Feature gluttony for Algonquian: inverse in Passamaquoddy[1]

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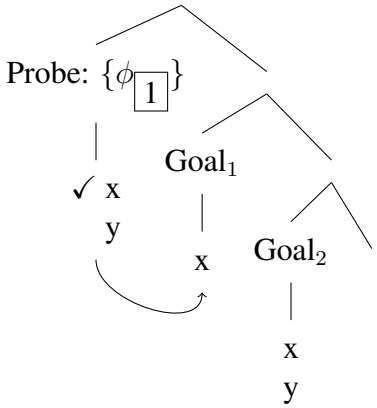
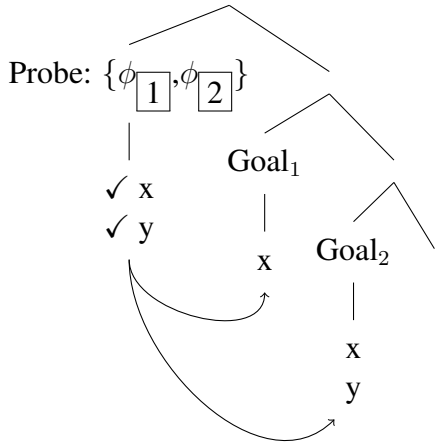
1 Introduction

- Coon & Keine 2020: **feature gluttony** is agreement of a probe with two different goals:

(1) **Step#1:** agreement with Goal_1



(2) **Step#2:** agreement with Goal_2



- **Gluttonous derivation:**

1. Probe with segments x and y agrees with the Goal_1, which has segment x, and copies ϕ-features of Goal_1 to itself (abbreviated as $\{\phi\boxed{1}\}$).
2. Segment y of the probe is not yet satisfied, so it keeps probing: it finds Goal_2, which has the segment y, checks its y segment, and copies ϕ-features of Goal_2 to itself (abbreviated as $\{\phi\boxed{2}\}$).
3. Now the probe has found itself in a situation where it has two different sets of features: $\{\phi\boxed{1},\phi\boxed{2}\}$. This is feature gluttony.

- **What's wrong with gluttony?**
  - Nothing is wrong with feature gluttony itself: it does not lead to an ill-formed syntax.
  - But it can lead to **future problems**:
    1. difficulties for movement that is parasitic on agreement (clitic-doubling leading in configurations with PCC effects in (Coon & Keine 2020));
    2. difficulties for spelling-out the features that the probe gathered (copula agreement effects in German, agreement in the dative-nominative construction in Icelandic in (Coon & Keine 2020)).

- **My goal:** explore whether feature gluttony can successfully account for direct/inverse in Algonquian (based on Passamaquoddy, data primarily from (Francis et al. 2008)).

[1]Many thanks to Adam Albright, Jessica Coon, Sabine Iatridou, Stefan Keine, Will Oxford, David Pesetsky, Norvin Richards, Stanislao Zompì, and the participants of Syntax Square at MIT. All errors are my own.

1.1 Verbal forms in Passamaquoddy

- **Passamaquoddy:** an Algonquian language which has preserved the Proto-Algonquian patterns in both Independent and Conjunct orders (Oxford 2014).
- **Verbal template** of Passamaquoddy (simplified):

Prefix	Verb Stem	Theme sign	Neg	Central	Mode/Tense	Peripheral
n	tokom	**a**	w	inu	pon	ik
1	hit.TA	**3**	NEG	1PL	PST	3PL
?	V	**Voice**	Neg	T	T	C
π		π		# ($+\pi$)		# ($+\pi$)

Table 1: 1Pl.EX Subject, 3PL Object: 'We (excl.) hit them.'

- **Two main orders:** "Independent" and "Conjunct":
  - Prefixal agreement and Peripheral agreement are present only in the Independent;
  - Independent's Prefix and Central agreement use the same affixes that are found in nominal possessor constructions.

1.2 Theme sign agreement

- It shows only π-agreement and can be viewed descriptively as object agreement (Oxford 2019) + default form ("inverse") for when no object agreement occurs.
- Whether the object agreement will occur or not depends on the relative ranking of the two arguments with respect to the person hierarchy.
- **The person hierarchy is different in Independent and in Conjunct:**

  (3) **Person hierarchy in Independent (TA)**
  SAP (speech act participants: 1,2) >3 (animate proximate) >4 (animate obviative)

  (4) **Person hierarchy in Conjunct (TA)**
  SAP (speech act participants: 1,2) and 3 (animate proximate) >4 (animate obviative)

- If the subject outranks the object on the relevant hierarchy, we see agreement with the object in person in the Theme sign slot.
- If the object outranks the subject, the default "inverse" marker *oku/oq* is inserted.[2]

(5) a. '-tokom-**a**-l
3-hit.TA.Ind-**3**-OBV
'(S)he (PROX) hits him/her (OBV).'

b. '-tokom-**oku**-l
3-hit.TA.Ind-**INV**-OBV
'(S)he (OBV) hits him/her (PROX).'

- Markers of Theme Sign are the same accross paradigms:

[2]There is one exception to this rule: in 4(4)>3Sg forms in Conjunct we get *-iht* instead, which is synchronically a portmanteau, but diachronically an inverse form (p.c. Conor Quinn).

(6) **Markers of Theme Sign:**

a. 1 ⇒ *-i*

b. 2 ⇒ *-ol*

c. 3/4 ⇒ *-a*

d. *oku/oq* elsewhere

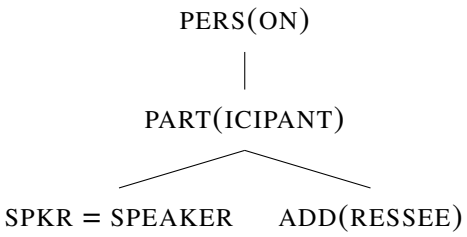
- **Independent -vs- Conjunct:** differ in whether they regard participants and proximate non-participants as "equally high" on the person hierarchy or not.

2 The mechanics of feature gluttony (Coon & Keine 2020)

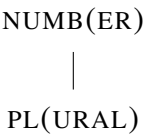
- Person and number features are arranged in feature geometries (Harley & Ritter 2002, Béjar 2003, a.o.), which encode entailment relations among features: features on lower nodes entail the features on higher nodes.

(7) The π and # geometries used in (Coon & Keine 2020)

a.



b.

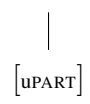


- Probes consist of hierarchically organized segments reflecting their requirements:
  - The **non-lowest segments** of the probe = the features that the probe will **interact** with.
  - The **lowest segment** of the probe = the feature that the probe is **satisfied** by.

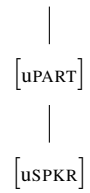
(8) Examples of probes[3]:

a. [uPERS] — fully satisfied by any person-bearing DP

b. [uPERS] — fully satisfied by any participant-bearing DP



c. [uPERS] — fully satisfied by a speaker-bearing DP



[3]Later on, I will simplify the representation of probes; for example, I will omit the u(ninterpretive) specification.

- The probe will agree with the closest accessible DP which matches some of its segments.
- If there are remaining segments that are not matched, the probe is not satisfied (Deal 2015), and **the remaining segments** continue probing.

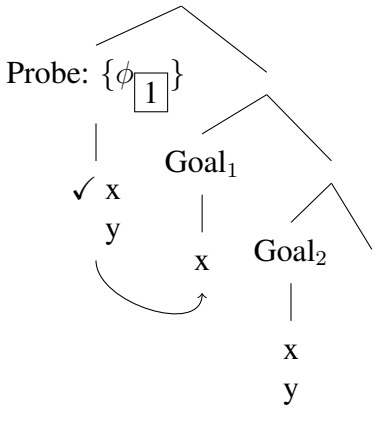
(9) **Agree** (Coon & Keine 2020)
Given a probe P with a hierarchy of unchecked feature segments [uF],
a. P searches the closest accessible DP in its domain such that this DP contains feature set [G], with [G] $\bigcap$ [F] $\neq \emptyset$;
b. the feature hierarchy [G] is copied to P;
c. [G] is removed from [uF];
d. iterate over steps a.-c. until [uF] = $\emptyset$ or search fails.

- Whether a probe conducts multiple search operations is directly determined by whether it has remaining unvalued segments after Agree.
- (9) only requires that there be some overlap between the unchecked segments on the probe and the segments of the goal. Either can be a superset of the other.
- The feature copying step in (9b) is coarse in the sense that the entire feature geometry of a DP is copied, even if only a segment of it undergoes Agree.

