənu.</td>
<td>niʔ</td>
<td>?aqʔ*?aq-at-as</td>
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<td></td>
<td>look-CTR=PRT</td>
<td>DET=dog.</td>
<td>be.there</td>
<td>PL•chase-CTR-3ERG</td>
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<td>?ə=ta=qʷit</td>
<td>ta=mimaw.</td>
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<td></td>
<td>OBL=DET=beach</td>
<td>DET=cat</td>
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<tr>
<td>b.</td>
<td>kʷə-t=gi</td>
<td>ta=čənu.</td>
<td>niʔ</td>
<td>?aqʔ*?aq-at-as</td>
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‘Look at the dog. He’s chasing the cat there on the beach.’ (EP)

Not all word order between arguments and adjuncts is fixed at Stage II, however; adjuncts that are not introduced by the oblique marker may still be freely ordered with respect to arguments:

As indicated by the double question mark (??), our consultant found this example marginal rather than totally ungrammatical. She mentioned that ‘some people might say it like that’, but clearly preferred (14b).

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those from Sliammon. However, note that J. Davis’ consultants, who appear to employ the oblique marker more consistently, were also from Homalco: this suggests that the variation may be diachronic rather than geographical (though the two are not mutually exclusive, of course).

10 As indicated by the double question mark (??), our consultant found this example marginal rather than totally ungrammatical. She mentioned that ‘some people might say it like that’, but clearly preferred (14b).
(15)  
   a.  jaq̓-at=səm   kʷisəm   ta=jaja  
       fall-CTR=FUT  tomorrow  DET=tree  
   b.  jaq̓-at=səm   ta=jaja   kʷisəm  
       fall-CTR=FUT  DET=tree  tomorrow
   ‘He’ll fell the tree tomorrow.’11  

Turning to A’-extraction contexts, we see a fifth change: extraction of a passive agent is no longer possible. This is shown in the WH-questions in (16):

(16)  
   a.  *  gat=ga   kʷ=jaq̓-at-əm-ul  
       who=PRT  DET=fall-CTR-PASS-PST  
   b.  gat=ga  kʷ=jaq̓-at-ul  
       who=PRT  DET=fall-CTR-PST  
       Who felled it (the tree)?

Note that the grammatical variant of transitive subject extraction in (15b) involves deletion of subject morphology, a strategy well-instantiated at all stages of the language, and widespread across Central Salish (see (8) above).

Finally, there is one respect in which Stage II speakers retain the old Stage I pattern. A post-predicative overt A DP is still possible with O extraction: in other words, both examples like (7a) and (7b) are still grammatical. This is shown in the WH-questions in (17):

(17)  
   a.  tam  (ta=)ʔaq̓•ʔaq̓-at-as  ta=čanu  
       what  (DET=)PL.chase-CTR-3ERG  DET=dog  
   b.  tam  (ta=)ʔaq̓•ʔaq̓-at-əm  ta=čanu  
       what  (DET=)PL.chase-CTR-PASS  DET=dog  
       ‘What is the dog chasing?’

Table 2 summarizes Stage II:

11 The ergative suffix -as regularly deletes before the future enclitic =səm: see Kroeber (2002a) for discussion.
Table 2: The distribution of arguments inʔayʔajuθəm at Stage II

<table>
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<td>yes</td>
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<tr>
<td>Oblique-marking with post-predicative A?</td>
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<td>Flexible ordering of arguments?</td>
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<tr>
<td>A’-extraction of O argument with overt A?</td>
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<td>yes</td>
</tr>
<tr>
<td>A’-extraction of A argument?</td>
<td>no</td>
<td>no</td>
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</tbody>
</table>

2.3 Stage III (Blake 1997, contemporary speakers)

Stage III, typical of the youngest generation of first language speakers ofʔayʔajuθəm, is not so much a stable system as a continuum, with some of the changes incipient at Stage II being pushed towards their logical conclusion.

The most noticeable of these changes is that at Stage III the oblique marker has disappeared altogether from passive agents: not only is it not normally present, but it cannot be restored in careful speech and is not recognized as grammatical.

The following example from Blake (1997) shows this quite clearly, since it was specifically constructed on the basis of examples first provided (with an oblique-marked agent) in J. Davis (1980).

(18) a. qə•qə-y-t-əm
    IPFV•beat.up-CTR-PASS ʔə=Joe  Jim
    ‘Joe is beating Jim up.’
    (J. Davis 1980: 280)

b. qə•qə-y-t-əm
    IPFV•beat.up-ctr-pass (*ʔə)=Joe  Jim
    ‘Joe is beating Jim up.’
    (Blake 1997: 92)

The oblique marker has also disappeared before adjuncts and, at this stage, the ban on re-ordering adjuncts with arguments is absolute (19).

(19) a. *ʔaq•ʔaq-at-əm
    PL•chase-CTR-PASS  ta=čənu  ta=qْʷit  ta=mimaw
    DET=dog  DET=beach  DET=cat

b. ʔaq•ʔaq-at-əm
    PL•chase-CTR-PASS  ta=čənu  ta=mimaw  ta=qْʷit
    DET=dog  DET=cat  DET=beach
    ‘The dog’s chasing the cat along the beach.’  (PD)
The ban extends to temporal adjuncts introduced by the nominalizer \( =s \) at Stage III (20); this is a shift from Stage II where temporal adjuncts still exhibit free word order (see (15) above).

(20) a. * \( \text{jaq-} \text{at-as-ul} \quad s=\text{jasul} \quad \text{ta=ja?} \text{ja} \text{?} \quad \text{NMLZ=yesterday} \quad \text{DET=tree} \)

\text{fall-CTR-3ERG-PST}

b. \( \text{jaq-} \text{at-as-ul} \quad \text{ta=ja?} \text{ja} \text{?} \quad s=\text{jasul} \)

\text{fall-CTR-3ERG-PST} \quad \text{DET=tree} \quad \text{NMLZ=yesterday}

‘He fell the tree yesterday.’ (PD)

A second change involves post-predicative A DPs in ergative-marked O extraction contexts. At Stage II, these are still possible, as shown in (17) above. At Stage III, this possibility is in the process of being eliminated. In fact, the oldest of our Stage III speakers embodies the process quite directly. This speaker was the principal language consultant for Blake (1997), and there her judgments match those of Stage I and II speakers in finding O-extraction examples with ergative marking and a post-predicative A DP grammatical:

(21) \( \text{tam=} \text{k}\text{ʷa?} \quad ?\text{a=maʔw-}t\text{-as-ul} \quad \text{tə=tumiš} \quad \text{DET=man} \)

\text{what=QUOT} \quad \text{PRT=eat-CTR-3ERG-PAST}

‘What did the man eat?’ (Blake 1997: 116)

However, we have been fortunate in being able to re-test this example (and others of the same type) with the same speaker some twenty years later. This time, the consultant rejects (21) in favour of its passive counterpart (22):

(22) \( \text{tam } \text{maʔw-}t\text{-am-ul} \quad \text{tə=tumiš} \quad \text{DET=man} \)

\text{what } \text{eat-CTR-PASS-PAST}

‘What did the man eat?’ (PD)

Rather than simply treating these intuitions as inconsistent, we’d like to suggest that this is a case of language change within a single speaker’s grammar: the change not only precisely mirrors the shift between older Stage II and younger Stage III speakers, but also represents the logical endpoint of a larger trend in which overt A DPs are ultimately banned altogether from ergative-marked clauses.

