

Salish Subject Inflection: Interactions between Infl and Voice

Marianne Huijsmans
University of British Columbia

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Outline

- 1 Introduction
- 2 Agreement in Salish
- 3 Present day Salish languages
- 4 Theoretical background
- 5 Analysis
- 6 Summary and conclusion

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Salish language family

- The Salish language family is comprised of 23 languages.
- The territory of the Salish peoples spans southeastern Vancouver Island in British Columbia to northwestern Montana with outliers in Oregon and central coastal British Columbia.
- The pressures of colonialism and in particular the residential school system have had a devastating effect on these languages.
- More than half are no longer spoken as first languages and no language has more than 100 L1 speakers (Davis, 2019).
- With great resilience and deep concern for their culture and languages, many communities are engaged in determined revitalization and documentation efforts.

A note on names and data

- Data in this presentation is drawn from previous documentation.
- In the presentation, I will largely be using language names found in this documentation.
- In many cases, however, these are not the names given by the nations to their own languages or are anglicizations of these names.
- Where I cite specific examples, I will therefore also introduce the names more properly given to these languages by those who speak/spoke them.

- In this presentation, I examine subject agreement in Northern Interior and Central Salish languages.
- There are two loci for subject agreement in these languages (and throughout the family): an inner position (=Voice) and an outer position (=Infl) (Davis, 1999, 2000, 2013).
- Whether agreement is realized in Infl, Voice, or both depends largely on transitivity and person, and to a lesser extent clause type.

- In this presentation, I will argue that the agreement patterns found in these languages arise through the interaction between agreement probes Infl and Voice, in particular the blocking effects of Voice.
- In the process, I will argue for variation in the features on Voice as a means of capturing cross-linguistic variation throughout these branches of the family.
- More conservative languages have a more specified Voice probe which blocks agreement between the external argument and Infl, while more progressive languages have less specified Voice probes that only partially intervene (or do not at all).

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Background: Agreement in Salish

- Salish languages have rich agreement systems while arguments are often realized as null pronouns.
- This led to the proposal that Salish languages have pronominal arguments (e.g. Jelinek and Demers, 1994; Jelinek, 1995, 1996, 2006).

- (1) Pronominal Argument Hypothesis (PAH):
In a pronominal argument language only pronouns may occupy argument positions. All overt DPs are optional adjuncts.

Background: Agreement in Salish

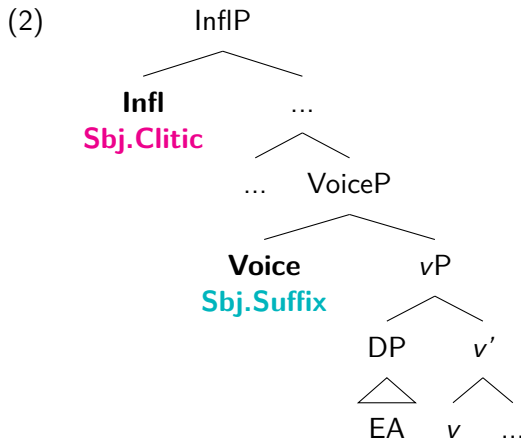
Under this hypothesis, the agreement morphemes we will be examining would be arguments rather than the Spell Out of agreement between functional heads and (often null) arguments in argument positions.

Background: Agreement in Salish

- I take this hypothesis to be amply refuted for the languages where the relevant data is available (see in particular Davis and Matthewson 2009 and references therein).
- Evidence against the PAH shows that adjunct-argument asymmetries exist for overt DPs and that overt DP arguments are arranged hierarchically.
- These asymmetries are not predicted to exist if overt arguments are all adjuncts: the PAH cannot be correct for Salish languages.
- **Important for this presentation: Where the data shows only subject agreement suffixes/clitics but no overt argument, there is a null pronoun occupying the argument position.**

Background: Subject agreement in proto-Salish

Davis (1999, 2000, 2013) argues that in proto-Salish there were two positions where subject agreement was realized: **Infl**, associated with **subject agreement clitics**, and **Voice**, associated with **subject agreement suffixes**.



Background: Subject agreement in proto-Salish

The position of agreement in proto-Salish was conditioned by transitivity (Davis, 1999, 2013).

- In intransitive clauses, subject agreement was realized by (second-position) subject clitics in Infl.

(3) Aux=**Sbj.Clitic** Pred

- In transitive clauses, subject agreement was realized by subject suffixes in Voice, and a 3rd person 'expletive' clitic marking clause type in Infl.

(4) Aux=**Expl.Clitic** Pred-**Sbj.Suffix**

- Note: I am using the term clitic in the morphophonological sense, not to refer to clitic doubling (e.g. Preminger, 2009).

From proto-Salish to the present

Davis relates the present-day agreement patterns to this proto-Salish system:

- Subject clitics have been gradually replacing subject suffixes in transitive clauses.
- Northern Interior languages are more conservative and southern Central Salish languages more innovative with respect to this change.
- First and second person subject suffixes are replaced by clitics before third person suffixes.
- Matrix clause suffixes are replaced before subordinate clause suffixes.

I will primarily be concerned with capturing the person asymmetries in this cline.