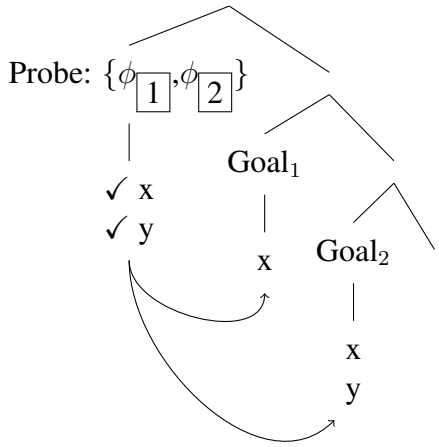
(10) **Feature gluttony** is a situation when a single probe P has entered Agree with more than one DP and thus copied more than one feature set [G] from them.

- **When does feature gluttony arise?**
When more than 1 DP has features relevant to the Probe, and <u>DPs that are further from the Probe have some relevant features that DPs closer to the Probe do not have</u>.

(11) **Step#1:** agreement with Goal_1



(12) **Step#2:** agreement with Goal_2

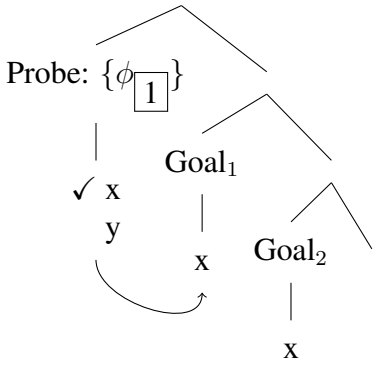


(13) Result of the Probe in (10)-(11):

$$P = \left\{ \phi_{\boxed{1}} = [x],\ \phi_{\boxed{2}} = \begin{array}{c}[x]\\ |\\ [y]\end{array} \right\}$$

- **When does feature gluttony NOT arise?**
  - when only features of 1 DP are relevant to the Probe;
  - when features of more than 1 DP are relevant to the Probe, and DPs further from the Probe do not have any relevant features that DPs closer to the Probe do not have.

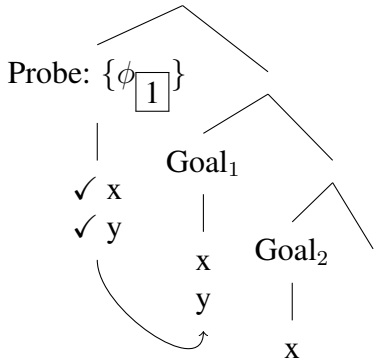
(14) Two DPs have the same features



(15) Result of the Probe in (13):

$$P = \left\{ \phi_{\boxed{1}} = [x] \right\}$$

(16) DP_2-features $\subset$ DP_1-features



(17) Result of the Probe in (15):

$$P = \left\{ \phi_{\boxed{1}} = \begin{array}{c}[x]\\ |\\ [y]\end{array} \right\}$$

- **To sum up:**

★ **Feature gluttony is created**
in configurations when the interaction with the closest DP satisfies the probe partially and a further DP is able to satisfy some segment(s) of the probe that remain active after the first interaction.

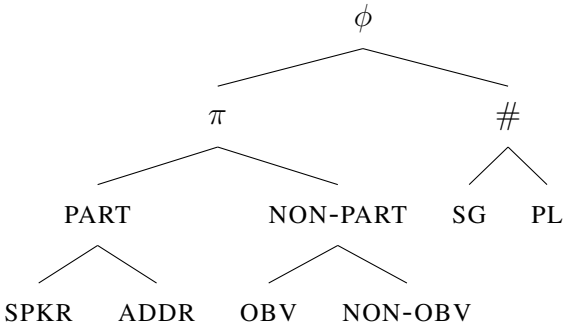
★ **Feature gluttony is avoided**
in configurations when either only one of the DPs has any features that the probe is searching for or the relevant features on the closest DP are a superset of the the relevant features on the DPs which are further away from the probe.

★ **Gluttonous configurations**
are not intrinsically bad, but can lead to problems further down the road (in syntax or morphology).

3 Inverse as a result of feature gluttony

3.1 Assumptions

- Assumptions about **feature geometry**:



- Assumptions about the **directionality** of Agree (Béjar & Rezac 2009):
  - **Bi-directional Agree:** try to be satisfied by something in your c-command domain, but if that failed, check out your specifier to see if it could satisfy you.

- Assumptions about the **probe**:
  - Voice being an object probe is an illusion. It is a probe searching for obviative DPs.
  - Here's its specification for the two orders:

(18) **Independent Probe**

(19) **Conjunct Probe**

3.2 Inverse in Independent

- **Inverse** is an underspecified portmanteau that occurs when the probe has agreed with two DPs and created a feature gluttony:

(20) **Inverse**
oku / oq ⇒ { {π}, {π}}

- Consider direct in Independent: PART + PART, {PART, 3}, and {3,4} combinations.

PART + PART	Form	Translation
{1, 2}	k-tokom-**ol**	I hit you (Sg).
{11, 2}	k-tokom-**ol**-pon	We (excl.) hit you (Sg).
{1, 22}	k-tokom-**ol**-pa	I hit you (Pl).
{11, 22}	k-tokom-**ol**-pon	We (excl.) hit you (Pl).
{2, 1}	k-tokom-**i**	You (Sg) hit me.
{2, 11}	k-tokom-**i**-pon	You (Sg) hit us (excl).
{22, 1}	k-tokom-**i**-pa	You (Pl) hit me.
{22, 11}	k-tokom-**i**-pon	You (Pl) hit us (excl).

Table 1: Direct in Independent Part & Part Configurations

{**PART, 3**}	Form	Translation
{1, 3}	n-tokom-**a**	I hit her / him.
{11, 3}	n-tokom-**a**-n	We (excl.) hit her / him.
{1, 33}	n-tokom-**a**-k	I hit them.
{11, 33}	n-tokom-**a**-nnu-k	We (excl.) hit them.
{12, 3}	k-tokom-**a**-n	We (excl.) hit her / him.
{12, 33}	k-tokom-**a**-nnu-k	We (incl.) hit them.
{2, 3}	k-tokom-**a**	You (Sg) hit her / him.
{22, 3}	k-tokom-**a**-wa	You (Pl) hit her / him.
{2, 33}	k-tokom-**a**-k	You (Sg) hit them.
{22, 33}	k-tokom-**a**-wa-k	You (Pl) hit them.

Table 2: Direct in Independent {PART, 3} Configurations

{**3, 4**}	Form	Translation
{3, 4}	'-tokom-**a**-l	(S)he (prox.) hits her / him (obv.).
{33, 4}	'-tokom-**a**-wa-l	They (prox.) hit her / him.
{3, 44}	'-tokom-**a**	(S)he (prox.) hits them (obv.).
{33, 44}	'-tokom-**a**-wa	They (prox.) hit them (obv.).

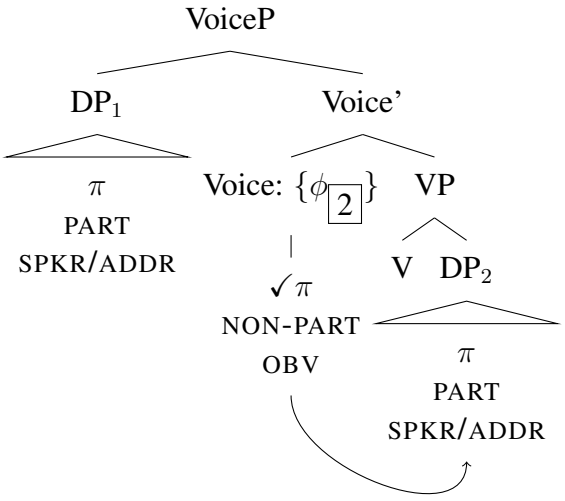
Table 3: Direct in Independent {3, 4} Configurations

- I propose that these are environments in which, among the features the Probe is searching for, the features of the subject are a subset of the features of the object:

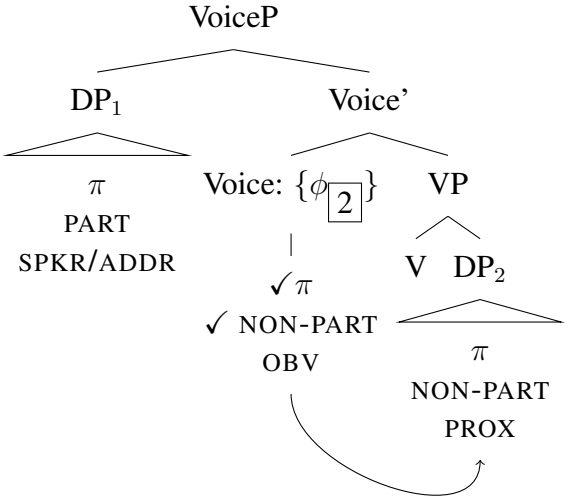
  1. {**PART+PART**} **(21):** $\{\pi\} \subseteq \{\pi\}$
     Voice checks its π feature off the object; it searches its specifier for things that would satisfy NON-PART or OBV, but the participant subject has none of these features.
  2. {**PART, 3**} **(22)**: $\{\pi\} \subseteq \{\pi$, NON-PART$\}$
     Voice checks its π and NON-PART features off the object; its OBV keeps probing, but the subject is participant, so the search fails.

