

On the surface nature of ergative agreement in Upriver Halkomelem¹

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In this paper I propose a formal analysis for the loss of ergative agreement in subject centered relative clauses in Upriver Halkomelem. I suggest that this phenomenon is the result of a requirement that subject agreement is determined at S-structure (rather than D-structure). That is, a subject that has undergone A'-movement is in a structural position (=SpecCP) where it can no longer trigger v-agreement (i.e. ergative agreement) but only C-agreement, which happens to be null for 3rd person. Thus, the apparent loss of ergative agreement in Halkomelem is reminiscent of so called wh-agreement, a well-established phenomenon in a number of languages, unrelated to Halkomelem.

1 The problem

It is well-known in the literature on Salishan languages that subject centered relative clauses show certain patterns that depart from the pattern one would expect given the regular paradigm associated with main clauses (see Kroeber 1999 for extensive discussion). Roughly, there are two main patterns found in Salish one found in Northern Interior Salish languages (henceforth NIS) and the other found on the Coast. In this paper I will mainly be concerned with the Coast Salish pattern and I will only briefly mention the possible implications of the proposed analysis for the Interior pattern (see Davis, this volume for a treatment of the Interior pattern). And within the Coast Salish branch, I will almost exclusively discuss data from Upriver Halkomelem (henceforth HLU). I will start by introducing the problem on the basis of a restricted set of data involving transitive sentences with 3rd person arguments.

In HLU, 3rd person transitive subjects (and only those) trigger so called ergative agreement as shown in (1).²

¹ I would like to thank Elizabeth Herrling, Elizabeth Phillips and the late Rosaleen George for sharing their knowledge of Halq'eméylem. I further thank Strang Burton and Henry Davis for helpful comments. Original data belongs to the Stó:lō nation language program (Stó:lō Shxwéł). Research on this paper was supported by the Social Sciences and Humanities Research Council (SSHRC 410-2002-1078) awarded to the author.

² If not otherwise indicated, all data are from HLU, collected in fieldwork by the author. All these data are presented in the official Stó:lō orthography, the key to which is as follows a = æ or ε; ch = tʃ, ch' = tʃ', e (between palatals) = i, e (between labials) = u, e (elsewhere) = ə, lh = ɬ, o = a, ō = o, xw = x^w, x̣ = x, y = j, sh = ʃ, th = θ, th' = tθ', tl' = tɬ',

- (1) q'ó:y-t-es te Strang te qwá:l
 kill-TRANS-3ERG DET Strang DET mosquito
 'Strang killed the mosquito.'

The ergative agreement (*-es*) is lost in a subject centered relative clause (see Galloway 1993):

- (2) il'ó te íle swíyeqe [q'óy-t-(*es) te qwá:l]
 3INDEP DET here man kill-TRANS-3ERG DET mosquito
 'This is the man who killed the mosquito.'

For completeness, note that exactly the same generalization is found in the other Halkomelem dialects (Cowichan, henceforth HLC see Gerdts 1988a and Musqueam, henceforth HLM, see Suttles 1984):

- (3) a. nít tə sténi? [ni q'áq^w-ət] *HLC*
 it's DET woman AUX club-TRANS
 'It's the woman who clubbed it.' Gerdts 1988a: 83
 b. k^wθə [ni c'éw-ət] *HLM*
 DET AUX help-TRANS
 'the one who helped him' Suttles 1984: 4: 8)

Note that this phenomenon is well-documented for many of the Coast-Salish languages (see again Kroeber 1999) and is often accompanied by a functional explanation to the effect that the lack of ergative agreement in subject-centered relative clauses serves as a disambiguation device (see section 3.2). However, to date a formal analysis of the Coast Salish pattern remains to be done.³

Within a formal framework like the principles and parameters framework (Chomsky 1981 and subsequent work) adopted here, the contrast between (1) and (2) raises the question of why ergative agreement is lost in this environment. Note that we cannot simply say that the loss of subject agreement in subject relative clauses is determined by Universal Grammar (UG) since many languages, including English, do not share this particular property:

ts = c, ts' = c', x = x or x', x^w = x^w, ' = ʔ, ' = high pitch stress, ` = mid pitch stress (see Galloway 1980 for discussion on this orthography and Galloway 1993 on the properties of stress in Upriver Halkomelem). Data from the other Halkomelem dialects or other Salish languages are given in whatever form they appear in their sources.

³ Davis 1994 gives a formal analysis of the pattern found in Lillooet (=NIS), which as we will see in section 6 cannot be carried over to the Coast pattern. The closest to a formal analysis of the coastal pattern is probably Gerdts 1988b, who argues that in these contexts the argument interpreted as the transitive subject is no longer "ergative" and thus ergative agreement is lost. However, Gerdts does not give a reason as to why this argument is no longer ergative.

- (4) a. John often kisses Mary.
 b. this is the man [who often kisses Mary

From this simple comparison between English and Halkomelem we can establish that the loss of subject agreement is not simply determined by UG. In other words, there is significant cross-linguistic variation that needs to be accounted for, i.e. what determines whether or not subject agreement is lost in subject relative clauses.

2 The proposal: subject agreement in HLU is surface agreement

I propose that the loss of ergative agreement in relative clauses can be accounted for with the following assumption:⁴

- (5) Ergative agreement in HLU is determined at S-structure.⁵

The assumption in (5) interacts with a number of independently established assumptions concerning the morpho-syntax of agreement in HLU to derive the loss of ergative agreement in subject relative clauses (and other properties to be discussed).