Salish language family

Coast Salish

Central Salish

Comox

Pentlatch

Sechelt

Squamish

Halkomelem

Nooksack

Straits

Northern Straits

Klallam

Lushootseed

Twana

Tillamook

Interior Salish

Northern Interior

Shuswap

Thompson

Lillooet

Southern

Columbian

Okanagan-Colville

Kalispel-Spokane

Couer d'Alene

Tsamosan

Inland

Upper Chehalis

Cowlitz

Maritime

Quinault

Lower Chehalis

Bella Coola

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Thompson/*n̄teʔkepmxcín* and Shuswap/*Secwepemctsín* have subject clitics realizing agreement in intransitive clauses.

- (5) cúʔ=kʷ=ň=ǰəʈ ʝe-wíʔx
little(aux)=2SG.IND.SBJ=Q=now good-become

'Are you feeling a little better now?' [Thompson]
(Davis 1999, 4, from Thompson & Thompson 1992:143)

Note: Subject agreement clitics attach to the first word of the clause – the main predicate or a preceding auxiliary. Suffixes always remain attached to the main predicate.

NIS: Thompson and Shuswap

Transitive clauses in Thompson and Shuswap have an expletive/third person subject clitic and subject suffixes:

- (6) a. **címəʔ=us** **ʔək-st-és** **e=nyémitn-s**
begin(aux)=**3SUBJ.SBJ** bring-TR-**3SBJ** DET=religion-3POSS
e=séme?
DET=white.man

‘When the white men first brought their religion’ [Thompson]
(Davis 1999, 12, from Thompson & Thompson 1992:143)

- b. **cut xe? k** **s=x^wuý=s** **milt-m-ne**
say deic DET NMLZ=fut(aux)=**3POSS.SBJ** visit-REL(TR)-**1SG.SBJ**

‘She thinks I’m going to visit him/her.’ [Thompson]
(Davis 1999, 12, from Thompson & Thompson 1992:394)

Note: When looking at transitive clauses we will often be examining subordinate clauses of which there are two types: nominalized and subjunctive. This is because both agreement in Infl and Voice is overt in subordinate clauses while third person agreement in Infl is null in main clauses (in both transitives and intransitives).

Agreement in intransitive clauses in CS languages and Lillooet/St'át'imcets is realized with subject clitics (as in NIS languages Thompson and Shuswap):

- (7) **wa=čəx^w** nsʔi k^w=ʔəs=wa ničim
PROG(aux)=**2SG.IND.SBJ** loud DET=2SG.POSS=PROG talk

'You are loud when you talk.' [Squamish/Skwxwú7mesh]
(Davis 1999, 4, from Kuipers 1967:185)

Subject agreement in transitive clauses frequently exhibits a person split. Third person agreement is realized by a suffix plus clitic, while first and second person agreement are realized only by clitics.

(8) a. 3rd person

q=?as p'ih?-nəx^w-as
IRR=?SUBJ get-TR-3SUBJ

'If he gets it.'

[Squamish]

(Kuipers 1967:192, as cited in Davis 1999, 19)

b. 1st person

q=?an p'ih?-nəx^w
IRR=1SG.SUBJ get-TR

'If I get it.'

[Squamish]

In specific environments, transitive clauses in these languages may also show doubling of subject agreement in first and second person:

(9) 1st possessive clitic with 1st subject suffix

... **ʔn=s=čáw-at-an**

... **1SG.POSS=NMLZ=help-TR-1SG.SBJ**

‘...that I helped him...’

[Squamish]

(Kuipers 1967:91, as cited in Davis 1999, 20)

CS: Lushootseed

The change is most advanced in Lushootseed/**dəx^wləšucid**, **x^wələšucid** with subject clitics completely replacing subject suffixes in transitive clauses.

(10) a. 2nd person

g^waʔx^w=čəx^w ɬu-háy-dx^w
eventually(aux)=2SG.SBJ FUT-know-TR

‘Eventually you will know.’ [Lushootseed]
(Bates, Hess, & Hilbert 1994:95, as cited in Davis 1999, 28)

b. 3rd person

ɬu-x^wiʔ=əs tiləb ləd^ʔix
FUT-NEG=3SUBJ.SBJ at.once PROG-break

‘...so that it does not break right away.’ [Lushootseed]
Hess & Hilbert n.d.:225, as cited in Davis 1999, 28)

From proto-Salish to the present

- Intransitive clauses uniformly have subject clitics in both NIS and CS languages.
- Subject agreement in transitive clauses varies:
 - NIS languages Thompson and Shuswap have **subject suffixes accompanied by an expletive (3rd person) clitic**.
 - CS languages + Lillooet frequently **replace 1st and 2nd person subject suffixes with clitics**, while retaining the **3rd person suffix** (with an accompanying 3rd person clitic).
 - Lushootseed, where the change is most advanced, has **replaced all subject suffixes with subject clitics**.