A third, rather distinct development is characteristic of the grammar of our youngest consultant, who was raised in Homalco. It involves a distinctive use of subject-initial word order in contexts without A’-extraction. However, since this is an aspect of the grammar that we suspect may in fact be a long-standing characteristic of the Homalco dialect, rather than an innovation, we set it aside here, and discuss it further in Appendix A.

Table 3 shows Stage III of the developments we have been tracing; differences between Stage II and III are italicized.
Table 3: The distribution of arguments in ʔayʔajuθəm at Stage III (cf. Blake 1997)

<table>
<thead>
<tr>
<th></th>
<th>ERGATIVE</th>
<th>PASSIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>First/second person O with overt A?</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Two overt post-predicative arguments?</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Oblique-marking with post-predicative A?</td>
<td>-</td>
<td>no</td>
</tr>
<tr>
<td>Flexible ordering of arguments?</td>
<td>-</td>
<td>no</td>
</tr>
<tr>
<td>A'-extraction of O argument with overt A?</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>A'-extraction of A argument?</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

3 Explaining the trajectory

The obvious question that now arises is whether a unified (or at least partially unified) explanation can be found for the developments we have outlined. Ideally, we would like to identify a single trigger, with the rest of the changes following from it as consequences; failing that, the convergence of two or more independent changes could account for the observed diachronic developments.

It seems unlikely that a single triggering factor is responsible. However, there are two independent trends whose interaction goes a long way towards accounting for the diachronic path. The first is the loss of the oblique marker (part of a more general trend involving the phonological attrition of pre-predicative material, including determiners). The second involves grammaticalization of the canonical Salish use of ergative marking in discourse to mark null topics. We discuss these two changes further in 3.1 and 3.2, respectively.

3.1 Loss of oblique marking

There is a clear historical trend in ʔayʔajuθəm towards the loss of functional elements in pre-predicative positions, quite possibly linked to the influence of the neighbouring Northern Wakashan language Kwak’wala, which like the rest of its family lacks both prefixes and proclitics. Most famously, this has resulted in ʔayʔajuθəm in the loss of the otherwise ubiquitous Salish nominalizing prefix *s- (though it survives tenuously as a proclitic in clausal nominalization) (e.g. Davis 1970a; Blake 2000; Watanabe, 2003). Other prefixes have also been eliminated, leading, for example, to reanalysis of first and second person possessive pronouns as proclitics (Watanabe 2003: 84–85) and the replacement of the pan-Salish stative prefix *ʔac- by an innovative combination of suffixation, infixation, and tone modulation (see Watanabe 2003: 410–449, Andreotti and Mellesmoen, this volume).

Though less advanced than the loss of prefixation, there is a parallel and obviously related set of incipient changes in ʔayʔajuθəm involving the erosion of proclitic elements. Aside from the oblique marker ʔə=, the most striking effect of this trend is the erosion of the determiner and complementizer systems, as noted
by e.g., Kroeber (1999, 2002b). As with the loss of the oblique marker, there are at least two stages to determiner attrition in ʔayʔaǰuθəm: in the first, characteristic of Stage II speakers, determiners are subject to phonological reduction and omission, leading to surface opacity, while in the second, characteristic of younger Stage III speakers, they are partially or totally eliminated. However, this process has not yet gone as far as it has with oblique marking: more conservative Stage III speakers who have completely eliminated oblique marking still occasionally use and can always restore determiners in careful speech, and even the most innovative younger speakers retain determiners in some environments. Nevertheless, the overall trajectory of phonological reduction followed by syntactic restructuring is very similar in the two cases.

At least three other Stage II developments can be directly linked to the loss of oblique marking. First, the shift from flexible to rigid word order for post-predicate DPs in passive clauses enables the language to continue to distinguish A from O arguments when oblique marking no longer does so. Second, the shift to rigid ordering between arguments and oblique adjuncts keeps adjuncts distinct from arguments in the absence of the oblique marker; the additional shift to rigid word order for temporal adjuncts at Stage III may be related, motivated by a drive towards uniform treatment of adjuncts across the system. Third, the prohibition against A'-extracting a passive agent can be made to follow from the fact that without oblique marking, it is impossible to tell whether a post-predicate DP in a passive clause with A'-extraction represents an A or an O argument.

### 3.2 Restriction in the function of ergative marking

The second general trend we consider here involves a narrowing of the function of ergative marking. In particular, by Stage III, ʔayʔaǰuθəm speakers employ the third person ergative suffix -as only to mark a null third person; all overt A arguments are introduced via passive morphology.

This development is a logical extension of the pan-Salish use of ergative marking to track continuing topics in discourse, as previously investigated by Kinkade (1989, 1990), H. Davis (1994), and Gerds and Hukari (2003), inter alia. The basic generalization is that once established, usually as the subject of an intransitive clause, the ‘topic’ (or more accurately, primary protagonist) of a discourse is represented by a null pronoun (pro) which is systematically mapped

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12 As with the loss of the oblique marker, there may also be a dialectal dimension at play in determiner attrition: Kroeber (2002b) mentions that it is most characteristic of Homalco speakers.

13 The exact syntactic and semantic circumstances under which this is possible remain to be explored.

14 Recall in this regard J. Davis’ (1973: 13) note to the effect that one of the functions of passive was precisely to avoid ambiguity via use of the oblique marker on passive agents.

15 While this might be a plausible diachronic motivation for the prohibition against A'-extracting the agents of passive-marked clauses in Stage II ʔayʔaǰuθəm, cross-linguistic evidence shows that it cannot be the only factor responsible: Island Halkomelem, Squamish, and Lushootseed all retain oblique marking but do not permit passive agent extraction.
onto the subject position of an active transitive clause, representing the A argument. This is the most plausible source for the ONI condition (see (1) above): since the A argument is represented by pro in subject position, a single DP in an active transitive clause will inevitably represent the O argument. The relevant mapping is schematized in (23):

(23)  primary protagonist (pro) → transitive (ergative) subject → agent

As far as (23) is concerned, ʔayʔajuθəm is not only a typical but an archetypical Salish language: not only does it never violate the ONI, but at Stage III the mapping in (23) is the only one permitted for ergative marking, thereby effectively precluding overt DPs from ever representing the A argument in an active transitive clause.16 In other words, Stage III ʔayʔajuθəm obeys the following condition:

(24)  The A-nominal Restriction
An overt post-predicative DP in an active transitive clause can never be interpreted as the A argument.