I will assume, following Davis 2000, that there are three structural positions for subject agreement across Salish, including HLU. In particular, I assume that ergative agreement is located in *v*, subjunctive agreement⁶ is located in a syntactic head within the C-domain (call it MoodP).⁷ Finally, I assume that subject clitics are located in a higher syntactic head also within the C-domain (call it CP; See Wiltschko 2002a, b).⁸ This is summarized in the tree-structure in (6). The relevant paradigms associated with each of these positions are given in table 1.

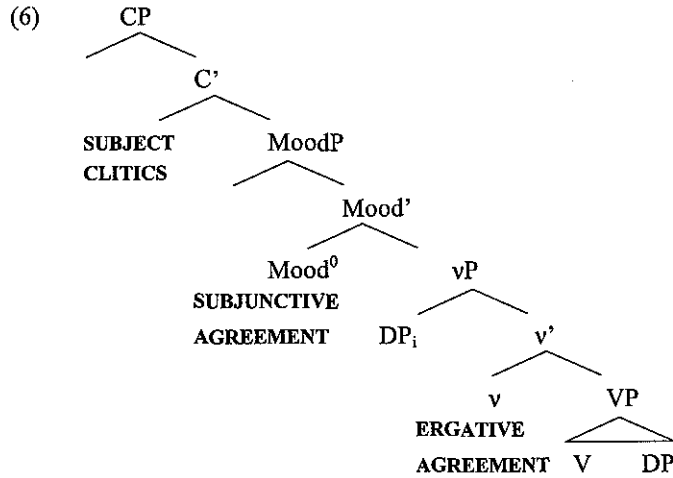
⁴ At this point I will leave the assumption in (5) as a stipulation, hoping that future research will reveal a deeper reason for it.

⁵ For the purposes of this paper, I am using a model that includes S-structure (à la Government and Binding Theory). The analysis could equally be developed in a system without an S-structure representation as in the Minimalist Program (Chomsky 1995 and subsequent work).

⁶ I follow Galloway's terminology here. The cognate in other Salish languages is usually called "conjunctive" agreement.

⁷ The term "C-domain" is intended to cover functional projections that used to be subsumed under C(complementizer)P, i.e. what Rizzi 1997 refers to as the "Left Periphery". This C-domain, which mainly encodes discourse properties, as well as clause typing is distinct from the so called I(nfl)-domain, which is the domain for case, tense, agreement and the like.

⁸ Note that this crucially departs from Davis 2000 who assumes two positions within the I-domain. For independent reasons, I do not believe that there is an I-domain in HLU (see Wiltschko 2003) but as far as I can determine, the present problem could also be implemented within Davis' 2000 analysis.



	C-agreement (=subject clitics)	Mood-agreement (=subjunctive)	v-agreement (=ergative)
1sg	tseI	-I	--
2sg	chexw	-exw	--
3sg	--	-s	-es
1pl	tset	-t	--
2pl	chap	-ep	--
3pl	--	-s	-es

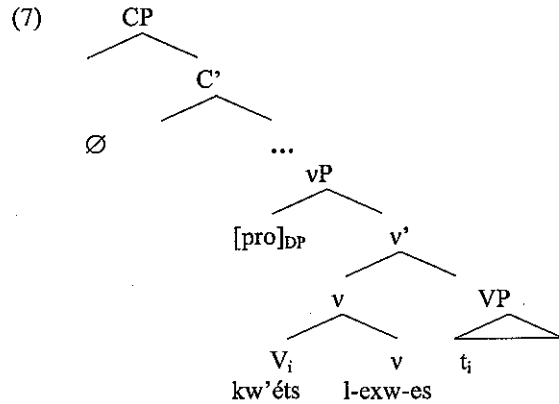
TABLE 2: HALKOMELEM AGREEMENT (GALLOWAY 1993)

With these assumptions in place, we will see in section 3, how the loss of subject agreement in relative clauses can be derived. In section 4 we will see that the assumption in (5) derives the loss of ergative agreement in another environment independent of subject extraction, and thus provides us with indirect support for this assumption. In section 5 we will test the analysis against a less restricted set of data, i.e. we will look at 1st and 2nd person arguments on the one hand and transitive object extraction on the other hand. Finally, in section 6 we will discuss the implications of the proposal in (5) for the NIS pattern, which is systematically different from the Coast Salish pattern.

3 Deriving the loss of ergative agreement in subject relative clauses

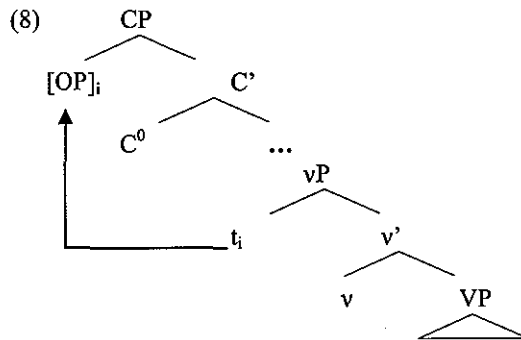
To see how the analysis works, consider the S-structure representation of a regular transitive clause:⁹

⁹ For the present purpose, I will abstract away from the position of overt DP's, which is a complicated matter in HLU. In (7), irrelevant projections are omitted for expository reasons.