Table: Variation in transitive subject agreement

	Voice	Infl
NIS	1/2/3	3
CS + Lillooet	(1)/(2)/3	1/2/3
Lushootseed	–	1/2/3

From proto-Salish to the present

- Southern Interior languages have innovated in a different direction: possessive clitics have become affixal and the subjunctive subject clitic series has been lost altogether (Davis, 1999).
- The other languages in the family for which there is sufficient data available have innovated in even more diverse directions.
 - Bella Coola lost subject clitics altogether.
 - Upper Chehalis reorganized the clitic-affix distinction to be conditioned aspectually.
 - Tillamook lost indicative and possessive subject clitics while retaining subject suffixes and subjunctive clitics.
- I will focus here on **NIS and CS** languages where there is a natural progression from one pattern to the other and the languages involved are well-described.

Preview of analysis

- Voice is an Agree probe. The difference between transitive and intransitive clauses falls out from the presence vs absence Voice.
- In transitive clauses, Voice intervenes between Infl and the subject DP.
 - Scenario 1: Voice probes for the same features as Infl preventing Infl from valuing its features, resulting in a failed search → insert default agreement in Infl (**NIS**).
 - Scenario 2: Voice probes for a subset of features that Infl probes for leaving active features that agree with Infl → 1/2 person clitics in Infl (**various CS**).
 - Scenario 3: Voice does not act as a probe → subject clitics in Infl (**Lushootseed**).

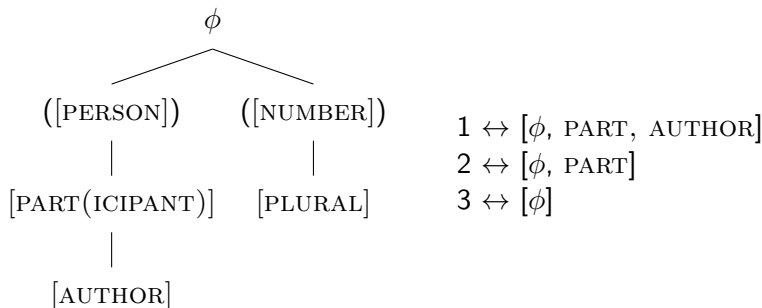
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Theoretical background

This account makes use of feature geometry (e.g. Harley and Ritter, 2004; McGinnis, 2005; Béjar and Rezac, 2009; Preminger, 2014) where third person is less specified than first and second person.

(11) A simplified feature geometry (Preminger, 2014, 45)



Theoretical background

- I adopt a theory where Agree is an operation that copies a feature from one head to another (Chomsky, 2000, 2001, 2004).
- A probe with an uninterpretable feature [uF] searches in its c-command domain for a matching feature [F].
- If it finds F, F is copied to the probe and this feature may be spelled out in the morphology.
- Following e.g. Béjar (2003); Béjar and Rezac (2009); Preminger (2011, 2014), failed Agree does not result in a derivation crash.

From Béjar and Rezac (2003, 2009) I adopt a modified Person-Licensing Condition:

- (12) A ϕ feature [F] is active until licensed by Agree of some segment that entails [F] (F or a feature lower in the hierarchy) in a feature structure of which [F] is a subset.

I also adopt a modified version of their Match requirement).

- (13) For a probe segment [uF], Spell Out will be determined by a subset [uF'] of [uF] that has matched.
(adapted from Béjar and Rezac, 2009)

Vocabulary Insertion will only care about the features that have been valued.

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Analysis: Vocabulary Items

In Infl, the spell out of 3rd person is the elsewhere case. In Voice, the spell out of 3rd person is the Vocabulary Item associated with the ϕ feature.

(14) Infl

- a. [PART, AUTHOR] \leftrightarrow 1SBJ Clitic
- b. [PART] \leftrightarrow 2SBJ Clitic
- c. [] \leftrightarrow 3SBJ Clitic

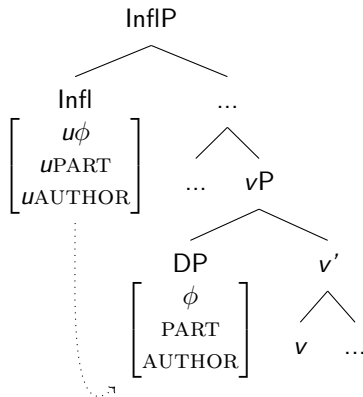
(15) Voice

- a. [ϕ , PART, AUTHOR] \leftrightarrow 1SBJ Suffix
- b. [ϕ , PART] \leftrightarrow 2SBJ Suffix
- c. [ϕ] \leftrightarrow 3SBJ Suffix

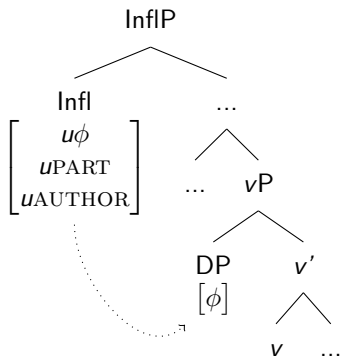
Analysis: Intransitive clauses

Infl bears $[u\phi, uPART, uAUTHOR]$.