The A-nominal Restriction has two further consequences. First, it naturally extends to first and second person arguments, thereby accounting for the fact that even by Stage II, ʔayʔajuθəm disallows ergative-marked clauses with first and second person object suffixes and overt agent DPs (see (10–11) above).17 Second, the condition predicts that in ergative O-extraction contexts, there can never be a post-predicative A argument; passive will always be employed instead. This prediction is borne out in the shift from Stage II to Stage III: see (21) and (22) above.

To conclude, of the six changes we identified in Tables 1–3, two (loss of word order flexibility in passivized clauses with two overt arguments, and loss of the ability of passive agents to extract) may be plausibly linked to a third (loss of oblique marking), while the other three (the prohibition in ergative clauses against a single overt DP with a first or second person object, the prohibition in ergative-

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16 Watanabe (2003: 286) comes to the same conclusion: “When the agent is expressed by an NP, passive is used: the use of passive in this context may actually be obligatory.”

17 As observed in footnote 2, many Central Salish languages (including all of those immediately adjacent to ʔayʔajuθəm territory) have an independent *3>2 restriction, and circumvent it by employing the passive. The condition in (18) has the same effect, but crucially only for clauses with overt DPs: unlike its neighbours, ʔayʔajuθəm freely allows 3>2 clauses as long as there are no overt arguments:

(i) ʔaq-at-anapi-s
    chase-CTR-2PL.OBJ-3ERG
    ‘S/he chased you folks.’ (Watanabe 2003: 217)

(ii) ʔaq-nu-mi-s
    chase-NCT-2SG.OBJ-3ERG
    ‘S/he caught up to you.’ (Watanabe 2003: 219)
marked clauses against two overt DPs, and the prohibition in ergative clauses against a post-predicative DP in O-extraction contexts) can all be derived from the A-nominal Restriction in (24).

4 Textual evidence

The diachronic changes in the grammar of ?ayaʔjuθəm which we have outlined have potential repercussions for the role of active and passive marking in narrative contexts. In particular, given the narrowing of the discourse function of ergative marking which we have identified as one of the major engines of syntactic change in the language, we might expect to find shifts in the way that topic tracking works in texts.

However, in order to investigate this issue fully, we need ample textual material from all three stages of the language, and unfortunately, at this point textual resources are fragmentary. This is either because recordings do not exist (particularly for the youngest generation of fluent speakers), or because existing recordings have not been fully transcribed and translated (particularly true of earlier stages of the language). Pending further work in this area, we provide here a preliminary comparison of textual data from Stage I and Stage II.

For Stage I, we used three texts from the John H. Davis collection in the California Language Archive that have been transcribed by Davis himself. For Stage II, we used the two texts in Part 4 of Watanabe (2003), which yield a comparable number of transitive clauses to the Davis texts (see Appendix B for details). In order to give us a rough idea of how active and passive are deployed, we separated out all transitive clauses, and classified them according to the number and role of overt post-predicative DPs they contained.

Results for Stage I are given in Table 4:

<table>
<thead>
<tr>
<th></th>
<th>ERGATIVE(^\text{18})</th>
<th>PASSIVE</th>
<th>Ø</th>
</tr>
</thead>
<tbody>
<tr>
<td>No overt post-predicative DP</td>
<td>19</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>Overt O</td>
<td>29</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>Overt A</td>
<td>-</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Overt A &amp; O</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A’-extraction of O, no overt A</td>
<td>4</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>A’-extraction of O, overt A</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A’-extraction of A, no overt O</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A’-extraction of A, overt O</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>36</td>
<td>-</td>
</tr>
</tbody>
</table>

\(^{18}\)This includes possessive subjects in nominalized transitive clause complements, where the third person possessive enclitic =s replaces the third ergative subject suffix -as unless an auxiliary is present, in which case the auxiliary hosts the enclitic and the suffix surfaces
At first glance, Table 4 does not seem very illuminating for the present study, since the overwhelming majority of transitive clauses in the texts belong to types whose grammaticality does not change over the time period we are examining. These include active and passive clauses with no overt DPs or a single overt O DP, passive clauses with a single A DP, and ergative-marked clauses with O-extraction and no overt post-predicative nominal. Together, these make up 88/89 of the total number of transitive clauses in the texts. This leaves just one clause predicted to be grammatical at Stage I, but not at stage II: an ergative-marked clause with both an overt A and an overt (clausal) O argument:19

\[(25) \quad xʷa \ gay-ňxʷ=as \quad təčəwəxanəm \quad qʷə•qʷə̓ลำ
\quad NEG \ realize-NCT=3CNJ \quad təčəwəxanəm \quad IPFV•come
\quad təčəwəxanəm didn’t realize they were coming.\]20

This is indeed predicted to be possible at Stage I but not at Stage II, but hardly provides compelling evidence for the changes we have identified.

However, it turns out that there are in fact rather striking differences between Stage I and Stage II in the distribution of ergative and passive clauses in texts: it’s just that these differences are not based on shifts in patterns of grammaticality, but in the relative proportions of (grammatical) clause types, reflecting shifts in their narrative function. This can be seen clearly when we compare Stage I with Stage II, given below in Table 5.

Table 5: The distribution of overt (DP) arguments at Stage II in two ʔayʔajuθəm texts

<table>
<thead>
<tr>
<th></th>
<th>ERGATIVE</th>
<th>PASSIVE</th>
<th>Ø</th>
</tr>
</thead>
<tbody>
<tr>
<td>No overt post-predicative DP</td>
<td>19</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Overt O</td>
<td>47</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Overt A</td>
<td>-</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>Overt A &amp; O</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>A'-extraction of O, no overt A</td>
<td>12</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>A'-extraction of O, overt A</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>A'-extraction of A, no overt O</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>A'-extraction of A, overt O</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>17</td>
<td>2</td>
</tr>
</tbody>
</table>

on the main verb (Watanabe 2003: 115). We assume that in cases where possessive marking replaces the ergative suffix, the latter is still underlyingly present, and therefore that such clauses should count as ergative.