I assume that transitive subjects are introduced in SpecvP (by means of the transitive suffix, which I take to be a secondary predicate; see Wiltschko 2001). Without subsequent movement, this (empty) argument is local enough (i.e. in the relation of Specifier-Head agreement) at S-structure to trigger *v* agreement. Thus in a transitive declarative clause with 3rd person subjects, ergative agreement shows up.

Now we turn to relative clauses, which I assume involve A'-movement of the relativized argument to SpecCP, as shown in (8):



Here, the argument introduced in SpecvP is no longer in a local relation with *v* at S-structure. Thus, it cannot trigger *v*-agreement (= ergative agreement). Rather, what happens is that the A'-moved argument triggers C-agreement, since it appears in a local relation with C, the host of another type of subject agreement (namely, subject clitics). It so happens, that C agreement is not associated with a full paradigm but rather contains a gap for 3rd person (singular and plural) (see table 1).¹⁰

¹⁰ Note that this is the case across the entire Salish language family and is reconstructable to Proto-Salish (Davis 2000, Kroeber 1999 among others).

Thus, subject extraction does not in fact involve loss of subject agreement but rather involves a change in agreement. Because of the S-structure requirement on subject agreement, C agreement rather than v agreement is used in case the subject is moved to SpecCP. However, the C agreement paradigm contains a gap for 3rd person and consequently subject agreement seems to be lost in case of subject extraction. As such this phenomenon is reminiscent of so called wh-agreement (see for example Chung 1998 for Chamorro) or A'-agreement in the sense of Branigan & MacKenzie 2002.¹¹ Thus, the phenomenon found in HLU is an option made available by UG.

3.1 Other instances of A'-movement

Note that this analysis predicts that the apparent loss of ergative agreement is not restricted to subject relativization. That is, we predict the same phenomenon every time a subject undergoes A'-movement to SpecCP. This prediction is borne out as I will show in this subsection.

First, as noted by Kroeber 1999, ergative agreement is lost in case of clefts, which involve relative clauses in the sentential part of the construction. Thus, we have already seen instances of this type of construction in (2).

Second, in wh-questions questioning the subject ergative agreement is lost, as shown in (9):

- (9) tewat kw' q'óy-t>(*es) te qwá:l
 WHO DET kill-TRANS-(3ERG) DET mosquito
 'Who killed the mosquito?'

Note that again this involves a clefted construction which in turn involves a relative clause and thus does not really provide a new argument.

However, HLU has the possibility of forming questions with just wh-movement and without clefting. In (10) there is no complementizer and thus we can interpret this as a true instance of wh-movement:

- (10) tewat q'óy-t(*es) te qwá:l
 WHO kill-TRANS>(*3ERG) DET mosquito
 'Who killed the mosquito?'

Note that here, too, ergative agreement is lost, as expected and this time there is (arguably) no relative clause involved.

Finally, ergative agreement is also lost in cases of subject fronting. HLU is underlyingly a VSO language with the option of SVO order. Crucially, if the subject appears in preverbal position, ergative agreement is lost.¹²

¹¹ For reasons of space however, I cannot go into a detailed discussion of how the HLU evidence fits in the discussion of wh-agreement.

¹² It is also possible to have SVO order with ergative agreement retained:

- (i) te Strang q'óy-t-es te qwá:l
 DET Strang kill-TRANS-3ERG DET mosquito

- (11) te Strang q'óy-t te qwá:l
 DET Strang kill-TRANS DETmosquito
 'Strang killed the mosquito.'

Note that one cannot argue that the SVO order in (11) involves a Cleft construction, with an interpretation like *It was X who V'ed*. If it was indeed a cleft construction, then one would expect OVS order to be equally well-formed, contrary to fact:¹³

- (12) *te qwá:l q'óy-t-(es) te Strang
 DET mosquito kill-TRANS(3ERG) DET Strang
 'Strang killed the mosquito.'

Thus, we have established that the apparent loss of ergative agreement is not restricted to subject centered relative clauses but happens in all cases of a subject undergoing A'-movement as expected by the present analysis.

3.2 A functional explanation for the loss of ergative agreement?

A number of researchers have argued that the loss of ergative agreement in case of subject centered relative clauses is ultimately functional in nature in that it serves as a disambiguation device. The reason for this claim is straightforward. Compare the two relative clauses below, one subject centered (13)a and the other object centered (13)b:

- (13) a. tl'ó te fle swíyeqe [q'óy-t>(*es) te qwá:l]
 3INDEP DET here man kill-TRANS-3ERG DET mosquito
 'This is the man who killed the mosquito.'
 b. tl'ó te i qwá:l [q'óy-t-*(es) te Strang]
 3INDEP DET here mosquito kill-TRANS-3ERG DET Strang
 'This is the mosquito that Strang killed.'

It is obvious that if it was not for the loss of ergative agreement in subject centered relative clauses, the two types of relative clauses would be surface identical. Thus, the loss of ergative agreement is a welcome device for disambiguation. However, whenever we are confronted with a functional explanation like this, the question arises as to what was first: form or function. It might well be that the loss of ergative agreement serves the function of disambiguation, but the question still remains as to whether this is the reason for its existence in the first place. If the loss of ergative agreement is not purely

'Strang killed the mosquito.'

There are reasons to believe that the SVO order found in (i) is not derived by A'-movement of the subject. Rather I suspect that this is a type of hanging topic construction, but for reasons of space I will not go into a detailed analysis.