(16) 1st person subject



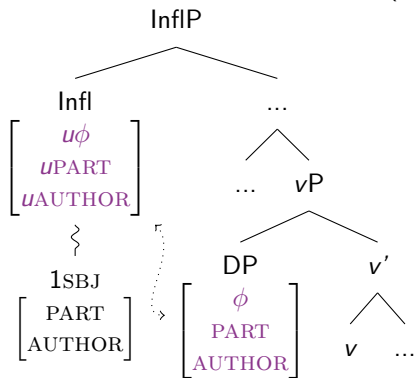
(17) 3rd person subject



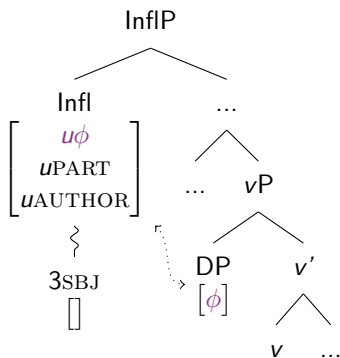
Analysis: Intransitive clauses

Spell Out is sensitive to valued features on the probe as per the modified Match requirement.

(18) 1st person subject



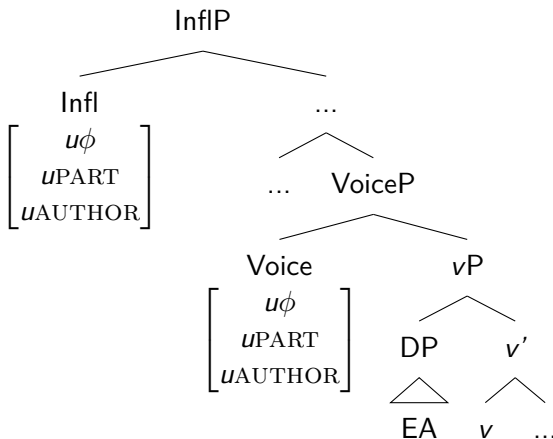
(19) 3rd person subject



Analysis: Thompson and Shuswap (NIS)

In transitive clauses with an expletive subject, Voice acts as a probe fully specified for ϕ -features.

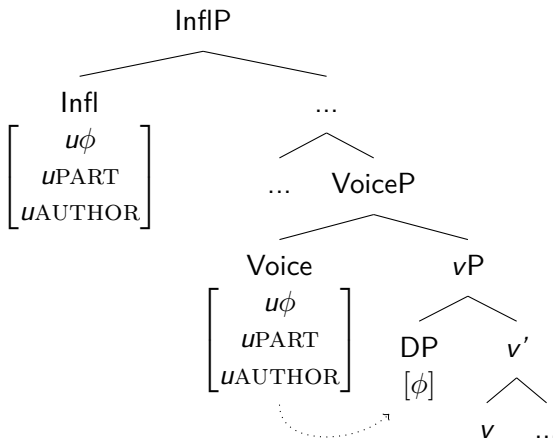
(20)



Analysis: Thompson and Shuswap (NIS)

Agreement between the external argument (EA) and the Voice probe will always license the person features of the DP.

(21)

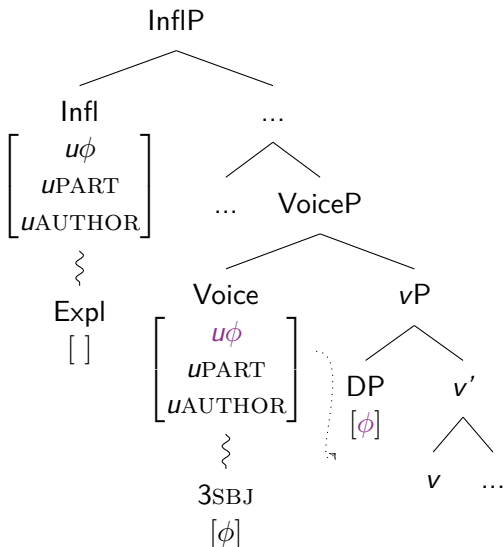


Analysis: Thompson and Shuswap (NIS)

After being licensed the ϕ features on the DP are inactive. There is no active goal for Infl to find. Failed agree does not cause a derivation crash. Since there are no valued features on Infl, the elsewhere/default agreement morpheme is inserted.

Thompson and Shuswap (NIS): Third person EA

(22)



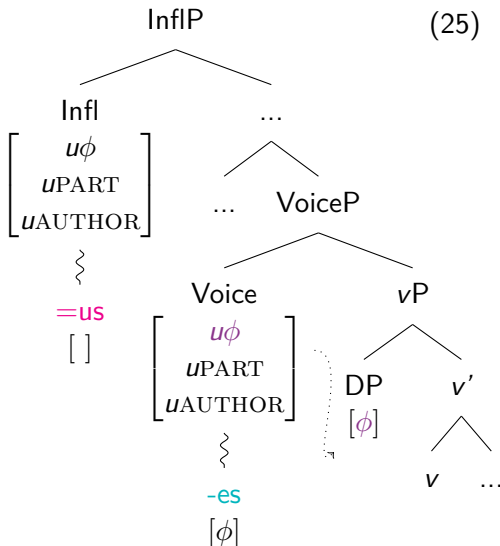
Thompson: Third person EA (Subjunctive clause)