19 Complement clauses generally count for the ONI, suggesting that they are genuine post-predicative arguments.

20 The third person conjunctive enclitic =as replaces the homophonous ergative subject suffix -as in transitive clauses under negation. As with nominalized clauses, the subject suffix resurfaces if an auxiliary is present, indicating it is underlyingly present but deleted by a morphophonological rule (see Watanabe 2003: 107).
Note first of all that the overall number of passives drops precipitously between Stage I and Stage II: at Stage I, the ratio of passives to transitive clauses is 40% (36/89), whereas at Stage II it is only 17% (17/99). A closer look at Table 5 shows where this deficit comes from: whereas at Stage I there are 18 passives clauses with no overt DPs, and 7 with an overt O but no overt A, at Stage II there are no passives in either of these contexts.

This suggests that passive is functioning differently at the two stages. In particular, at Stage I, as in many Salish languages, active transitive (ergative) and passive clauses are used to regulate the interaction of two discourse referents over a stretch of narrative: ergative is used for the canonical mapping of the primary protagonist onto A and a secondary protagonist onto O (see (23)), and passive is used for the inverse mapping, in which the primary protagonist is mapped onto O and the secondary protagonist onto A. A good example of this kind of sequence is provided by Watanabe (2003: 289), who cites part of a traditional story about Mink and Wolf in his discussion of the functions of passive marking. In this fragment, Mink is the primary protagonist, represented by a null subject (pro) in the ergative-marked main clause in (26a); Wolf is the secondary protagonist, explicitly mentioned as the passive agent of the relative clause in the same sentence. The immediately following sentence in (26b) features a main clause passive with no overt nominals: here Mink is the understood patient and Wolf is the understood agent.

(26)  
a. ləxʷ-s-as kʷ=na-t-it ʔə=tə=ʔəʔum
dislike-CAUS-3ERG DET=say-CTR-PASS OBL=DET=wolf
‘He [Mink] didn’t like what Wolf had said.’

b. ʔəm-at-əm kʷ=s=ʔutʷ-ut-it
threaten-CTR-PASS DET=NMLZ=shoot-CTR-PASS
‘He [Wolf] threatened to shoot him [Mink].’ (‘He [Mink] was threatened to be shot at.’)  

Now, whereas passive clauses such as that in (26a) with an overt A are used at both Stages I and II, Table 5 appears to show that by Stage II passive clauses such as (26b) with a covert A are no longer employed to keep track of a secondary protagonist.

The question now arises as to if and how this change in the discourse function of passive is linked to the syntactic changes which characterize Stages II and III. In answer to this question, notice that the restriction on the use of passive is almost precisely inverse to the restriction on ergative marking which constitutes one of the major innovations of Stage II ?əyʔəjʔəʔom. While ergative marking is restricted to clauses without an overt DP, passive is being used only where an overt A DP is present. It thus appears that narrowing of the function of ergative morphology to mark only a null (pro) A argument has triggered a change in the use of passive, with the result that in narrative contexts, Stage II passive cannot be used to track a null A argument.

21 Watanabe does not say who the storyteller is.
It is important to bear in mind that this does not mean that A arguments in passive clauses must always be overt at Stage II/III. As emphasized by Watanabe (2003: 285), referent tracking is not the only function of passive in ?ayʔajuʔom; there is also an impersonal or ‘unspecified agent’ use which typically does not involve an overt A DP:

(27) ́pitʰ-ːt-ʔam=ga huy ʔoqa-ːt-ʔam squeeze-CTR-PASS=PRT then dry.berries-CTR-PASS

‘They [berries] are squeezed and then dried.’ (Watanabe 2003: 286)

Sentences such as (27) are still possible at Stage II/III of the grammar and can be elicited given the right discourse context:

(28) ni=ʔut asq tʔ=ʔiltan. ˈʔa=qʷʔal ːmakʷ-ːt-ʔam.
be.there=PST outside DET food EVD=come eat-TR-PASS

gat=qʷ kʷ=ʔakʷ-t-uʔ tʔ=ʔiltan.
who=EVD DET=eat-TR-PST 1S.POSS=food

‘I had my food outside and someone came and ate it. I wonder who ate my food.’ (PD)

This tells us that the change seems to lie specifically in the discourse tracking function of passive. In fact, we can characterize both the ergative restriction and the passive restriction as conditions on discourse anaphora:

(29) Referent tracking and the ergative-passive alternation at Stage II/III

a. Ergative: the A argument must be anaphoric to a discourse referent.

b. Passive: the A argument cannot be anaphoric to a discourse referent.

Obviously, the descriptive generalization in (29) has implications for the syntax of both active transitive and passive clauses which go well beyond the scope of this paper; for a few preliminary remarks, see Section 6 below.

Finally, as with any conclusions based on textual evidence, but particularly with a small sample size such as this, it is important to strike a note of caution. It is always possible that our results are skewed for some extraneous reason such as speaker style or the nature of the narratives themselves. The remedy for this, of course, is to increase the amount of textual data available, a need which this study highlights.

Turning to the more direct syntactic predictions of Stage II, we can see that the textual evidence shown in Table 5 is consistent not only with Stage II but also with Stage III changes. There are no cases of two overt post-predicative DPs with ergative marking; no cases of post-predicative DPs with ergative subject and first
or second person object marking; and in almost every case of object extraction with a post-predicative DP, passive is employed, as shown in the cleft construction in (30), from the story ‘Mink and Grizzly’ in Watanabe (2003):

(30) hi=kʷaʔ tə=qixʔ-tu-s qayx
be=QUOT DET=younger.sibling-PAST-3POSS Mink

CLEFT=grab-NCT-PASS (OBL=)DET=grizzly
‘It was Mink’s younger brother that the grizzly grabbed (that was grabbed by the grizzly).’ (Watanabe 2003: 568)

In fact, even the single apparent counter-example to the A-nominal Restriction in the Stage II texts we have examined turns out on closer inspection to conform to it. The relevant example comes from the same story as (29), and involves a relative clause with a locative demonstrative head and an apparent post-predicative A DP:

(31) θu::=kʷa?=ga (?ə=)taⁿ təs-t-as qayx
go::=QUOT=PRT (OBL=)DEm reach-CTR-3ERG Mink
‘She arrived at where Mink was (had reached).’ (Watanabe 2003: 584)

However, follow-up with the original narrator of the text (EP) reveals that this apparent counter-example is the result of a mistranslation: rather than representing the A argument, the post-predicative DP qayx ‘mink’ in (31) is actually the O argument, and the correct translation is ‘She (Grizzly) got to (the place) where she reached Mink.’

In other words, the available textual evidence at Stage II fully supports the A-nominal Restriction (24) which we have characterized as the logical endpoint of the restriction of ergative marking to pro, fully realized only at Stage III. The fact that there are no post-predicative agent DPs in ergative-marked clauses in the texts suggests that Stage III characteristics are already present in narrative contexts at Stage II.