3. {**3, 4**} **(23)**: : $\{\pi, \text{NON-PART}\} \subseteq \{\pi, \text{NON-PART, OBV}\}$
   Voice checks its π, NON-PART and OBV features off the object; the probe is satisfied and does not probe further.

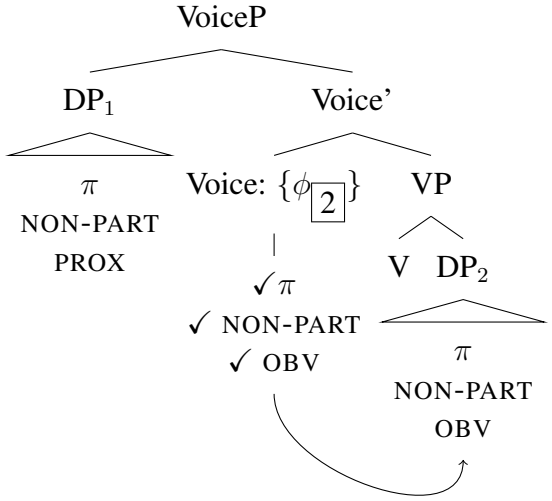
(21) **Direct** in {**PART + PART**}



(22) **Direct** in {**PART, 3**}



(23) **Direct** in {**3, 4**}



- In all of these cases the Voice probe only enters into Agree with the object.
- Whether the probe is satisfied or not, it spells out what it got — object features.
  Hence **direct = object agreement**.
- Now consider the environments in which we see the Inverse marker: {3, PART} (Table 4) combinations and {3, 4} combinations (Table 5).

{**3, PART**}	Form	Translation
{3, 1}	n-tokom-**oq**	(S)he hits me.
{3, 11}	n-tokom-**oku**-n	(S)he hits us (excl.)
{33, 1}	n-tokom-**oku**-k	They hit me.
{33, 11}	n-tokom-**oku**-nnu-k	They hit us (excl.).
{3, 12}	k-tokom-**oku**-n	(S)he hits us (incl.).
{33, 12}	k-tokom-**oku**-nnu-k	They hit us (incl.).
{3, 2}	k-tokom-**oq**	(S)he hits you (Sg).
{3, 22}	k-tokom-**oku**-wa	(S)he hits you (Pl).
{33, 2}	k-tokom-**oku**-k	They hit you (Sg).
{33, 22}	k-tokom-**oku**-wa-k	They hit you (Pl).

Table 4: Inverse in Independent {3, PART} Configurations

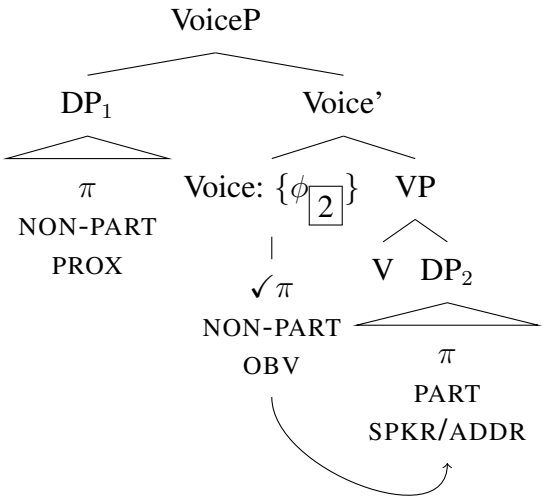
{**4,3**}	Form	Translation
{4, 3}	'-tokom-**oku**-l	(S)he (obv.) hits her / him (prox.).
{4, 33}	'-tokom-**oku**-wa-l	(S)he (obv.) hits them (prox.).
{44, 3}	'-tokom-**oku**	They (obv.) hit her / him (prox.).
{44, 33}	'-tokom-**oku**-wa	They (obv.) hit them (prox.).

Table 5: Inverse in Independent {4, 3} Configurations

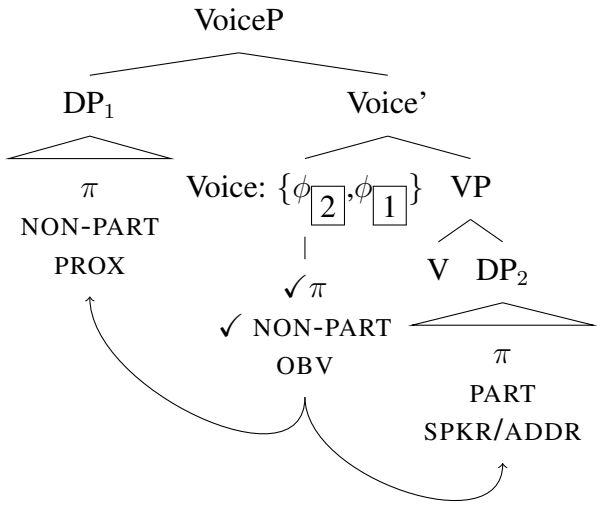
- In both of these configurations, if we consider the features that the probe is searching for (π, NON-PART, OBV), the features from this set that the object has constitute a proper subset of the features from this set that the subject has.
- This results in **feature gluttony**.

1. {**3, PART**} **(11)-(12):** {π, NON-PART} $\supset$ {π}
   - Voice checks its π feature off the participant object, and the object's features are copied onto the probe.
   - The probe's NON-PART and OBV features keep probing.
   - They find the subject, which helps the probe check off its NON-PART segment. Then subject features are copied onto the probe.
   - Thus, the probe ends up with ϕ-features of two different DPs.
2. {**4, 3**} **(13)-(14):** {π, NON-PART, OBV} $\supset$ {π,NON-PART}
   - Voice checks its π and NON-PART features off the proximante non-participant object, and object features are copied onto Voice.
   - The OBV feature of the probe keeps probing and finds the subject, which is obviative, and so the probe can check off its OBV feature. Subject features get copied onto the probe.
   - The probe is satisfied, but the feature gluttony is created again.

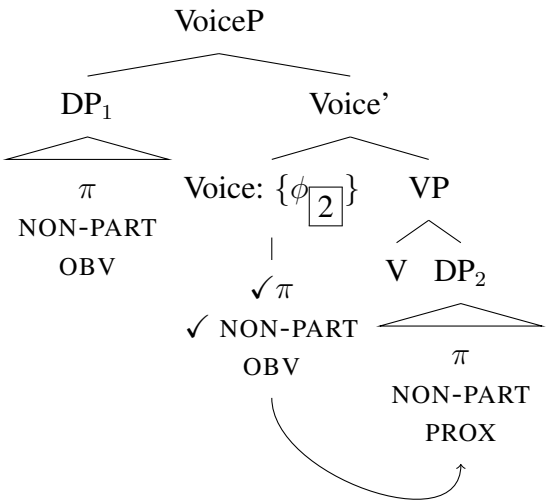
(24) **Inverse** in {**3,** PART}**, Step 1**



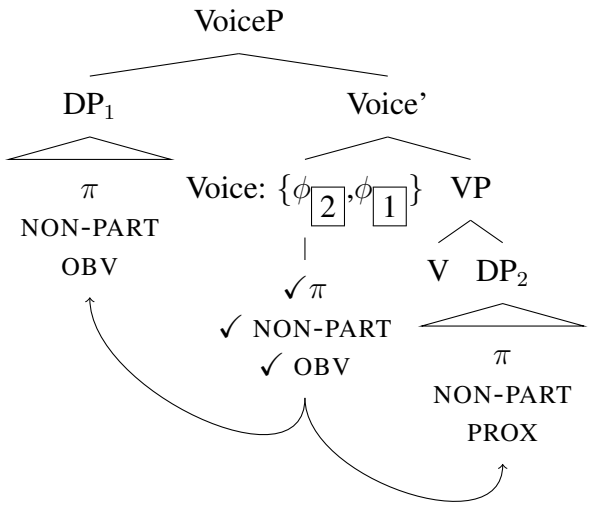
(25) **Inverse** in {**3,** PART}**, Step 2**



(26) **Inverse** in {**4, 3**}**, Step 1**



(27) **Inverse** in {**4, 3**}**, Step 2**



- I propose that in the absence of better options, feature gluttonies in Algonquian languages are spelled-out with the Inverse marker in (20).

3.3 Inverse in Conjunct

- Recall that the hierarchy in Conjunct is quite similar. The only difference is that participants and non-participant proximates are grouped together:

(28) **Person hierarchy in Conjunct (TA)**
SAP (speech act participants: 1,2) and 3 (animate proximate) >4 (animate obviative)

- This means that besides {PART + PART} (table 6), {PART, 3} (table 7)[4], and {3,4} (table 8) configurations, the {3, PART} also shows direct pattern = object agreement (table 9).