- (23) címəʔ=us ʔek-st-és e=nyémitn-s
begin(aux)=3SUBJ.SBJ bring-TR-3SBJ DET=religion-3POSS
 e=séme?
DET=white.man

‘When the white men first brought their religion’ [Thompson]
(Davis 1999, 12, from Thompson & Thompson 1992:143)

Thompson: Third person EA (Subjunctive clause)

(24)

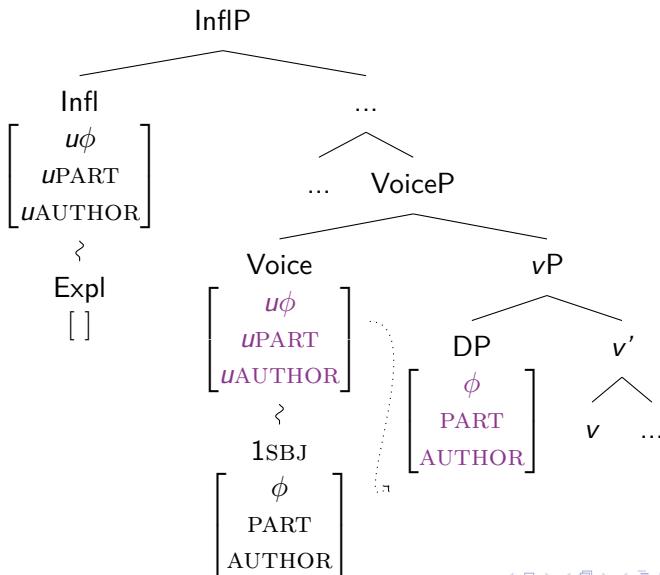


(25) a. Infl: $[] \leftrightarrow =us$

b. Voice: $[\phi] \leftrightarrow -es$

Thompson and Shuswap (NIS): First person EA

(26)

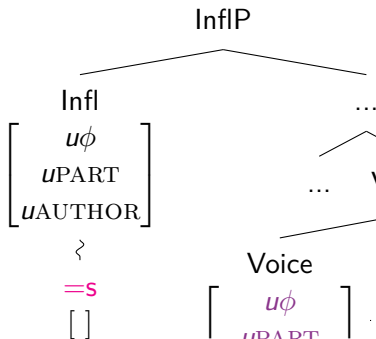


Thompson: First person EA (Nominalized clause)

- (27) cut xe? k s=x^wuý=s milt-m-ne
say deic DET NMLZ=fut(aux)=3POSS.SBJ visit-REL(TR)-1SG.SBJ
'She thinks I'm going to visit him/her.' [Thompson]
(Davis 1999, 12, from Thompson & Thompson 1992:394)

Thompson: First person EA (Nominalized clause)

(28)

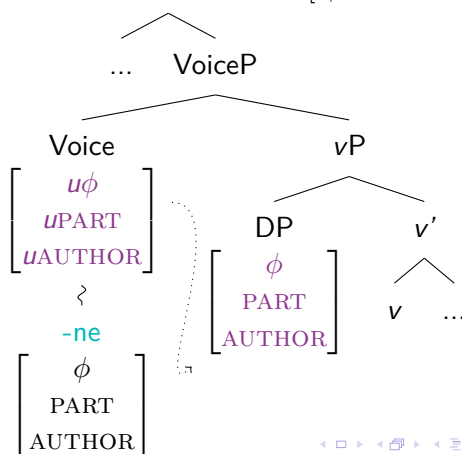


(29)

a. Infl: $[\] \leftrightarrow =s$

b. Voice:

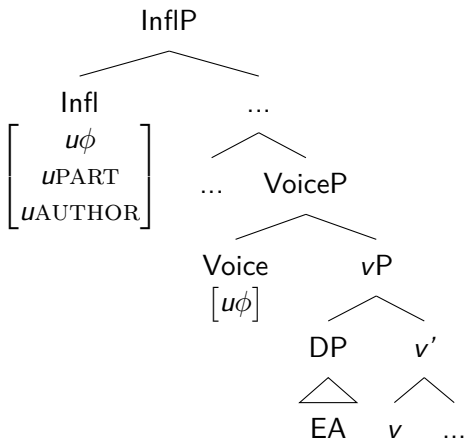
$[\ \phi, PART, AUTHOR] \leftrightarrow -ne$



Analysis: Central Salish

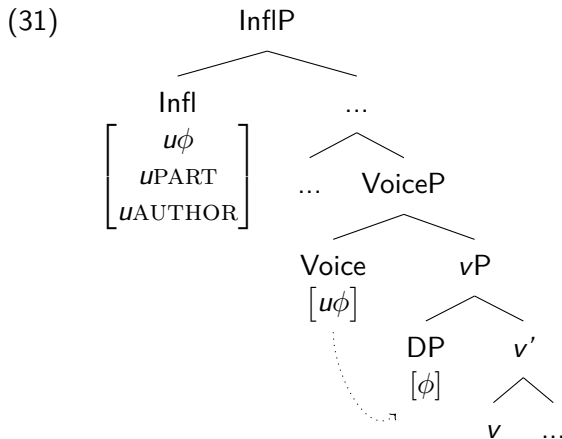
In Central Salish languages where 1st and 2nd person subject clitics have replaced subject suffixes in transitive clauses, Voice is a less specified Probe.