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22 These are not included in the table; there are three relevant cases in the texts, all of which involve passive morphology.
5 Cross-Salishan perspectives

In this section, we turn to a comparison of theʔayʔajuθəm system as presented here with two other Central Salish systems, Lushootseed and (Island) Halkomelem. We focus on two topics: a direct comparison of theʔayʔajuθəm system with that of Lushootseed, which also exhibits a restriction against two overt DPs in active clauses; and a three-language survey of the active-passive alternation as viewed from the perspective of textual analysis.

5.1 ʔayʔajuθəm versus Lushootseed

For those with some knowledge of comparative Salish syntax, the developments we have outlined forʔayʔajuθəm immediately bring to mind the other well-known Salish language where two overt DP arguments are banned in active transitive clauses: Lushootseed (32a), as described in particular by Hess (1995). Just as inʔayʔajuθəm, passive is used to circumvent this proscription (32b):

(32) a.* ʔugʷəč̓-əd ti=č̓ačas ti=sqʷəbay?  
  seek-CTR  DET=boy  DET=dog

b. ʔugʷəč̓-t-əb ʔa=ti=č̓ačas ti=sqʷəbay?  
  seek-CTR-PASS  OBL=DET=boy  DET=dog

‘The boy looked for the dog.’ (‘The dog was looked for by the boy.’)  
  (Lushootseed: Hess 1995: 23)

The comparison between these two languages is even more interesting because there is no question of areal influence: though Lushootseed, likeʔayʔajuθəm, is part of the Central branch of Salish, it is spoken at the Southern end of the Salish sea (along with its close relative Twana, which is less well-documented but probably shared the relevant syntactic characteristics), whereasʔayʔajuθəm is the most northerly Central Salish language. The question then is whether the independent development of a ban affecting two arguments in transitive clauses had the same preconditions or has followed the same diachronic trajectory in the two systems.

The answer appears to be only very partially. We have identified two central factors in the development of theʔayʔajuθəm system: the loss of oblique marking, and the restriction of ergative marking to pro subjects. The first of these changes has not apparently affected Lushootseed at all. Hess (1995: 23) emphasizes the role of the oblique marker in distinguishing post-predicative A from O arguments, which (as in Stage Iʔayʔajuθəm), may be re-ordered from their canonical VAO order in passive clauses: compare (33) to (32b) above.

(33) ʔugʷəčg̓t-əb ti=sqʷəbay? ʔa=ti=č̓ačas  
  seek-CTR-PASS  DET=dog  OBL=DET=boy

‘The boy looked for the dog.’  
  (Lushootseed: Hess 1995: 23)
Lushootseed also differs partially from ?ayʔaǰuθəm in the second factor, the restriction of ergative marking to pronominal subjects. As pointed out in 2.2, the A-nominal Restriction (24) predicts that no overt agent DP will be possible in any active transitive clause, including those with a first or second person object suffix. We have seen that this prediction is borne out in Stage II and III ?ayʔaǰuθəm (see (10–11) above); however, in the equivalent Lushootseed sentences, both passive and active variants are allowed with an overt A DP, as seen in (34):

(34) a. \(?ug^*=t-\text{čəl}\) ?a=ti=sqʷəbay?

\(\text{seek-CTR-PASS=1PL.SU} \quad \text{OBL=DET=dog}\)

‘The dog looked for us’ (‘We were looked for by the dog.’)

b. \(?ug^*=t-\text{ubul}\) ti=sqʷəbay?

\(\text{seek-CTR-1PL.OBJ} \quad \text{DET=dog}\)


In other words, the narrowing of active transitive marking to pro which has reached its logical endpoint in ?ayʔaǰuθəm has only gone partway in Lushootseed, not yet having affected clauses with first or second person objects.

Lushootseed also differs from ?ayʔaǰuθəm in its A’ extraction patterns, though here the differences are a consequence of an independent morphological development in Lushootseed which has led to the complete loss of ergative morphology. As has previously been observed (see in particular H. Davis 1999, 2000 and Kroeber 1999), the Lushootseed system represents the end point of a historical process which has seen the gradual replacement of Proto-Salish subject suffixes by one of the three clitic subject series (indicative, possessive, and conjunctive/subjunctive), with other Central Salish languages showing various intermediate stages along this diachronic path. The result is that the ergative–passive alternation has been replaced in Lushootseed by a Ø–passive alternation (as seen in (34) above, for example), with third person unmarked (or rather, marked only by a Ø indicative clitic) in main clauses, and marked by possessive and conjunctive clitics in subordinate clauses. This in turn has resulted in neutralization of extraction morphology for transitive subjects and objects, since the loss of ergative marking means that the standard Central Salish strategy of deleting the third person ergative suffix in A extraction contexts is now indistinguishable from the standard strategy for O extraction, in which ergative marking is retained. The Lushootseed system has consequently been realigned so that Ø always marks A extraction and passive is uniformly applied in O extraction contexts, as shown in the following pair of WH-questions: 23

---

23 As with the A-nominal Restriction, this realignment has not affected cases of O extraction with a first or second person subject, which remain in the active rather than the passive voice in Lushootseed, as shown in the WH-questions in (i) and (ii):
Table 6 summarizes our comparison between Stage III ʔayʔaǰuθəm and Lushootseed.

<table>
<thead>
<tr>
<th></th>
<th>?ayʔaǰuθəm</th>
<th>Lushootseed</th>
</tr>
</thead>
<tbody>
<tr>
<td>First/second person O suffix with A DP?</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Two overt DPs in active transitive clause?</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Oblique-marking with post-predicative A?</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Flexible ordering of arguments?</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>A'-extraction of O in active transitive?</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>A'-extraction of O in passive</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

As Table 6 shows, there are more differences than similarities between the two systems. One of the major changes in ?ayʔaǰuθəm (the loss of oblique marking) has not affected Lushootseed at all; and though it is true that the shared ban against two post-predicative DPs in active transitive clauses does appear to derive from the same narrowing of the function of ergative morphology to mark only topical (pro) subjects, that change has also gone significantly further in ?ayʔaǰuθəm than in Lushootseed.

In this light, it is worth asking whether Lushootseed shows the discourse profile of Stage I or Stage II/III ?ayʔaǰuθəm, a topic to which we turn next.

### 5.1 Discourse use of the active–passive alternation across Central Salish

In this section, we present a four-way comparison in the textual distribution of DPs in transitive clauses between Stage I and Stage II ?ayʔaǰuθəm, Lushootseed (Bates 2004), and Island Halkomelem (Gerdts and Hukari 2003). Of particular interest is the question of whether the differences we saw in 3.3 between the use

(i) \( g^*at \ k^*i=\text{ʔuʔény-}dx^w \ ti=sq^*əbay? \)
who DET=find-NCT DET=dog
‘Who found the dog?’