¹³ The sentence in (12) without ergative agreement is of course grammatical under the SVO interpretation (i.e. *The mosquito killed Strang.*)

functional, we predict that this form is used even if there is no potential for ambiguity at all. This is indeed the case, as I will now show.

First, the potential for ambiguity shown in (14) only arises in the context of a 3rd person subject combining with a 3rd person object. If the object is either 1st or 2nd person as below, then this ambiguity does not arise:

- (14) *tl'ó te í swíweles [kw'ets-l-óx]*
 3INDEP DET here boy see-TRANS-1SG.O
 'This is the boy who saw me.'

Since in (14) there is a 1st person object, it is clear that the extracted 3rd person argument must correspond to the subject of the clause. Nevertheless ergative agreement is lost as predicted by the formal but not by the functional analysis.¹⁴

A functionalist could argue that the disambiguation pattern has been completely grammaticalized for all cases of relative clauses. In other words, one could argue that the construction "subject relative clause" that ergative agreement is lost, but the source of this is a disambiguation device. Such an analysis might work for relative clauses, however, it won't work for subject fronting.

We have seen above that subject fronting does not involve a relative clause type construction but nevertheless ergative agreement is still lost. Note however, that here the loss of ergative agreement never serves a function since OVS sentences are strictly ungrammatical as we have seen in (12) repeated below for convenience:

- (12) **te qwá:l q'óy-t-(es) te Strang*
 DET mosquito kill-TRANS(-3ERG) DET Strang
 'Strang killed the mosquito.'

In sum, the functional motivation for the loss of ergative agreement cannot explain the loss of ergative agreement in SVO sentences whereas the formal analysis proposed here can. I take this to be supporting evidence for a formal analysis, as the one proposed in this paper.

4 Another argument for the surface nature of subject agreement

The assumption that agreement is determined at S-structure predicts that the verb and the argument have to be in a local relation at S-structure to trigger agreement. So far we have seen that if the subject moves out of this local domain into an A'-position, agreement in *v* can no longer occur. Note, that we also expect the reverse effect. That is, we predict that if we move the verb away

¹⁴ The pattern predicted by the functional analysis, is exactly what we find in NIS, as I will briefly discuss in section 6.

from this local domain into a position that is too far away for agreement, then v agreement on the verb should be lost.

Though not completely conclusive, I think that there are two pieces of evidence to this effect. To see this, we have to look at a context which induces subjunctive agreement. We observe that in negative environments an auxiliary carries subjunctive agreement:

- (15) a. *éwe tsel lí-ǀ tɬ'íls-th-òmə*
 NEG 1SG.S AUX-1SG.SS want-TRANS-2SG.O
 'I don't like you.'
 b. *éwe chexw lí-xw tɬ'íls-th-óx*
 NEG 2SG.S AUX-2SG.SS want-TRANS-1SG.O
 'You don't like me.' Galloway 1993: p.186

However, in the absence of an auxiliary, the verb can carry subjunctive agreement in which case the sentence is associated with a future interpretation (Wiltschko 2002a, Bar-el et al. 2003).

- (16) a. *éwe-chap t'ílem-ǁ wáyeles*
 NEG-2PL.S sing-2PL.SS tomorrow
 'You folks won't be singing tomorrow.'
 b. *éwe-tset t'ílem-ǂ wáyeles*
 NEG-1PL.S sing-1PL.SS tomorrow
 'We won't be working tomorrow' Wiltschko 2002a: ex.37

Now the situation is interesting in case of 3rd person subjects. Here, in the presence of an auxiliary we again find subjunctive agreement on the auxiliary and ergative agreement on the verb, as expected:

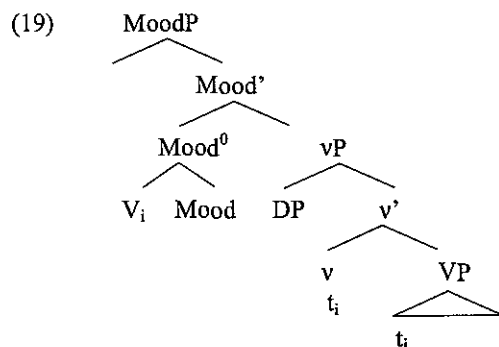
- (17) a. *éwe lí-g tɬ'íls-th-óx-es*
 NEG AUX-3S want-TRANS-1SG.O-3ERG
 'He/she/it/they doesn't/don't like me.' Galloway, 1993: 186
 b. *éwe lí-g kw'éts-l-exw-es kw' spath te Strang*
 NEG AUX-3S see-TRANS-3O-3ERG DET bear DET Strang
 'Strang didn't see a bear.'

And again it is possible to use the sentence without an auxiliary. Strikingly, in this case we only find one agreement suffix, as shown below (see also Davis 2000, Kroeber 1999 for similar facts in other Salish languages).

- (18) *éwe kw'éts-l-exw-es tɬ' Strang kw' spath*
 NEG see-TRANS-3O-3ERG DET.OBL Strang DET bear
 'Strang will not see a bear.'

I believe that the present analysis allows us to understand this loss, which is otherwise not obviously explicable (unless we are dealing with

phonological reduction). In (18), we find a configuration where the verb is not in a local relation with the subject to trigger agreement. This time it is not the subject but rather the verb that has undergone movement (in this case to Mood) as shown in the following tree-structure:



In other words, ergative agreement is lost because the verb is not in v at S-structure. I take the fact that our analysis allows us to understand this peculiar fact a promising sign for the validity of the claim that ergative agreement is determined at S-structure.