PART + PART	Form	Translation
{1, 2}	tokom-**ol**-an	I hit you (Sg).
{11, 2}	tokom-**ol**-ek	We (excl.) hit you (Sg).
{1, 22}	tokom-**ol**-eq	I hit you (Pl).
{11, 22}	tokom-**ol**-ek	We (excl.) hit you (Pl).
{2, 1}	tokom-**i**-yin	You (Sg) hit me.
{2, 11}	tokom-**i**-yek	You (Sg) hit us (excl).
{22, 1}	tokom-**i**-yeq	You (Pl) hit me.
{22, 11}	tokom-**i**-yek	You (Pl) hit us (excl).

Table 6: Direct in (U.) Conjunct Part & Part Configurations

{**PART, 3**}	Form	Translation
{1, 3}	tokom-**a**-w-an	I don't hit her / him.
{11, 3}	tokom-**a**-w-ehk	We (excl.) don't hit her / him.
{1, 33}	tokom-**a**-w-an	I don't hit them.
{11, 33}	tokom-**a**-w-ehk	We (excl.) don't hit them.
{12, 3}	tokom-**a**-w-ohq	We (excl.) don't hit her / him.
{12, 33}	tokom-**a**-w-ohq	We (incl.) don't hit them.
{2, 3}	tokom-**a**-w-on	You (Sg) don't hit her / him.
{22, 3}	tokom-**a**-w-ehq	You (Pl) don't hit her / him.
{2, 33}	tokom-**a**-w-on	You (Sg) don't hit them.
{22, 33}	tokom-**a**-w-ehq	You (Pl) don't hit them.

Table 7: Direct in (U.) Conjunct {PART, 3} Configurations (negative)

{**3,4**}	Form	Translation
{3, 4}	tokom-**a**-t	(S)he (prox.) hits her / him (obv.).
{33, 4}	tokom-**a**-hti-t	They (prox.) hit her / him.
{3, 44}	tokom-**a**-t	(S)he (prox.) hits them (obv.).
{33, 44}	tokom-**a**-hti-t	They (prox.) hit them (obv.).

Table 8: Direct in (U.) Conjunct {3, 4} Configurations

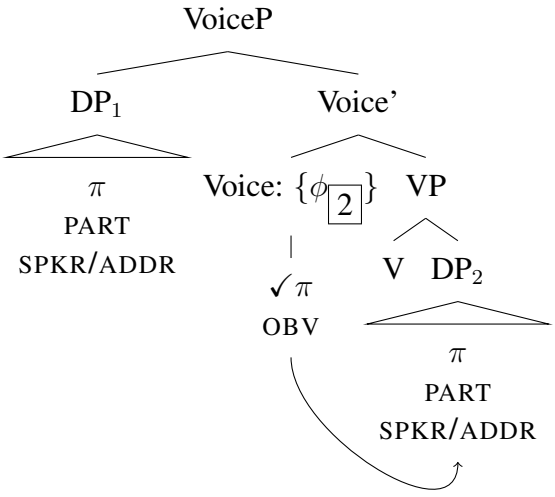
[4]I am using negative forms for this paradigm, because the positive ones have portmanteaus which correspond to combination of Theme sign and Central agreements.

{**3, PART**}	Form	Translation
{3, 1}	tokom-**i**-t	(S)he hits me.
{3, 11}	tokom-**i**-nomot	(S)he hits us (excl.)
{33, 1}	tokom-**i**-hti-t	They hit me.
{33, 11}	tokom-**i**-nomot	They hit us (excl.).
{3, 12}	tokom-**ol**-inoq	(S)he hits us (incl.).
{33, 12}	tokom-**ol**-inoq	They hit us (incl.).
{3, 2}	tokom-**os**-k	(S)he hits you (Sg).
{3, 22}	tokom-**ol**-inaq	(S)he hits you (Pl).
{33, 2}	tokom-**os**-k	They hit you (Sg).
{33, 22}	tokom-**ol**-inaq	They hit you (Pl).

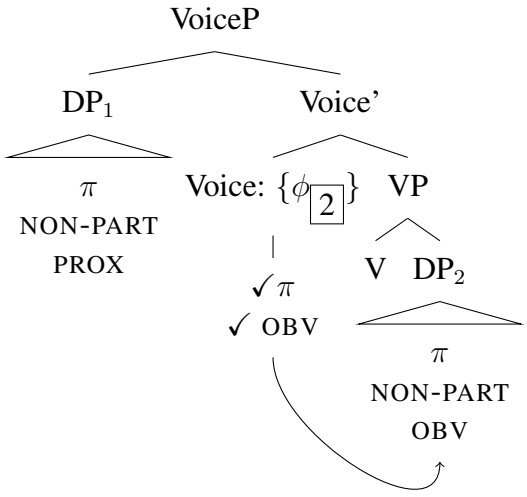
Table 9: Direct in (U.) Conjunct {3, PART} Configurations

- This difference can be accounted for if the Voice probe of Conjunct does not have NON-PART segment within its probing segments.[5]
- Derivations for {PART + PART}, (29), and {3,4}, (30), basically remain in Conjunct the same as in the Independent:
  - in case of {PART + PART}, (29), the probe will not agree with the higher DP because it doesn't have OBV;
  - in case of {3,4}, (30), the probe will not agree with the higher DP because it will be completely satisfied by the lower DP.

(29) **Direct** in {**PART + PART**}



(30) **Direct** in {**3, 4**}

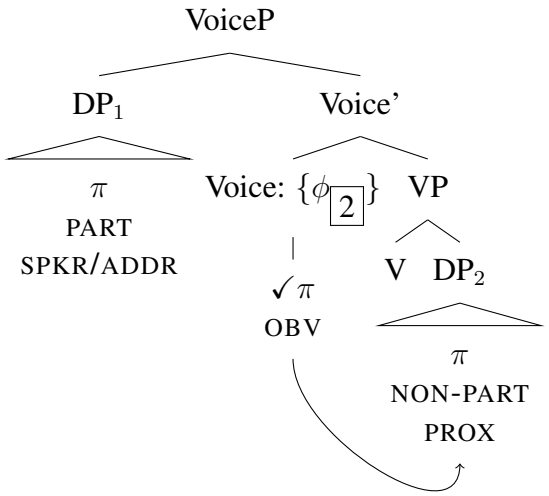


- Removing the NON-PART segment from the probe will result in participant and proximate non-participant DPs have the same amount of segments that the probe is searching for: both kinds of DPs can satisfy π segment, neither can satisfy OBV segment.

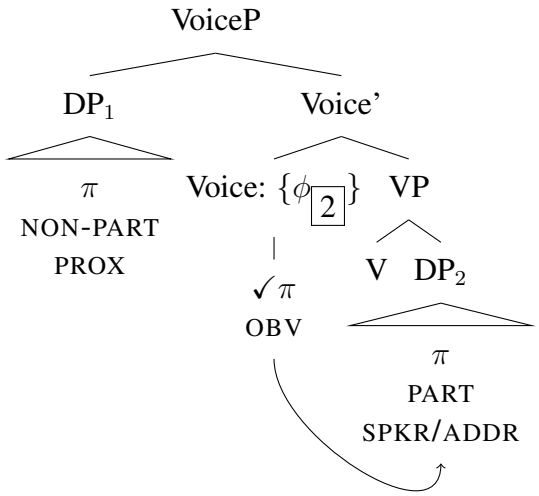
[5]Note that a similiar "skipping" of a segment of the entailment scale on a probe is necessary for a feature gluttony-account of Me-First PCC (PART is skipped, while π and SPKR are present, Coon & Keine 2020).

- The result is thus object agreement in both {PART, 3} and {3,PART}:
  - in case of {PART, 3} the non-participant argument satisfies π, and the higher participant DP has nothing more relevant to offer to the probe;
  - in case of {3,PART} the participant argument satisfies π, and the higher non-participant DP has nothing more relevant to offer.

(31) **Direct** in {**PART, 3**}



(32) **Direct** in {**3, PART**}



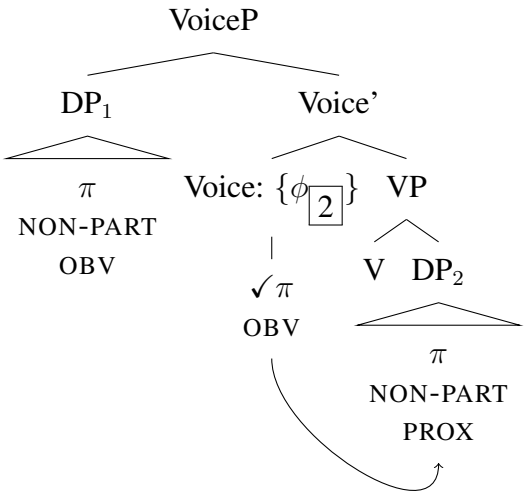
- Configurations {4,3} in Conjunct have a small complication: in case the object is Singular, what we see is a portmanteau *iht* (table 10).
- However, with 3PL objects we clearly see the Inverse morphology (table 10), so I will assume {4,3} in Conjunct results in Inverse.