(30)



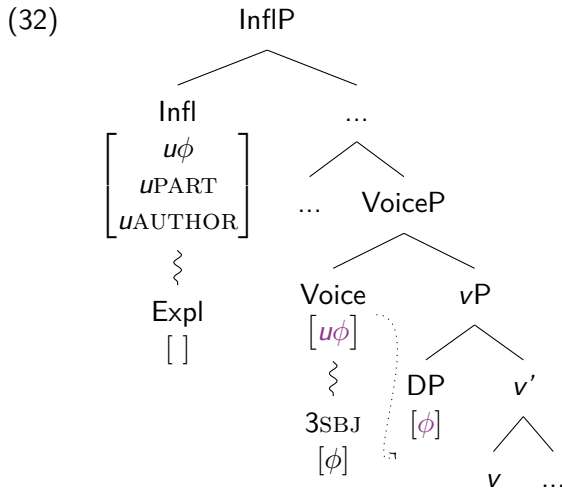
Analysis: Central Salish

Only the person features of 3rd person subjects will be licensed by Agree with Voice.



Analysis: Central Salish

The derivation with 3rd person subjects is parallel to that in NIS languages Thompson and Shuswap.



Squamish: 3rd person EA (Subjunctive clause)

(33) q=ʔas p'ihʔ-nəx^w-as
IRR=3SUBJ get-TR-3SBJ

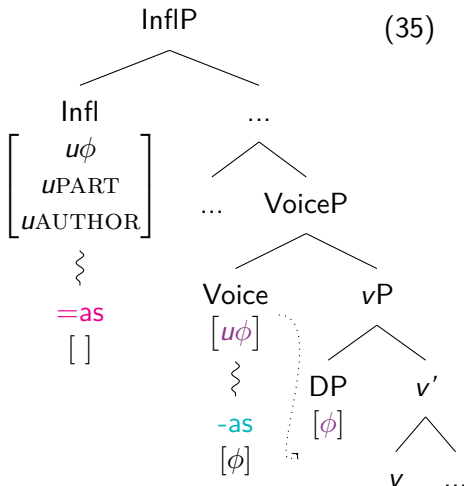
'If he gets it.'

(Kuipers 1967:192, as cited in Davis 1999, 19)

[Squamish]

Squamish: 3rd person EA (Subjunctive clause)

(34)



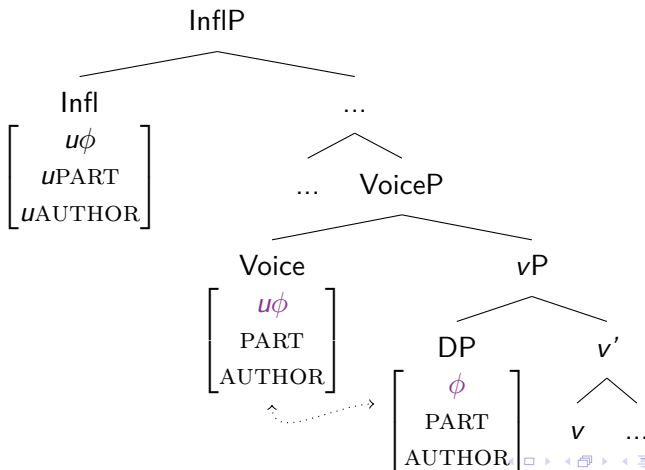
(35) a. Infl: $[\] \leftrightarrow =as$

b. Voice: $[\phi] \leftrightarrow -as$

Analysis: Central Salish

Where the goal is more highly specified than the probe, the extra features on the goal are copied to the probe (Béjar and Rezac, 2009). This is the case for 1st and 2nd person subjects.

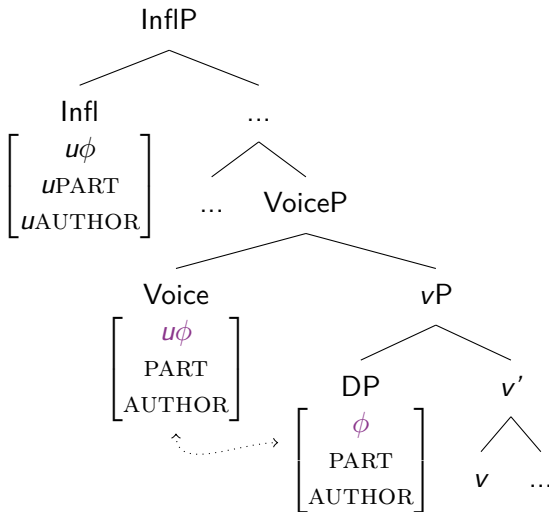
(36)



Analysis: Central Salish

The extra copied features remain active since they have not been licensed.