A second piece of evidence pointing in the same direction has to do with the above mentioned future interpretation associated with verb movement. This is a general phenomenon in HLU which is not restricted to subjunctive environments, but is also found in matrix clauses (Bar el, et al.)

- (20) a. tsel t'ilem
 1SG.S sing
 'I'm singing.'/'I sang.'
 b. t'ilem-tsel
 sing-1 SG.S
 'I am going to sing.' (Bar-el et al. 2003, (4) and (7))

Now, it is interesting to notice that a verb with ergative agreement, even in the absence of an auxiliary, does not trigger this future interpretation:

- (21) q'ó:y-t-es te Strang te qwá:l
 kill-TRANS-3S DET Strang DET mosquito
 'Strang killed the mosquito.'

In principle, there is no reason why the verb should not undergo head movement, and thus trigger a future interpretation, in the absence of an auxiliary. However, the present analysis allows us to understand this fact. The verb does not move because in order to be associated with ergative agreement it

needs to stay within *v*.¹⁵ Note crucially, that in HLU ergative agreement is only associated with 3rd person. Thus, we predict that the verb can freely move if the subject is either 1st or 2nd person, which is indeed the case as we have seen in (20). In other words, in case of 1st and 2nd person subjects the verb does not need to stay in *v* to trigger agreement since 1st and 2nd person matrix agreement is C-agreement.

Let us briefly sum up what we have found so far. The assumption that subject agreement is a kind of surface agreement derives some welcome results: it explains the loss of ergative agreement in case the subject undergoes A'-movement on the one hand and in case the verb undergoes head-movement on the other.

These findings raise the question as to whether object agreement behaves in a similar fashion. This is the topic of the next section.

5 What happens to object agreement?

First, I assume that object agreement is associated with *v*, like ergative agreement (see Wiltschko 2003).¹⁶ If object agreement was, like ergative agreement, an S-structure phenomenon, we would expect it to disappear in case of i) A'-movement of objects and ii) verb movement. We will start by discussing the second set of data first, since the evidence here is easier to come by.

5.1 Object agreement and verb movement

Recall that verb movement is most readily seen in subjunctive environments in the absence of an auxiliary, i.e. the type of verb movement that is necessarily associated with a future interpretation (see section 4). To figure out whether or not object agreement is surface dependent, we simply need to see what happens in case of verb movement where the verb includes object agreement. The relevant data straightforwardly show that object agreement is not lost even if the verb has undergone movement. That is, in those contexts where the verb - rather than an auxiliary - is associated with subjunctive agreement, and where a future interpretation is triggered, object agreement is still present:

- (22) *éwe chexw kw'ákw'eth-eth-óx-exw*
 NEG-2SG.S looking-TRANS-1SG.O-2SG.SS
 'You are not going to be looking at me'

¹⁵ In principle, it should be possible to move the verb and lose ergative agreement altogether. However, I have no evidence to this effect and I leave this as a matter for future research.

¹⁶ The assumption that *v* is associated with agreement for both subjects and objects, respectively is consistent with the standard claim that *v* introduces both the agent theta-role and accusative case (see Kratzer 1994, Chomsky 1995).

From this we conclude that the surface constraint on ergative agreement does not carry over to object agreement. In other words, we must conclude that object agreement is determined at D-structure.

This much established, we can now turn to the second kind of evidence, i.e. the one from A'-movement, which turns out to be much more complicated than the one from verb movement.

5.2 Object agreement and object A'-movement

There is an ongoing debate in the relevant literature, as to whether or not object agreement is lost in case of object extraction (see Kroeber 1999 for an overview). This has partly to do with the fact that the data is hard to interpret and to make things worse sometimes contradictory (as we will see shortly). Let us see whether the hypothesis put forth in this paper can help us view the problem in a different light and so could potentially illuminate it.

First, let me point out why the data are so hard to interpret. From the following paradigm we can see that object agreement is only associated with 1st and 2nd person but 3rd person object agreement is zero:

- (23) a. may-th-óx-es
see-TRANS-1SG.O.-3ERG
'He helps me.'
- b. may-t-óxw-es
help-TRANS-1PL.O.-3ERG
'He helps us.'
- c. may-th-óme-tsel
help-TRANS-2SG.O-1SG.S
'I help you.'
- d. may-t-óle-tsel
help-TRANS-2PL.O-1SG.S
'We help you_{pl}.'
- e. máy-t-∅-es
help-TRANS-3ERG
'He helps him.' adapted from Galloway 1993: 178

As should be obvious, on the basis of this type of data we cannot establish whether in case of A'-movement object agreement is lost or not, i.e. whether it is associated with the representation in (24)a) or b):

- (24) a. stám te q'óy-t-∅-es tú-tl'ò
WH DET kill-TRANS-3OBJ-3ERG DET-3INDEP
- b. stám te q'óy-t-es tú-tl'ò
WH DET kill-TRANS-3ERG DET-3INDEP
'What did he kill?'