{**4,3**}	Form	Translation
{4, 3}	'-tokom-**iht**	(S)he (obv.) hits her / him (prox.).
{4, 33}	'-tokom-**oku**-hti-t	(S)he (obv.) hits them (prox.).
{44, 3}	'-tokom-**iht**	They (obv.) hit her / him (prox.).
{44, 33}	'-tokom-**oku**-hti-t	They (obv.) hit them (prox.).

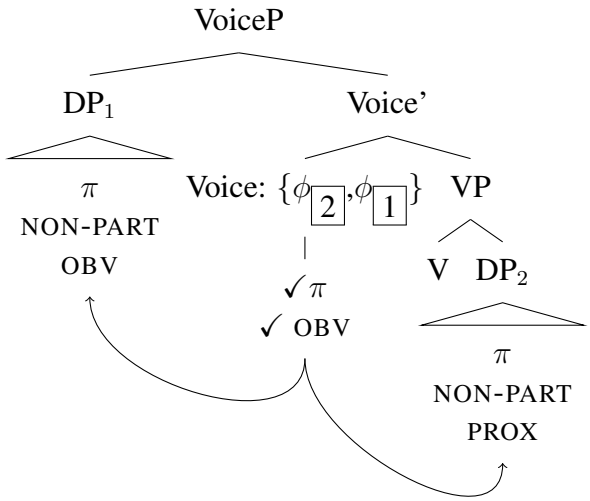
Table 10: Inverse in (U.) Conjunct {4, 3} Configurations

- My analysis captures the inverse of {4,3} in Conjunct:
  - the proximate object will satisfy only the ϕ segment of the probe (33);
  - the object features will be copied onto the probe;
  - the obviative subject will satisfy the OBV segment of the probe (34);
  - the subject features will be copied onto the probe.
- $\Rightarrow$ this results in feature gluttony, which results in an Inverse marker.

(33) **Inverse** in {**4, 3**}**, Step 1**



(34) **Inverse** in {**4, 3**}**, Step 2**



4 Interim conclusion

- we see **object agreement** because object is the first thing that Voice sees when it's searching for relevant goals, and so it's the first thing it agrees with;
- object agreement happens if the object fully satisfies the probe, or if it only partially satisfies the probe, but the subject does not have any additional features for the probe;
- when the object only partially satisfies the probe, and the subject has some features that the probe is searching for that the object does not have, **feature gluttony** is created;
- **Inverse marker** is the result of feature gluttony on the Voice probe.

5 Portmanteaus as a better way of pronouncing FG

5.1 Hierarchy effect in Conjunct portmanteaus

- Passamaquoddy has six portmanteaus in the Conjunct paradigm; all of them are found in configurations where at least one of the arguments is 3rd person:

(35) Portmanteaus in Conjunct

a. *-uk* {1Sg subject, 3Sg or 3PL object}
b. *-ot* {2Sg subject, 3Sg or 3PL object}
c. *-iht* {4Sg or 4Pl subject, 3Sg object}
d. *-inomot* {3Sg or 3PL subject, 1Pl excl. object}
e. *-olinoq* {3Sg or 3PL subject, 1Pl incl. object}
f. *-olinaq* {3Sg or 3PL subject, 2Pl object}

- A hierarchy effect is observed in configurations where one of the arguments is a participant, and another argument is 3rd person (36):

(36) **Generalization:**
Portmanteaus that are created in the {3, PART} configuration, cannot be disrupted by negation, while portmanteaus that are created in the {PART, 3} configuration, are disrupted by negation.

- As we see from tables (11)-(12), in {PART,3} positive forms the Theme sign is missing, a portmanteau is created if the subject is singular.

{**PART.SG, 3**}	Form	Translation
{1, 3}	tokom-**uk**	I hit her / him.
{1, 33}	tokom-**uk**	I hit them.
{2, 3}	tokom-**ot**	You (Sg) hit her / him.
{2, 33}	tokom-**ot**	You (Sg) hit them.

Table 11: Direct in (U.) Conjunct {PART.SG, 3} Configurations (positive)

{**PART.PL, 3**}	Form	Translation
{11, 3}	tokom-ek	We (excl.) hit her / him.
{11, 33}	tokom-ek	We (excl.) hit them.
{12, 3}	tokom-oq	We (excl.) hit her / him.
{12, 33}	tokom-oq	We (incl.) hit them.
{22, 3}	tokom-eq	You (Pl) hit her / him.
{22, 33}	tokom-eq	You (Pl) hit them.

Table 12: Direct in (U.) Conjunct {PART.PL, 3} Configurations (positive)

- In negative forms, the Theme sign re-appears and the portmatneaus get disrupted:

{**PART, 3**}	Form	Translation
{1, 3}	tokom-a-w-an	I don't hit her / him.
{11, 3}	tokom-a-w-ehk	We (excl.) don't hit her / him.
{1, 33}	tokom-a-w-an	I don't hit them.
{11, 33}	tokom-a-w-ehk	We (excl.) don't hit them.
{12, 3}	tokom-a-w-ohq	We (excl.) don't hit her / him.
{12, 33}	tokom-a-w-ohq	We (incl.) don't hit them.
{2, 3}	tokom-a-w-on	You (Sg) don't hit her / him.
{22, 3}	tokom-a-w-ehq	You (Pl) don't hit her / him.
{2, 33}	tokom-a-w-on	You (Sg) don't hit them.
{22, 33}	tokom-a-w-ehq	You (Pl) don't hit them.

Table 13: Direct in (U.) Conjunct {PART, 3} Configurations (negative)

- I propose that in {PART,3(3)} configurations the features on Voice and the features on T are spelled out together when nothing intervenes between them.
- When negation intervenes between Voice and T, the conditions for allomorphy or spelling out the span are not met anymore, thus no portmanteaus are created.
- In {3(3), PART} configurations we see portmanteaus being created when the object is a plural participant (table 15).

{**3, PART.SG**}	Form	Translation
{3, 1}	tokom-i-t	(S)he hits me.
{33, 1}	tokom-i-hti-t	They hit me.
{3, 2}	tokom-os-k	(S)he hits you (Sg).
{33, 2}	tokom-os-k	They hit you (Sg).

Table 14: Direct in (U.) Conjunct {3, PART.SG} Configurations

{**3, PART.PL**}	Form	Translation
{3, 11}	tokom-**i**(-)**nomot**	(S)he hits us (excl.)
{33, 11}	tokom-**i**(-)**nomot**	They hit us (excl.).
{3, 12}	tokom-**ol**(-)**inoq**	(S)he hits us (incl.).
{33, 12}	tokom-**ol**(-)**inoq**	They hit us (incl.).
{3, 22}	tokom-**ol**(-)**inaq**	(S)he hits you (Pl).
{33, 22}	tokom-**ol**(-)**inaq**	They hit you (Pl).

Table 15: Direct in (U.) Conjunct {3, PART.PL} Configurations

- These portmanteaus are not disrupted by negation:

{**3, PART**}	Form	Translation
{3, 1}	tokom-i-hq	(S)he doesn't hit me.
{3, 11}	tokom-**i**(-)**nomohq**	(S)he doesn't hit us (excl.)
{33, 1}	tokom-i-hti-hq	They don't hit me.
{33, 11}	tokom-**i**(-)**nomohq**	They don't hit us (excl.).
{3, 12}	tokom-**ol**(-)**inohq**	(S)he hits us (incl.).
{33, 12}	tokom-**ol**(-)**inohq**	They hit us (incl.).
{3, 2}	tokom-ol-u-hk	(S)he hits you (Sg).
{3, 22}	tokom-**ol**(-)**inahq**	(S)he hits you (Pl).
{33, 2}	tokom-ol-u-hk	They hit you (Sg).
{33, 22}	tokom-**ol**(-)**inahq**	They hit you (Pl).

Table 16: Direct in (U.) Conjunct {3, PART} Configurations (negative)

- **Hypothesis:** the portmanteaus that are created in {3(3), PART} configurations result not from spans or allomorphy, but from a configuration with multiple agreement by a single head.
- The pattern that we have seen in Conjunct is summarized in (17).