(ii) \( g^*at \ k^*i=?uʔəɬ-təxʷ=čələp \)
who DET=eat-CAUS=2PL.SU
‘Whom did you folks feed?’

(Hess 1995: 100)
of passives in Stage I and Stage II ʔayʔajuθəm are reflected cross-linguistically in Lushootseed (where ergative marking is partially restricted) as opposed to Halkomelem (where it is not).

For ease of comparison, we employ the classification system used by Gerdt and Hukari and subsequently adopted by Bates, which excludes cases of A’-extraction. To boost numbers for Stage II ʔayʔajuθəm, we have also added two more stories from the First Voices website: see Appendix B for details.

We begin with active transitive clauses, shown in Table 7:

**Table 7:** Distribution of DPs in active transitive clauses in three Central Salish languages

<table>
<thead>
<tr>
<th></th>
<th>HK</th>
<th>LU</th>
<th>CX I</th>
<th>CX II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subject and object are overt DPs</strong></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Subject and object are overt DPs</td>
<td>7</td>
<td>9</td>
<td>-</td>
<td>Ø</td>
</tr>
<tr>
<td>Only overt DP is subject</td>
<td>3</td>
<td>4</td>
<td>-</td>
<td>Ø</td>
</tr>
<tr>
<td>Only overt DP is object</td>
<td>43</td>
<td>53</td>
<td>40</td>
<td>65</td>
</tr>
<tr>
<td>Both subject and object are zero</td>
<td>28</td>
<td>35</td>
<td>22</td>
<td>35</td>
</tr>
<tr>
<td>Total 3rd person active transitives</td>
<td>81</td>
<td>100</td>
<td>62</td>
<td>100</td>
</tr>
</tbody>
</table>

(NB: all the HK cases with only overt subjects feature demonstratives, which act inversely to ordinary DPs in this context: see Gerdt and Hukari 2003 for discussion).

A glance at this table shows that as far as active transitives are concerned, the three languages (and both stages of ʔayʔajuθəm) are quite close to each other, setting aside the ban on two DPs in active transitive clauses in Lushootseed and Stage II/III ʔayʔajuθəm, which differentiates them from all other Salish languages save Twana. All four systems obey the ONI almost uniformly (the only exceptions involving demonstratives in Halkomelem), and in all of them the majority of clauses (53%–67%) contain a single overt O DP, with clauses containing no overt DPs the second most common pattern (33%–39%).

Next, we turn to passives.

---

24 We use the standard Salishanist abbreviation CX (Comox) for ʔayʔajuθəm in tables 7 and 8.
Here, the data are less uniform and more illuminating. First of all, cross-Salishan comparison shows that Stage II ?ayʔaǰuʔəm is indeed the outlier as far as the overall percentage of passive clauses is concerned: while even at Stage I, the ratio of passives to actives in ?ayʔaǰuʔəm is lower (at 40%) than that for either Halkomelem (65%) or Lushootseed (54%), it plunges to a mere 13% at Stage II.\textsuperscript{25}

The reason, as we already saw in comparing Stage I and Stage II ?ayʔaǰuʔəm, is the near-total restriction of passives in narrative contexts at Stage II to clauses with overt A DPs. In contrast, both Halkomelem and Lushootseed line up closely with Stage I ?ayʔaǰuʔəm in showing around 50% of passives with no overt arguments; for passives with a lone overt O argument, the range is from 20%–36%, with Halkomelem at the high end and Lushootseed nearly identical to Stage I ?ayʔaǰuʔəm at 21%.

These results serve to strengthen our suspicion that there has been a rather radical change in the discourse use of passive in the recent history of ?ayʔaǰuʔəm, which differentiates it from all other Central Salish systems, including Lushootseed. As proposed above in section 4, the change appears to be triggered by the restriction of ergative marking to pro A arguments, which in turn has led to a realignment of the discourse function of passive, so that in narrative contexts it can now no longer be used to refer to covert A arguments.

6 Implications for the Pronominal Argument Hypothesis

Before concluding, we address certain syntactic implications of the developments we have traced in this paper, focusing in particular on the Pronominal Argument Hypothesis (PAH: see e.g., Jelinek and Demers 1994).

Returning to the conditions in (29), repeated here as (36), and in particular the condition on ergative marking in (29a/36a), it is hard to escape the conclusion

\textsuperscript{25}The Stage I ?ayʔaǰuʔəm ratio is very similar to those of Squamish (42.5% passive: Jacobs 1994) and Bella Coola (41.5% passive: Forrest 1994).
that ?ay?ajuʔəm shows ‘pronominal argument’ properties – in fact, rather literally so, since ergative subjects may only be represented by pro.

Referent tracking and the ergative–passive alternation at Stage II/III

a. Ergative: the A argument must be anaphoric to a discourse referent.

b. Passive: the A argument cannot be anaphoric to a discourse referent.

However, it is important to point out that this is only true of ergative subjects. As far as we can tell, all other lexical (DP) arguments in ?ay?ajuʔəm behave as though they occupy conventional argument positions, rather than being generated as clausal adjuncts coindexed with pronouns in argument positions, as predicted by the Pronominal Argument Hypothesis (PAH). It is therefore misleading – at least for ?ay?ajuʔəm – to talk about a pronominal argument language as opposed to a pronominal argument configuration.

It also matters which version of the PAH we adopt to describe the ergative pattern in ?ay?ajuʔəm. In the version proposed by Jelinek and Demers (1994) for Northern Straits Salish, pronominal clitics and affixes on the predicate directly represent arguments, which for ?ay?ajuʔəm would mean that the ergative suffix -as was a pronoun. Though there is evidence that e.g., third person plural subject markers in some Salish languages may indeed be pronouns rather than agreement morphemes (see e.g., H. Davis 2003 on St’át’imcets/Lillooet), none of this evidence applies to -as.

On the other hand, a version of the PAH whereby agreement morphology indirectly represents arguments by obligatorily licensing pro in argument position is more easily applicable to ?ay?ajuʔəm. The obvious candidate is Baker’s (1996) version of the PAH, which claims that in languages with ‘super-rich’ agreement, agreement morphology absorbs case, allowing only pro (which is caseless, by hypothesis) to occupy argument positions.

However, while Baker’s version of the PAH mechanically accounts for the restriction of ergative subjects to pro, it misses the essence of the restriction in ?ay?ajuʔəm, which is driven not by the richness of agreement morphology but by the obligatorily anaphoric nature of transitive subjects. In terms of the diachronic trajectory of ?ay?ajuʔəm, nothing about the morphology of the agreement system of Stage II differs from that of Stage I; what does differ, as we have seen, is that a preference for ergative subjects to be anaphoric to a discourse topic becomes entrenched as a requirement.