A first indication that suggests that object agreement is retained in case of object extraction has to do with a claim I made in Wiltschko (to appear). There I argue that HLU does in fact have 3rd person object agreement, i.e. an allomorph of the Ø morpheme. This object agreement only shows up with the limited control transitive marker (*l-*) and the causative suffix (*st-*):¹⁷

- (25) a. kw'ets-l-éxw-chap
 see-TR-3O-2PL.S
 'You_{pl} see him.'
 b. imex-st-éxw-tsel
 walk-CAUS-3O-1SG.S
 'I make him walk.' adapted from Galloway 1993: 178

If this analysis is indeed correct, then we can easily test whether or not object agreement is lost in case of object A'-movement. If object agreement were lost in case of object A'-movement, then we would expect *-exw* to disappear. As we see below, this is not the case: *-exw* is retained in this environment:

- (26) stám kw'e kw'ets-l-exw-es
 WHAT DET see-TRANS-3O-3ERG
 'What did he see?'

This is a first indication that the claim introduced in section 5.1, namely that object agreement is a D-structure phenomenon and thus retained in case of A'-movement is indeed on the right track.

Let us now turn to data with 1st and 2nd person objects, which under any analysis, are associated with object agreement. And here is where the controversy begins. A'-movement of 1st and 2nd person arguments can only involve relative clauses including clefts with independent pronouns as heads. (There simply is no 1st or 2nd person equivalent for wh-words.) As shown below, the data found in the literature give contradictory results. On the one hand in HLU and HLM a relative clause which depends on a 1st or 2nd pronoun does not contain 1st or 2nd person object agreement, respectively:

- (27) tló ta'á'altha [kw'ets-l-exw-es te qwá:l]
 3INDEP DET-1SG.INDEP see-TRANS-3O-3ERG DET mosquito
 'I'm the one the mosquito saw.'
- (28) a. nówə [ni k'wʒc-nəx^w-èn] HLM
 2SG.INDEP AUX see-TRANS-1SG.TRANS.SUBJ
 'You are the one that I saw.'

¹⁷ The relevant ending is sometimes analyzed as being part of the transitive markers rather than as a separate object morpheme (see Wiltschko, to appear for detailed discussion).

- b. ʔé nθə [ni-ʔ kʷʒc-nəxʷ-_-əs]
 1SG.INDEP AUX-PAST see-TRANS-_-3TRANS.SUBJ
 'I am the one he saw.' (Suttles 1984, cited from Kroeber 1999: 278)

However, in data from HLC we observe that 1st and 2nd person agreement is retained:

- (29) a. nəwə [ni ləm-θ-ámə-ʔé nʔ] HLC
 2SG.INDEP AUX look-TRANS-1SG.TRANS.SUBJ
 'It's you that I looked at.'
 b. ʔé nʔθə [ni qʷàqʷ-ə-θ-ámʔʒ-əs]
 1SG.INDEP AUX club-LV-TRANS-1SG.OBJ-3TRANS.SUBJ
 'It's me who he clubbed.' Gerdt 1988a: 83

At first sight, our analysis seems to be compatible only with the data from HLC, since we expect object agreement to be retained (given the assumption established in section 5.1 that object agreement is determined at D-structure).

Now, what about the HLU and HLM data? Fortunately, there is an independently motivated way to reconcile our analysis with the problematic data. That is, assume that the (empty) argument which undergoes A'-movement, and which is coindexed with the independent pronoun that acts as the head of the relative clause is actually not 1st or 2nd person respectively, but rather is formally 3rd person (see Matthewson 1993). That is, assume that independent pronouns can be coindexed with an A'-moved argument which is 3rd person.

A first indication that supports this view has to do with the fact that in sentences where 1st and 2nd object agreement is apparently lost we find *-əxw*, which I assume is a 3rd person object agreement morpheme (as mentioned above).

Second, the assumption that 1st and 2nd person independent pronouns are associated with a 3rd person operator in the dependent relative clause, is compatible with the form of independent pronouns. As shown in the table below, and argued extensively in Wiltschko 2002c, independent pronouns are preceded by a determiner, which is formally 3rd person:

	sg	pl
1	<u>ta</u> -ʔáltha/taʔáʔáltha	<u>ta</u> -lhlímelh
2	<u>ta</u> -léwe	<u>ta</u> -lhwélep/tahléwep
3	<u>tú</u> -tlʔò/thú-tlʔò	<u>tú</u> -tlʔó:lem/thutlʔó:lem/yutlʔó:lem

TABLE 2: HALKOMELEM INDEPENDENT PRONOUNS (GALLOWAY 1980: 27)

Thus, it is not completely unexpected that independent pronouns formally behave like 3rd person arguments. That is, rather than interpreting the absence of agreement as real absence of agreement (i.e. a gap as in Roberts 1999), we could analyze it as 3rd person agreement, which again, happens to be zero (see Matthewson 1993).

Of course, ideally we want independent evidence for this claim, which I think is indeed available. First, we predict that 1st and 2nd person Independent pronouns are also associated with 3rd person agreement if they are associated with a subject that has undergone A'-movement. Again, the evidence here is hard to come by. The only environment we can test our assumption involves overt 3rd person subject agreement which is not lost in case of subject A'-movement. Thus neither C agreement (which is \emptyset for 3rd person) nor v agreement (which is predictably lost in case of subject A'-movement) will suffice. Fortunately, the agreement pattern we need to test our assumption is available, namely in the form of subjunctive agreement.