Configuration	Theme Sign	Agreement	Disruptability by Negation
{PART.SG, 3}	no	portmanteau	**disrupted**
{PART.PL, 3}	no	subject (PART.PL) agreement	disrupted (Theme sign emerges)
{3, PART.SG}	yes	subject (3) agreement	—
{3, PART.PL}	yes/no	portmanteau	**not-disrupted**

Table 17: Portmanteaus in Conjunct with a PART and a 3rd person arguments

- When two DPs belong to different classes (participant and non-participant), the output of the configuration is determined by the c-command relation between them.
- One output is "if a portmanteau is created, it is disrupted by negation", the other output is "if a portmanteau is created, it is not disrupted by negation".
- **Question:** can we analyze this as FG?

5.2 Conjunct T agreement

Preview of the idea:

- When we see an undisruptable portmanteau:
  - ▷ there is a FG being created on Voice;[6]
  - ▷ T agrees with the features within the FG on Voice because its Best match is the features of the object;
  - ▷ T has a portmanteau VI to spell out the whole FG on Voice;
  - ▷ T gets the FG from Voice and spells it with the portmanteau that it has.
- ⇒ This is why we need a story for how T agreement proceeds in Conjunct.
- Here's what agreement we see on the T in Conjunct:

(37) **Central slot in Conjunct (*descriptive generalization*):**

a. Agree with 1PL if there is 1PL.
b. If there is no 1PL, agree with 2PL.
c. If there is no 1PL or 2PL, agree with a non-obviative argument (PART(icipant) or PROX(imate)); if both arguments are non-obviative, choose the subject.
d. Otherwise, don't agree.

[6] T cannot be the probe which creates FG, because, as we will see, we want T to be equidistant from the features of the subject and the features of the object. But this is incompatible with T being a probe that could create a Feature Gluttony.

- I propose that this descriptive behavior reflects the following probe on T:

  (38) T probe in Conjunct
  a. [PL$_{SPKR}$]
  [PL$_{PART}$]
  [PART]
  [PROX]
  b. T: PL$_{SPKR}$ $\wedge$ PL$_{PART}$ $\wedge$ PART $\wedge$ PROX

- Together with Oxford (2019), I will assume that the features of the subject and the features of the object are equidistant from T. **Equidistance helps us explain the omnivority:** T agrees with whatever is the best, no matter whether it is the subject or the object.

- In particular, I will assume that the features of the object that Voice has gathered project onto the VoiceP level, which is equisitant from the subject in Spec, VoiceP.

- The two principles that guide T's choice of agreement are in (39).

  (39) **Two principles of Equidistance**
  a. *Best Match!*
  If two sources of feature bundles, X and Y, are equidistant from a probe P, then P agrees with the feature bundle that matches more of its feature segments than the other one.
  b. *Prefer DP!* (constraint-based formulation)
  If two sources of feature bundles, X and Y, are equidistant from a probe P, then P agrees with that feature bundle that is present on a DP (as opposed to a functional head).

- **Brief illustration:**
  in the {2,1} configuration T will agree with the 2nd person DP because it is both the Best match and a DP. In {2,11} T will agree with the 1PL object, because although the features are not coming from the DP directly, it is the Best match, while 2nd person is not.

{2,1}	*Best Match!*	*Prefer DP!*
☞{2} (subject)	✓ (PART)	✓
{1} (Voice)	✓ (PART)	*

Table 18: *Prefer DP!* determines the outcome ({2,1})

{2,11}	*Best Match!*	*Prefer DP!*
{2} (subject)	* (PART)	✓
☞{11} (Voice)	✓ (PL$_{SPKR}$ $\wedge$ PL$_{PART}$ $\wedge$ PART)	*

Table 19: *Best Match!* determines the outcome ({2,11})

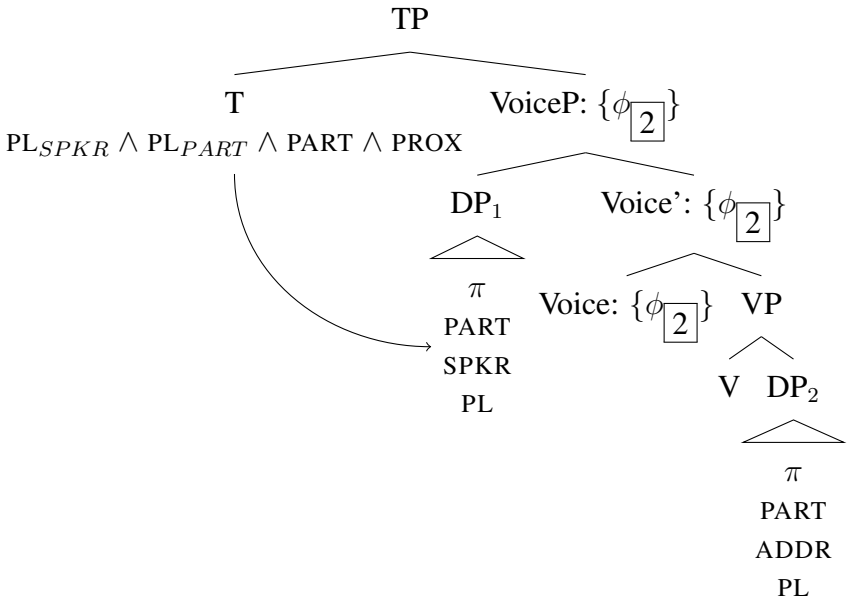
- The table below illustrates how "good" different kinds of DPs are for the Conjunct T: how many of its features they satisfy.

DP	Features of T ($\text{PL}_{SPKR} \wedge \text{PL}_{PART} \wedge$ PART $\wedge$ PROX) that it satisfies
1Sg	1/4: PART
1Pl (excl.)	3/4: PL_{SPKR}, PL_{PART}, PART
1Pl (incl.)	3/4: PL_{SPKR}, PL_{PART}, PART
2Sg	1/4: PART
2Pl	2/4: PL_{PART}, PART
3Sg	1/4: PROX
3 Pl	1/4: PROX
4Sg	0/4
4Pl	0/4

Table 20: How much of T's features different DPs can satisfy

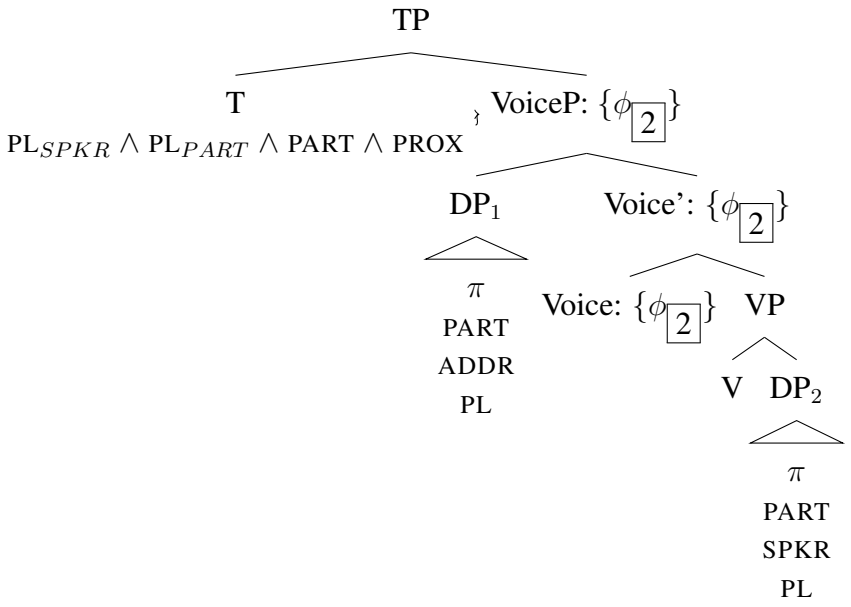
- To illustrate how the system works, let's consider {11,22} and {22,11} configurations, which show the preference to agree with 1PL features.

(40) {1Pl, 2Pl} configuration



where $\{\phi_{\boxed{2}}\}$ = $\pi \wedge$ PART $\wedge$ ADDR $\wedge$ PL (satisfies 2/4 features: PL_{PART}, PART);
DP_1's features = $\pi \wedge$ PART $\wedge$ SPKR $\wedge$ PL (satisfies 3/4 features: PL_{SPKR}, PL_{PART}, PART)

(41) {2Pl, 1Pl} configuration



where {$\phi_{\boxed{2}}$} = π ∧ PART ∧ SPKR ∧ PL (satisfies 3/4 features: PL$_{SPKR}$, PL$_{PART}$, PART);
DP$_1$'s features = π ∧ PART ∧ ADDR ∧ PL (satisfies 2/4 features: PL$_{PART}$, PART)

- Since 1PL is T's Best match, it will agree with its features independent of whether it will find it on the subject or on VoiceP.
- As we see from (21), when the two DPs are equally "good" with respect to T's desires, T agrees with the subject:

PART + PART	Form	Translation
{1, 2}	tokom-ol-**an**	I hit you (Sg).
{2, 1}	tokom-i-**yin**	You (Sg) hit me.
{**PART, 3**}	Form	Translation
{1, 3}	tokom-a-w-**an**	I don't hit her / him.
{1, 33}	tokom-a-w-**an**	I don't hit them.
{2, 3}	tokom-a-w-**on**	You (Sg) don't hit her / him.
{2, 33}	tokom-a-w-**on**	You (Sg) don't hit them.
{**3, PART**}	Form	Translation
{3, 1}	tokom-i-**t**	(S)he hits me.
{33, 1}	tokom-i-**hti-t**	They hit me.
{3, 2}	tokom-os-**k**	(S)he hits you (Sg).
{33, 2}	tokom-os-**k**	They hit you (Sg).