This in turn suggests a different way to look at ‘pronominal argument’ configurations, not in terms of agreement parameters, but in terms of their anaphoric properties; such a perspective certainly seems more promising for ergative subjects in ?ay?ajuʔəm, and has the additional advantage that it can be

26 Though it is also true that many of the critical diagnostic tests (e.g., island effects) have yet to be systematically carried out in ?ay?ajuʔəm.
potentially extended to the condition on passive clauses in (36b), which states that the A argument of a passive cannot be anaphoric.

Formalizing the properties of the relevant system of discourse anaphora is beyond the scope of this paper, but we have a few thoughts about the direction this might take. There are two basic approaches, the first involving a theory of cross-sentential anaphora specifically designed to handle text-level coreference, the second involving an extension of intra-sentential anaphora to cross-sentential contexts.

Though either approach is in principle able to account for the basic facts, here we tentatively offer two arguments in favour of the second alternative, where the dependency is represented sentence-internally via a null topic which A'-binds pro in the subject position of a transitive clause. The first argument concerns the possibility of an overt topic binding a pro subject: in Appendix A below, we argue that this possibility is exemplified by one of our Stage III speakers, who allows AVO order with ergative marking. The second argument is that A'-extraction of the A argument of a passive becomes impossible at Stage II at approximately the same time as its anaphoric use in discourse becomes restricted: if the two are seen as facets of the same restriction on intra-sentential A'-binding, a unified explanation becomes possible, whereas if they derive from separate components of the grammar (text-level anaphora and intra-sentential A'-binding), their simultaneous appearance must be regarded as coincidental.

7 Conclusion

We hope to have shown in this paper that some apparently confusing and even contradictory previous findings on the distribution of DPs in ?ayʔaǰúθəm can be resolved once a diachronic dimension is introduced. Arranged over a period of about three generations, the data show that the language has been undergoing rapid and far-reaching syntactic changes.

These changes are not due to the influence of English, nor are they a pathological symptom of a language in terminal decline. Rather, they are driven by the internal dynamics of ?ayʔaǰúθəm grammar, and in particular by two dominant trends. The first is morphophonological, and has resulted in the gradual loss of all pre-predicative material, beginning with prefixes and progressing to proclitics, probably under the influence of neighbouring Kwak’wala, which lacks both prefixes and proclitics, and is known to have influenced ?ayʔaǰúθəm in phonological respects (see J. Davis 1970b).

The second is syntactic, and represents an extension of a widespread Salish trend: the tendency to reserve transitive subject (ergative) marking for continuing (null) topics. In ?ayʔaǰúθəm, this tendency has simply been taken to its logical endpoint: ergative only marks null topics, leading the language to adopt the A-Nominal Restriction given in (24) above, and repeated here as (37):

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27 Though we cannot dismiss the possibility that the rate of change may have been influenced by language attrition.
The A-nominal Restriction

An overt post-predicative DP in an active transitive clause can never be interpreted as the A argument.

We have shown, furthermore, that the A-nominal Restriction has had an impact on discourse structure, where the restriction of ergative marking to anaphoric (pro) A arguments has led to a complementary restriction on passive, which at Stage II/III cannot license anaphoric A arguments, unlike at Stage I or in either Lushootseed or Island Halkomelem. This development is summarized in (28), repeated below as (38):

Referent tracking and the ergative–passive alternation at Stage II/III

a. Ergative: the A argument must be anaphoric to a discourse referent.

b. Passive: the A argument cannot be anaphoric to a discourse referent.

One implication of these changes is that the ‘pronominal argument’ configuration associated with ergative marking is tied to specific discourse conditions, rather than purely structural considerations (e.g. Case-absorbing agreement morphology). At the same time, however, an account relying on a purely discourse-centered theory of cross-sentential anaphora would miss the syntactic nature of the configuration and the changes that produced it.

Obviously, there is more to say here and much more research to be done. We hope, though, to have at least started to ask the right questions.

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**Appendix A: subject-initial order**

As noted in 2.3 and 6.1, our youngest Stage III speaker, who was raised in Homalco, unexpectedly but quite regularly uses AVO word order with ergative marking, as shown in (1):

(1) mima\textsuperscript{w} ?a•ʔaq-\textsubscript{as} \textsuperscript{\dot{c}}\textsuperscript{n}u
cat IPFV•chase-CTR-3ERG dog

‘The cat is chasing the dog.’ (JF)

It is important to distinguish this word order possibility from ‘concealed’ clefts with an extracted A argument. Since clefts commonly lack the introductory predicate *hi(t)*, and Stage III speakers have lost the *ʔa* = ‘cleft particle’ entirely, an A argument in initial position could at first sight either be a genuine pre-predicative subject or a clefted (A’-extracted) subject. However, for our consultant, as for the language more generally, only O arguments may ever be A’-
extracted from ergative-marked predicates; extracted A arguments always trigger deletion, as shown in the WH-question in (2):

(2)  
\[
gat \quad ?a•qaʔ-at(*-as) \quad \text{mimaw} \\
\text{who} \quad \text{IPFV•chase-CTR(*-3ERG)} \quad \text{cat} \\
\text{Who’s chasing the cat? (JF)}
\]

A string consisting of [A V+erg O] cannot therefore be treated as a concealed cleft.

This still leaves us with the question of what position a pre-predicative subject \textit{does} occupy, and in particular, whether it sits relatively low in the structure (below T(ense), for example) or higher up, in a left-peripheral functional projection. Here, its position relative to negation is significant: it \textit{precedes} the negative predicate \textit{xʷa}, as shown in (3b).

(3)  
\[
\begin{align*}
\text{a.} & \quad xʷa \quad ?a•qaʔ-at-it \\
& \quad \text{NEG IPFV•chase-CTR-SB.PASS} \quad \text{dog} \quad \text{rat} \\
& \quad \text{‘The dog didn’t chase the rat.’}^{28}
\\
\text{b.} & \quad čau \quad xʷa \quad ?a•qaʔ-at=as \\
& \quad \text{NEG IPFV•chase-CTR=3SV} \quad \text{rat} \\
& \quad \text{‘The dog didn’t chase the rat.’}^{29}
\end{align*}
\]

Negation in Central Salish languages is independently known to occupy a position either very high in the clausal superstructure (as in the analysis of Wiltschko 2002) or outside the negated clause altogether (as in that of H. Davis 2005): see Kroeber (2002b) for pertinent discussion on ?ayʔajuʔəm. The position of the A argument at the extreme left periphery of negated AVO clauses thus indicates it is even higher up in the structure, in a sentence-external topic position.