Consider what happens in the crucial example, namely a 1st or 2nd person independent pronoun acting as the head of a relative clause, which contains subjunctive agreement. If 1st and 2nd person agreement was simply lost, then we would expect no agreement; but if 1st and 2nd person independent pronouns were associated with 3rd person agreement we would expect 3rd person subjunctive agreement to show up. As we see below, the prediction of the latter hypothesis is borne out: we find 3rd person subjunctive agreement:

- (30) a. *tl'ó ta-áltha éwe lí-s q'óy-t te qwá:l*
 3INDEP DET-1SG.INDEP NEG AUX-3S kill-TRANS DET mosquito
 'It was me who didn't kill the mosquito.'
 b. *tl'ó taléwe éwe lí-s q'óy-t te qwá:l*
 3INDEP DET-2SG.INDEP NEG AUX-3S kill-TRANS DET mosquito
 'It was you who didn't kill the mosquito.'

In (30) we see that the subject of the embedded clause is indeed 3rd person, as predicted by the present claim. As an alternative, one could argue that the 3rd person argument is in fact the reflex of an expletive subject in this environment as in the following abstract representation.¹⁸

- (31) *Indep pronoun_{1st/2nd} [CP [OP_{1/2}] [MoodP [pro_{expl}] [[-S_{3rd}] [vP [t].....*

If this analysis were on the right track then we expect that this strategy, i.e. an expletive subject triggering 3rd person agreement associated with a 1st or 2nd person subject, is always available. That is we would expect mismatches in agreement to occur more generally. This is however never the case: subjunctive agreement always has to match the person of a 1st and 2nd person subject.

- (32) a. *éwe tsel lí-l tí'íls-th-òmè*
 NEG 1SG.S AUX-1SG.SS want-TRANS-2SG.O
 'I don't like you.'
 b. *éwe chexw lí-xw tí'íls-th-óx*
 NEG 2SG.S AUX-2SG.SS want-TRANS-1SG.O
 'You don't like me.'

Galloway 1993: p.186

¹⁸ This possibility has been pointed out to me by Henry Davis (p.c.).

- (33) a. *éwe tsel lí-s tɪ'íls-th-òmə
 NEG 1SG.S AUX-3SS want-TRANS-2SG.O
 'I don't like you.'
- b. *éwe chexw lí-s tɪ'íls-th-óx
 NEG 2SG.S AUX-3SS want-TRANS-1SG.O
 'You don't like me.'

Since it is not clear how a mismatch like the one posited in (31) could be restricted such that it only ever occurs in case of A'-movement I will dismiss this analysis.

Given the pattern in (30), we have independent evidence for the assumption that a 1st and 2nd person independent pronoun acting as the head of a relative clause is associated with a 3rd person operator in the relative clause and this 3rd person operator triggers 3rd person agreement, which in many cases is null. Consequently, the data in (27) and (28) are compatible with our claim that object agreement is retained in case of object A'-movement.

Two remarks are in order at this point. First, we need to revisit the apparent difference between HLU/HLM and HLC respectively.¹⁹ From the present perspective, we have to conclude that the data from HLC indicate that the strategy using a 3rd person empty operator is just an option, and that the operator can formally be of 1st or 2nd person as well. Preliminary evidence from HLU suggests that this might indeed be an option in HLU as well. That is, in relative clauses with subjunctive agreement, the version with 1st or 2nd person subjunctive agreement is marginally available:

- (34) a. tɪ'ó ta-áltha éwe lí-ɪ q'óy-t te qwá:l
 3INDEP DET-1SG.INDEP NEG AUX-1SG.SS kill-TRANSDet mosquito
 'It was me who didn't kill the mosquito.'
- b. tɪ'ó ta-léwe éwe lí-xw q'óy-t te qwá:l
 3INDEP DET-2SG.INDEP NEG AUX-2SG.SS kill-TRANSDet mosquito
 'It was you who didn't kill the mosquito.'

Thus, it could be that the apparent differences between HLU/HLM and HLC are simply a reflex of which strategy is chosen: the one with 3rd person agreement, which results in the apparent loss of agreement or the one with 1st or 2nd person agreement, which results in apparent retention of agreement. I will leave this as a matter for future research.

The second point to be addressed has to do with Roberts' 1999 argument against the assumption that there is 3rd person agreement associated with these gaps. He argues on the basis of the distribution of plural agreement that the lack of agreement is better analyzed as a gap rather than as empty agreement. That is, conjoined proper noun complements generally require as plural affix on the predicate (van Eijk 1997: 240):

¹⁹ Note that at this point there is not enough data available to find out whether this is a dialectal difference or whether the different options are available in all dialects.

- (35) wa7 k'wzús-em {wit/*-Ø} wi s-John múta7 s-Bill
 PROG work-INTR-{3PL.INTR/3SG.INTR} PL.DET NOM-J CONJ NOM-B
 'John and Bill are working.' Roberts 1999: 287, ex. (31)

However, in the corresponding cleft, plural marking is ungrammatical (Roberts 1999):

- (36) nilh s-John wi s-Bill wa7 alkst (*-wit)
 FOC NOM-J CONJ NOM-B PROG work (*3PL.INTR)
 'It is John and Bill who are working.' Roberts 1999: 288, ex. (33)

The present analysis allows us to understand this pattern and still maintain the assumption that there is empty 3rd person agreement. We simply need to assume that plural agreement, like ergative agreement, can only be established at S-structure. At present I do not know whether this claim can be supported empirically and so I leave it for future research. (Note that HLU does not have this type of plural agreement ending.)