Table 21: T agreeing with the subject DP in Conjunct

(42) a. $\{\pi$, PART, SPKR, SG$\} \Rightarrow$ *-an*

b. $\{\pi$, PART, (ADDR), SG$\} \Rightarrow$ *-on*
can undergo a regular phonological rule (see {2,1}): o $\Rightarrow$ i / i__

c. $\{\pi$, NON-PART, PROX, SG$\} \Rightarrow$ *-t* iff / V__,
-k otherwise

d. $\{\pi$, NON-PART, PROX, PL$\} \Rightarrow$ *-hti-t* iff / V__,
-k otherwise

- That in all of these cases T agrees with the subject is expected under my proposal: since subject features are accessible from the first source — a real DP, they will be preferred over the second-source object features from a functional projection (VoiceP) due to ***Prefer DP!***

{3,1}	*Best Match!*	*Prefer DP!*
☞{3} (subject)	✓: 1 feature = PROX	✓
{1} (Voice)	✓: 1 feature = PART	*

Table 22: *Prefer DP!* determines the outcome ({3,1})

- To summarize **T's agreement in Conjunct:**
  - ▷ The probe: $\text{PL}_{SPKR} \wedge \text{PL}_{PART} \wedge$ PART $\wedge$ PROX
  - ▷ T is equidistant from the features of the object and the features of the subject and agrees with the Best Match.
  - ▷ When the features of the subject and the features of the object are equally "good" for T, T agrees with the subject.

5.3 Undisruptable portmanteaus on T saving FG on Voice

- Here is the list of undisruptable portmanteaus:

{3, 11}	tokom-**inomot**	(S)he hits us (excl.)
{33, 11}	tokom-**inomot**	They hit us (excl.).
{3, 12}	tokom-**olinoq**	(S)he hits us (incl.).
{33, 12}	tokom-**olinoq**	They hit us (incl.).
{3, 22}	tokom-**olinaq**	(S)he hits you (Pl).
{33, 22}	tokom-**olinaq**	They hit you (Pl).
{4, 3}	'-tokom-**iht**	(S)he (obv.) hits her / him (prox.).
{44, 3}	'-tokom-**iht**	They (obv.) hit her / him (prox.).

Table 23: Undisruptable portmanteaus in Conjunct

- (43) summarizes my proposal about T's interaction with Voice.

(43) **T's Best Match is ϕ on Voice.**

a. **FG-pied piping:**
if ϕ is part of a FG and T has a portmanteau to expone the whole FG
$\Rightarrow$ T removes FG from Voice, gets it onto itself and expones it as a portmanteau.

b. **ϕ-copying:**
if ϕ is not part of a FG or if T does not have a portmanteau to expone Voice's FG
$\Rightarrow$ T agrees with ϕ on Voice and copies it without removing.

- When Voice creates a FG, a problem of finding a way of spelling it out arises.
- FG can be exponed on Voice itself by a very underspecified portmanteau (= the inverse marker):

(44) **Inverse**
oku / oq $\Rightarrow$ { $\{\pi\}$, $\{\pi\}$}

- When T agrees with a feature bundle present on Voice, it can sometimes help Voice out:

▷ If T has a better, more specific portmanteau for spelling the Voice's FG, it can pied-pipe the whole FG together with the ϕ-bundle that it is actually interested in and spell this FG on T with the more specific portmanteau.

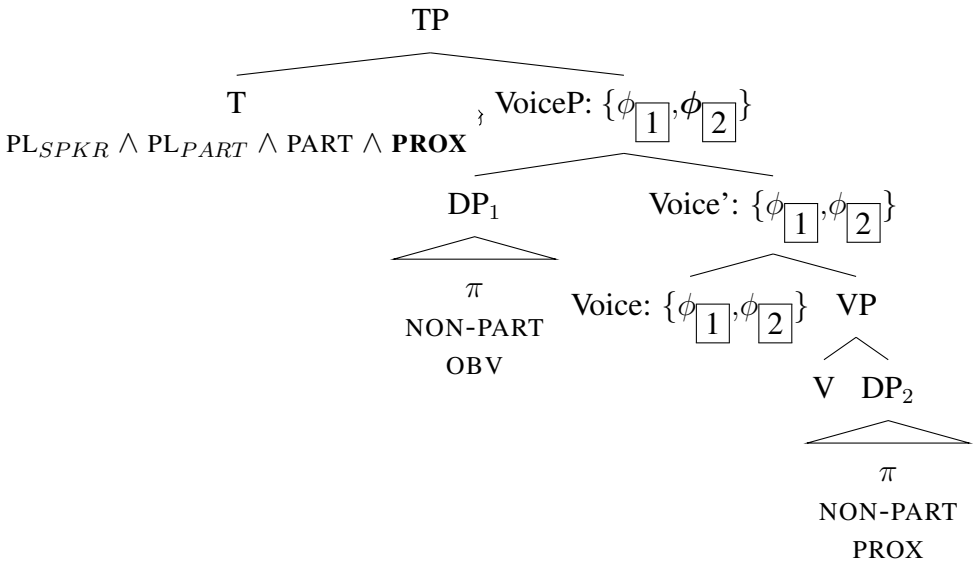
- Let's illustrate this proposal by comparing the {4(4),3} configuration, which results in an undisrupted portmanteau, with the {4(4),33} configuration, which shows an inverse marker in Voice with separate T agreement.
- Passamaquoddy has a portmanteau for the {4(4),3} configuration, (45), but not for the {4(4),33} configuration. I will assume the subset principle for portmanteaus as in (46).

(45) **Portmanteau for {4(4), 3}**
iht $\Rightarrow$ { $\{\pi$, NON-PART, OBV$\}$, $\{\pi$, NON-PART, PROX, SG$\}$}

(46) **The Subset Principle for portmanteaus**
A portmanteau of the form {X, Y} (where X and Y are sets of features) can spell out the set {X', Y'} on the syntactic head iff X is the subset of X', and Y is a subset of Y'.

- Note that (45) can expone the two feature bundles in the {4(4),3} configurations, but it cannot expone the two feature bundles in the {4(4),33} configurations.
- In the {4(4),3} configuration T will find its Best Match on Voice (47): Voice's feature bundle $\{\phi_{\boxed{2}}\}$ has the proximate feature that T is searching for.
- This feature bundle is part of a FG, and it happens to be the case that T has a portmanteau to spell this FG out (45).

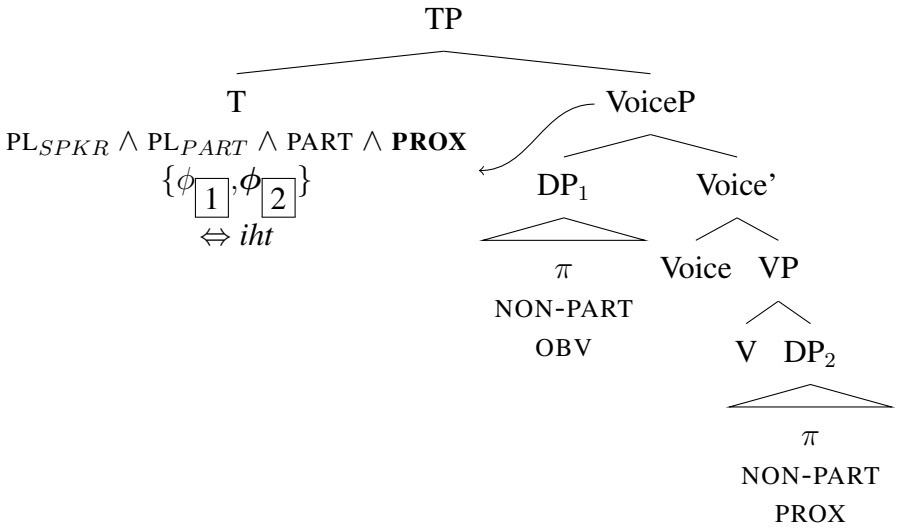
(47) {4, 3} configuration: T finds its Best Match on VoiceP



where $\{\phi_{\boxed{2}}\}$ = π ∧ NON-PART ∧ PROX (satisfies 1/4 of T's features: PROX);
DP$_1$'s features = π ∧ NON-PART ∧ OBV (satisfies 0 of T's features)