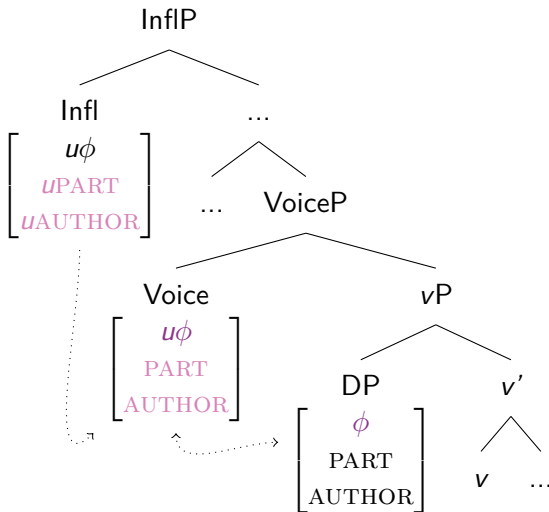
(37)



Analysis: Central Salish

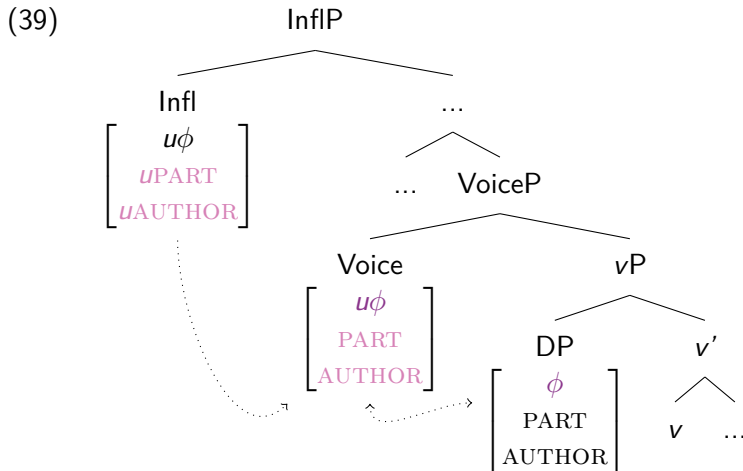
When Infl probes it finds these active features on Voice and copies them.

(38)



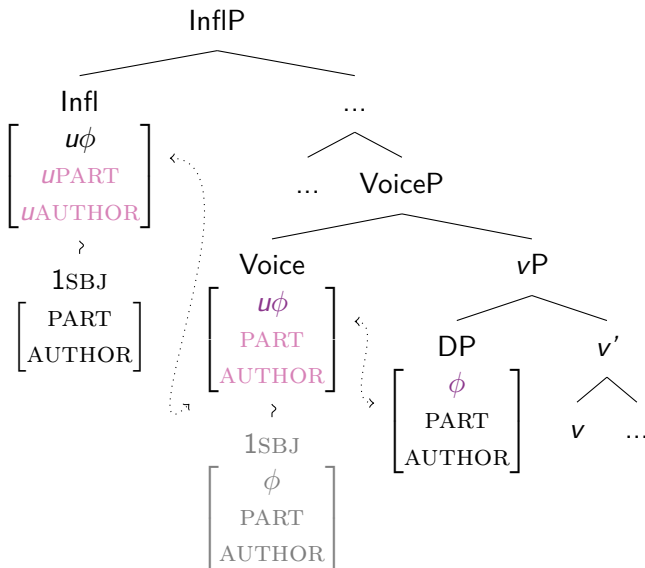
Analysis: Central Salish

By default, Vocabulary Insertion only targets the topmost copy, but in certain cases may also target the intermediate copy.



Analysis: Central Salish

(40)



Squamish: 1st person EA (Subjunctive clause)

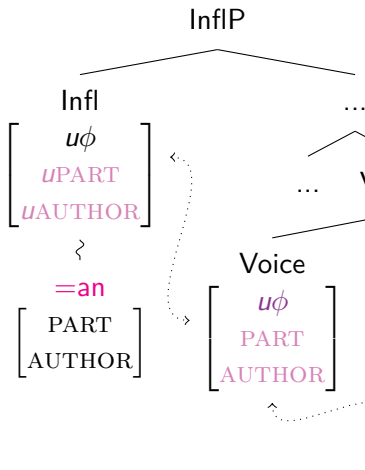
(41) q=?an pih?-nəx^w
IRR=1SG.SUBJ get-TR

'If I get it.'

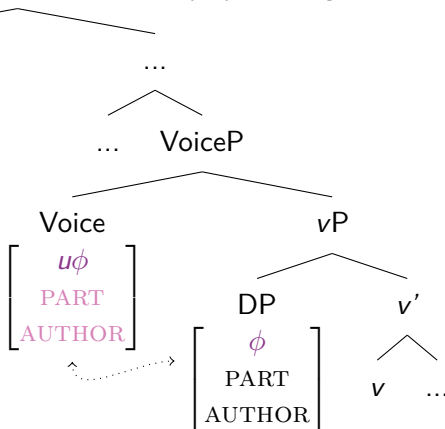
[Squamish]

Squamish: 1st person EA (Subjunctive clause)

(42)



(43) Infl: [PART, AUTHOR] \leftrightarrow =an



Squamish: Doubled agreement (Nominalized clause)

(44) 1st possessive clitic with 1st subject suffix

... ?n=s=čáw-at-an

... 1SG.POSS=NMLZ=help-TR-1SG.SBJ

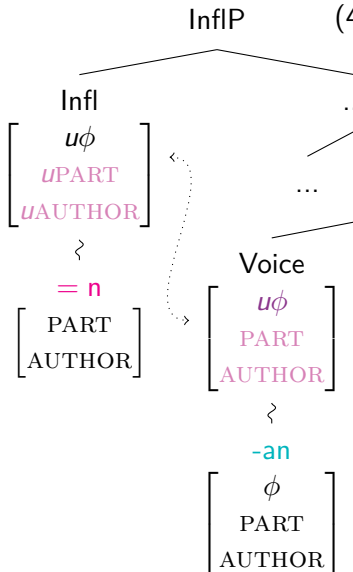
‘...that I helped him...’