We have now established some evidence that the object agreement is different in nature from ergative agreement in that the former is established at D-structure whereas the latter is established at S-structure. From this assumption we derive the fact that ergative agreement but not object agreement is lost in case of i) A'-movement of the corresponding argument and ii) head movement of the verb. In the next section I will briefly discuss the differences between the Coast Salish pattern discussed here and the NIS pattern.

6 Some remarks on cross-Salish differences

The NIS pattern differs significantly from the Coast Salish pattern in the following ways.

First, in all of the Northern Interior Salish languages (i.e. Lillooet, Shuswap and Thompson) as well as Bella Coola, subject A'-movement triggers an exceptional pattern only in case both the subject and the object are 3rd person (Kroeger 1999). In other words, if the object is 1st or 2nd person, subject A'-movement is not realized in any unexpected way. For ease of exposition I only give examples from Lillooet (henceforth LI), where the phenomenon is most extensively discussed in the literature (see Davis 1994, Roberts 1999, Kroeger 1999):

- (37) áts'x-en-lhkan [ta sqáycw-a [ta pz-án-tsih-*(as)-a]] LI
 see-TRANS-1SG.S DET man-DET DET meet-TRANS-2SG.O-3SG.CONJ-DET
 'I saw the man who met you.' Roberts 1999: 284 ex. (20)

Recall that the situation is different on the Coast, where subject A'-movement always triggers loss of ergative agreement independent of the person of the object. This was shown on basis of the example in (14) repeated below for convenience:

- (14) tl'ó te í swíweles [kw'ets-l-óx]
 3INDEP DET here boy see-TRANS-1SG.O
 'This is the boy who saw me.'

Next, the way in which A'-movement is marked differs across the different languages. In Lillooet subject A'-movement is optionally associated with a special morpheme *tali-*, which is diachronically related to a so called "topical object marker" (see for example Kinkade 1990):

- (38) nilh ti ucwalmícw-a ats'x-en-táli ti sám7-a LI
 FOC DET Indian-DET see-TRANS-TALI DET white-DET
 'It's the Indian who saw the white man.' Davis 1994: ex (1a)

Crucially, this morpheme *-táli* replaces ergative agreement, which essentially means that ergative agreement is lost in case of subject A'-movement. Note further that this replacement is only optional. That is, subject A'-movement is compatible with the regular pattern found in declarative clauses without movement:

- (39) áts'x-en-as ta sqáycw-a...
 see-TRANS-3ERG DET man-DET
 ...ta taw-en-ás-a s-Mary ta púkw-a
 DET sell-TRANS-3ERG-DET NOM-M DET book-DET
 'She saw the man that sold Mary the book.' Davis 1994: ex (16)

Davis' 1994 analyzes *-táli* is a "discourse passive marker" by which he means the following:

"whereas ordinary passive dethematizes a subject (in the sense of depriving it of its thematic role), discourse passive detopicalizes a subject." (Davis 1994: section 4)

He further argues that this assumption derives the fact that *-tali* is restricted to context of A'-movement, since the only empty category which can be linked to a non-topical element is a true (operator-bound) variable, i.e. movement is needed to create an appropriate variable. And finally, Davis argues that this analysis derives the fact that *tali-* is i) syntactically optional (like passive its occurrence is governed by discourse considerations) and ii) restricted to sentences with 3rd person subjects and 3rd person objects since

"it is only in this environment that there are two possible d-topic binders one of which can be de-topicalized to alter the prominence relations between them" (Davis 1994; section 5)

If these last two properties (optionality and restriction to 3/3 sentences) were indeed a necessary consequence of the discourse passive analysis, then by

definition it cannot be taken over to explain the Halkomelem pattern. This is so since it is exactly these two properties that distinguish the Halkomelem from the Lillooet pattern, which is summarized in table 3, which lists the differences:

	HL	Lillooet
form used	∅	-táli
special morphology	obligatory	optional
context	DP _{3rd subject} ...t _i ... DP _{x object}	DP _{3rd subject} ...t _i ... DP _{3rd object}

TABLE 3: DIFFERENCES BETWEEN HL AND LI SUBJECT EXTRACTION

If the Lillooet properties were indeed a necessary consequence of the discourse passive analysis, then the HL pattern cannot fall out. However, I don't actually agree with Davis' conclusion that it follows from his analysis that it can only target 3rd person sentences. I don't see how the analysis forces this conclusion, rather it seems to be an additional and purely functional statement (similar to the one discussed in section 3.2). As such, it cannot play a role in a formal analysis. If so, then maybe there is a way in which Davis' analysis can be extended to account for the HL pattern.

Similarly, the present analysis cannot be straightforwardly taken over to account for the Lillooet pattern. That is, if ergative agreement was purely determined at S-structure, we would expect the loss of ergative agreement in subject A'-movement to be obligatory in Lillooet as well, contrary to fact. This means that at this point we have (at least) two options:

- i) the Lillooet and HL patterns are entirely different from each other and thus resist a unified analysis
- ii) there is a unified analysis

Ultimately, I think that the present analysis can be reconciled with the Davis analysis, in that both analyses have something in common: they argue that a relation established in the theta domain (i.e. the vP domain) is altered in the discourse domain (i.e. the CP domain). But the precise formulation of an analysis that captures both patterns awaits future research.

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