An analysis involving a left-peripheral topic is also supported by the rather specific discourse circumstances under which our consultant most often uses AVO order: namely, in all-new contexts, and especially at the beginning of a narrative. In other words, it looks like a sentence-initial A occupies a left-peripheral position, from where it serves to introduce a new discourse topic (and possibly to re-establish an old one).^{30}

A topic analysis also provides a solution for the problem that the presence of an overt A-argument raises for the A-nominal Restriction in (33), which bans all

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28 When passive clauses occur under negation, the subordinate passive marker \textit{-it} is employed: see Watanabe (2003: 295).
29 The ergative marking characteristic of AVO word order is replaced here by the homophonous third person subjunctive enclitic induced by negation (Kroeber, 2002a); however, it is still underlyingly present, as can be seen if an auxiliary is supplied to host the enclitic, in which case the ergative suffix resurfaces on the main verb.
30 This line of analysis also predicts that a sentence-initial A will occupy its own Intonation Phrase (see Koch 2008) for evidence that this is indeed the case for SV(O) structures in Thompson River Salish). We have not yet had time to investigate this prediction.
overt A DPs in ergative-marked clauses, and is characteristic of Stage III ʔayʔajuθəm speakers, including the present consultant. If a pre-predicative A occupies a left-peripheral topic position, it can bind a pro in argument position just like an extra-sentential discourse topic: the dependency between the topic and pro is then subject to the mapping in (20), and conforms to the A-nominal Restriction in (33). In fact, as noted in 6.2, the existence of overt discourse topics in Stage III ʔayʔajuθəm might be used to argue that a null topic anaphoric to the principal protagonist of the discourse is present at the left periphery of every ergative-marked clause, from where it binds a pro in argument position.

Finally, while (as far as we are aware) it has never been previously discussed, AVO order is not quite unattested in the previous literature on ʔayʔajuθəm. We have found one other instance, in J. Davis (1978):

(4) θə=čanu nəgiʔaʔ-at-as šə=tə=lamatù
2SG.POSS=dog 2SG.IND chase-CTR-3ERG DET=1SG.POSS= sheep
‘YOUR dog chased my sheep.’ (J. Davis 1978: 234)

This example is significant for a couple of reasons. First, it appears to be an example of contrastive topicalization, judging by the translation and the emphatic independent pronoun adjoined to the fronted A argument; this fits with our tentative characterization of the AVO construction as involving a topic position.

Second, J. Davis did his early fieldwork in Homalco, which is where our consultant was raised. This raises the possibility that AVO order is not an innovation at all, but an instance of dialect variation, with Homalco speakers allowing and Sliammon speakers disallowing it. Unfortunately, we have as yet been unable to test this conjecture with older (Stage II) Homalco speakers: this is a priority for future work.

Appendix B: Methodology

The phenomena investigated in this paper involve both grammatical dependencies and discourse-conditioned alternations, with changes spanning three generations of speakers. As such, we felt it was important to use a variety of methodologies to investigate the patterns and a variety of sources for the data. In this appendix, we lay out some of the methodologies we used to gather linguistic evidence for the arguments made in this paper.

In order to initially characterize the distribution of ergative/passive and overt DPs, we used short storyboards set up to manipulate reference tracking across utterances. In particular, we presented a short sequence of pictures, varying which character was introduced as the topic and which character was the agent in subsequent transitive clauses.

Figures 1 and 2 illustrate a typical contrast. In Figure 1, the dog is introduced as the topic and remains the protagonist in the following two panels of the cartoon (created using the www.pixton.com website). In sample narrative (1), he is also the agent of the transitive predicate ʔaʔaʔaʔatas ‘chasing’. In Figure 2, the cat is introduced as the topic and remains the protagonist. However, in the sample narrative for this sequence (2), the cat is the agent of the first transitive verb
papkwatas ‘he watches/looks at him’ but the patient of the second verb ‘chase’, which is given as a passive (ʔaq̓atəm ‘he was chased’).

**Figure 1** There’s a dog. He sees a cat. He chases the cat.

(1) a. ʔaq̓s-əm ta= … na=čənu
    play-MID DET=… FILL=dog
    ‘The...um...dog is playing.’

b. ʔaq̓ʔaq̓-at-as ta=mimaw
    PL·chase-CTR-3ERG DET=cat
    ‘He’s chasing the cat.’

c. ʔəy̓ƛ̓ taʔ ta=mimaw
    run [IPFV] DEM DET=cat
    ‘He’s running toward the cat.’

d. ʔayʔsay
    CHAR·scared
    ‘It’s scared.’

‘The dog is playing. He’s chasing the cat. He run toward the cat. It’s scared.’

**Figure 2** There’s a cat. He sees a dog. The dog chases him.
These sequences set the stage for follow up elicitation in the form of questions and answers, which allowed us to examine transitive predicates in extraction contexts (3). For these, we would both elicit questions (‘How would I ask what the dog chased?’) and ask questions in ʔayʔajuθəm to elicit answers in ʔayʔajuθəm from our consultants.

We also examined the realization of transitive predicates and overt DPs in available narratives for both Stage I and Stage II ʔayʔajuθəm. For this textual analysis, we coded all transitive verbs with two third-person arguments for whether the transitive marker was followed by ergative, passive, possessive or no morphology and whether there were any pre-predicative (extracted) or post-predicative DP arguments.
For Stage I, we used three texts from the John H. Davis collection of recordings in the California Language Archive at http://cla.berkeley.edu/collection/10048): ‘T’echewaxanam’ told by Ambrose Wilson, and ‘Transformer and the Birds’ and ‘Thanch and P’ah’ told by Tommy Paul.

For Stage II, we drew on the two texts in Section 4 of Watanabe (2003): ‘The Basket Ogre’, told by Mary George, and ‘Mink and Grizzly’, told by Elsie Paul, as well as two additional stories from the First Voices website (http://www.firstvoices.com/en/Sliammon/stories): ‘Mink and Grey Bird’, told by Sue Pielle, and ‘Mink Marries Barnacle’ told by Elsie Paul.

Concurrently with these other methods of investigation, we used direct elicitation in order to answer questions about specific constructions, filling in gaps in the paradigm and gathering negative data. This allowed us to be sure that an unattested construction was not an accidental gap in the data, for instance, but actually disallowed in the grammar of our consultants. The direct elicitation built directly on our observations of the data in more naturalistic, ongoing speech contexts, but established the parameters of the alternations more firmly. Taken together with the textual evidence and storyboard elicitation, this allowed us to draw more concrete conclusions about the status of various constructions.