(Kuipers 1967:91, as cited in Davis 1999, 20)

[Squamish]

Squamish: Doubled agreement (Nominalized clause)

(45)



(46)

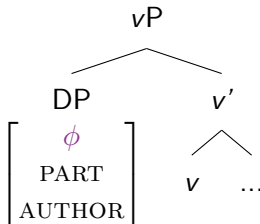
a. Infl:

$[PART, AUTHOR] \leftrightarrow = n$

b. Voice:

$[\phi, PART, AUTHOR] \leftrightarrow -an$

VoiceP

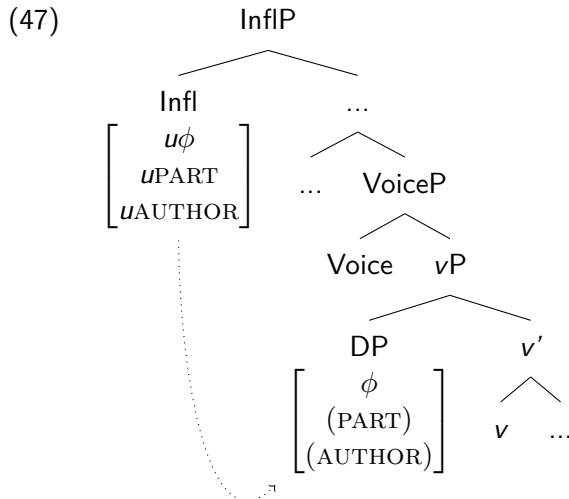


Summary of 1st and 2nd person agreement:

- 1st and 2nd person subject clitics replace subject suffixes when only the higher copy is Spelled Out.
- The doubled agreement pattern arises when the copies in both Infl and Voice are spelled out.

Analysis: Lushootseed

In Lushootseed Voice does not act as an agreement probe. Agreement in transitive clauses is therefore uniformly with Infl as in intransitive clauses.



Lushootseed: 3rd person EA (Subjunctive clause)

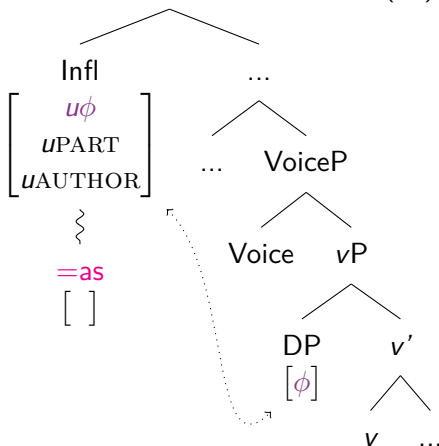
(48) 3rd person

ɬu-xʷiʔ=əs tiləb lədʔix
FUT-NEG=3SUBJ.SBJ at.once PROG-break

‘...so that it does not break right away.’ [Lushootseed]
Hess & Hilbert n.d.:225, as cited in Davis 1999, 28)

Lushootseed: 3rd person EA (Subjunctive clause)

(49) (50) [] ↔ =as



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Table: Agreement in transitive clauses

Languages	Voice probe	Agreement on Voice	Agreement on Infl
NIS minus Lil-looet	$\begin{bmatrix} u\phi \\ u\text{PART} \\ u\text{AUTHOR} \end{bmatrix}$	1/2/3	Expl
CS & Lillooet	$[u\phi]$	3 (/1/2)	1/2/Expl
Lushootseed	None	None	1/2/Expl

Conclusion

- In the proto-Salish system transitive subjects were uniformly marked by subject suffixes accompanied by expletive third person clitics.
- A gradual change has replaced subject suffixes with subject clitics, especially in 1st and 2nd person in Central Salish languages (and Lillooet).
- I've argued that this change arises through the gradual erosion of features on Voice.

- Proto-Salish and present-day Thompson and Shuswap have a Voice head specified with a full set of uninterpretable phi features, blocking Infl's search.
- In CS languages with a person split, the Voice head has become less highly specified: it probes only for $[\phi]$ features and so does not license first and second person EAs.
- Where the change is most advanced in Lushootseed, Voice is no longer specified as an agreement probe, allowing Infl to directly agree with the external argument.

Acknowledgements

I am particularly grateful to Henry Davis for the original research on which this analysis builds and much helpful discussion. I am also very grateful to Nico Baier for extremely useful discussions of the data and analysis. All errors are my own.

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