- Thus, T removes the FG from Voice and expones it as a portmanteau *-iht*, (48):

(48) {4, 3} configuration: T expones the FG that Voice created

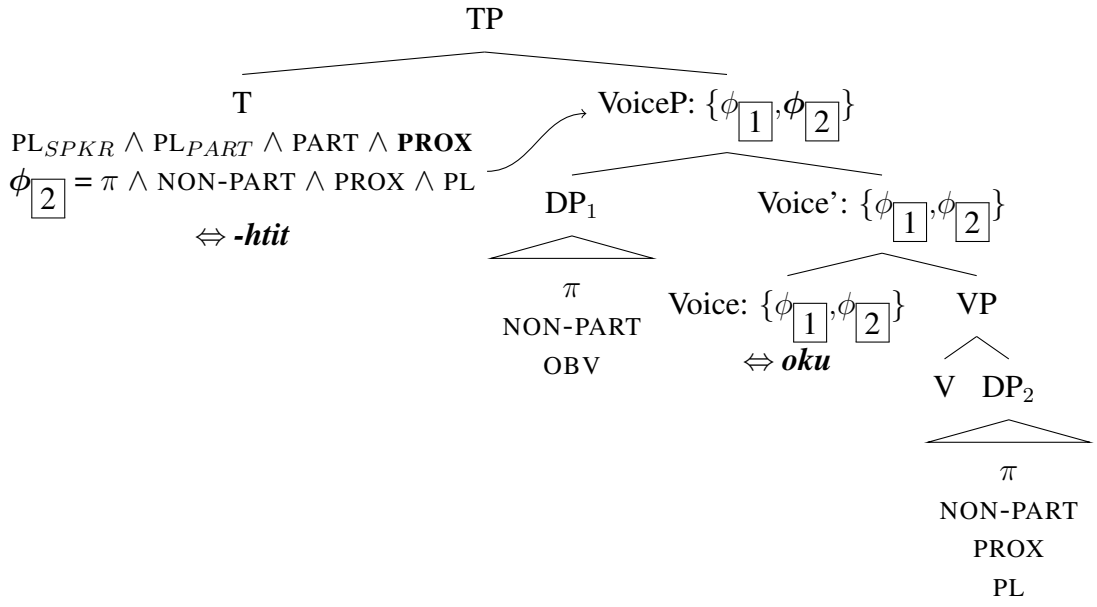


where $\{\phi_{\boxed{2}}\}$ = π ∧ NON-PART ∧ PROX (satisfies 1/4 of T's features: PROX);
DP$_1$'s features = π ∧ NON-PART ∧ OBV (satisfies 0 of T's features)

- Now consider the {4,33} configuration. As in the previous case, T finds its Best Match on Voice — the feature bundle corresponding to the proximate object.
- However, unlike in the previous case, T does not have a portmanteau that could expone the whole FG that Voice has created.

- So T only makes a copy of the object's set of features and expones them, without removing any features from Voice. The FG on Voice is exponed by the underspecified portmanteau — the inverse marker.

(49) $\{4, 33\}$ configuration: ϕ-copying



- The fact that the portmanteau *-iht* cannot be disrupted by negation receives a natural explanation under this account:
  - ▷ Under assumption that Neg(ation)P is a projection that intervenes between T and Voice, we do not expect *-iht* to be disruptable, because it expones the T head.

Next step: other non-disruptable portmanteaus.

- **Question:** what do we need to change about the specification of the Voice probe in order for the {3(3), PART.PL} configurations to result in FG (in addition to {4(4),3(3)} configurations that result in FG)?
- **The challenge:** it is impossible to come up with a strictly ordered hierarchy for a FG-explanation that would give us FG in {3(3), PART.PL} and {4(4),3(3)}, but in no other configurations.
- Consider the output of four configurations that we encounter in Conjunct:

(50) a. {3, PART.SG} = no FG (direct object agreement)
b. {3, PART.PL} = FG (undisruptable portmanteaus)
c. {PART.SG, PART.PL} = no FG (direct object agreement)
d. {PART.PL, PART.SG} = no FG (direct object agreement)

- Here is why this pattern makes it impossible to have a FG-explanation:

(51) **The issue with (50):**

1. From the fact that the {3, PART.SG} configuration results in no FG it follows that 3rd person proximate arguments should be not higher on the hierarchy than PART.SG: PART.SG $\geqslant$ 3.
2. From the fact that the {3, PART.PL} configuration results in FG it follows that 3rd person arguments are higher on the hierarchy than PART.PL arguments (otherwise FG would not have been created): 3 >PART.PL.
3. By transitivity, from (1) and (2) above we can conclude that that PART.SG >PART.PL.
4. However, from the fact that the {PART.SG, PART.PL} configuration results in no FG it follows that PART.SG arguments are not nigher on the hierarchy than PART.PL arguments: $\neg$ [PART.SG >PART.PL].
5. (3) and (4) together result in a contradiction.

- The contradiction that we've arrived at in (51) shows us that we cannot order the relevant kinds of noun phrases into a strictly ordered hierarchy.
- **Absence of a strictly ordered hierarchy is fatal for a FG-explanation:** (50a-b) are not compatible with (50c) being a configuration without FG.

Solution: adding disjunctive probing

- an approach to agreement along the lines of Béjar & Rezac (2009) and Coon & Keine 2020 already has conjunctive agreement encoded in it: a probe that has segments A, B, and C can be represented as a conjunction A $\wedge$ B $\wedge$ C: (52a) is equivalent to (52b).

(52) **Conjunction in agreement**

a. Probe with probing segments A, B, C:
[A]
[B]
[C]

b. Conjunctive Probe: A $\wedge$ B $\wedge$ C

c. **Interaction condition:** A $\vee$ B $\vee$ C (while they are active)

d. **Satisfaction condition:** A $\wedge$ B $\wedge$ C (when all become inactive)

- If we restate the same approach in terms of Deal (2015), we can state the same probe by defining an interaction condition in (52c) and a satisfaction condition in (52d).
- One can note that disjunction is already used in defining the probe's interaction condition.
- The only new thing then that we need to add is that **the satisfaction condition can also be a disjunction.**

(53) **The rules of disjunctive probing:**

a. If a goal X can fully satisfy one of the disjuncts of the disjunction A $\vee$ B, it checks off that disjunct and thereby satisfies the probe.

b. If a goal X cannot fully satisfy any of the disjuncts, but it can partially satisfy one of the disjuncts, it checks off some features of that disjunct.

c. The first interaction determines the disjunct: all checking of the features must proceed within the same disjunct that was first interacted with.

- Now we have all the tools to make a proposal about the Voice probe in Conjunct:

(54) **Conjunct Voice** *(final version)*

a. Segmental representation:

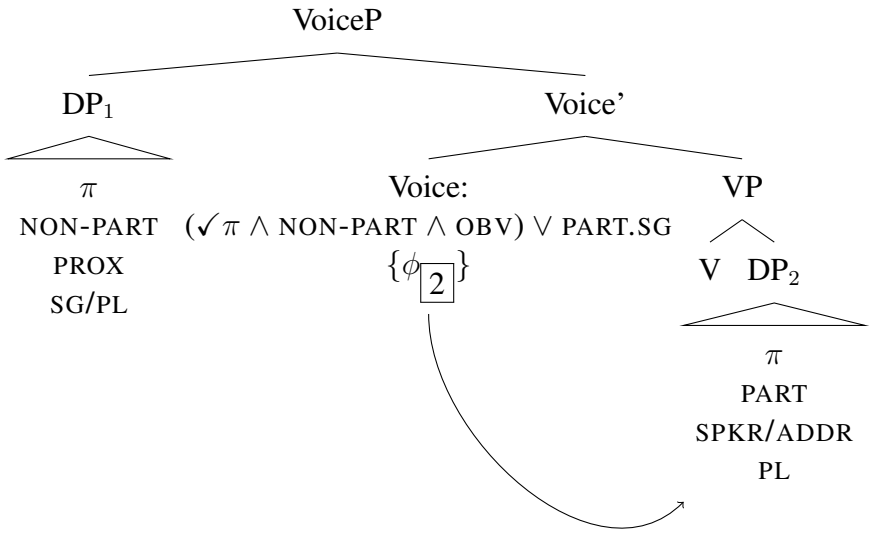
$[\pi]$
[NON-PART] $\vee$ [PART.SG]
[OBV]

b. Representation in terms of conjunction and disjunction:
$(\pi \wedge$ NON-PART $\wedge$ OBV$) \vee$ PART.SG

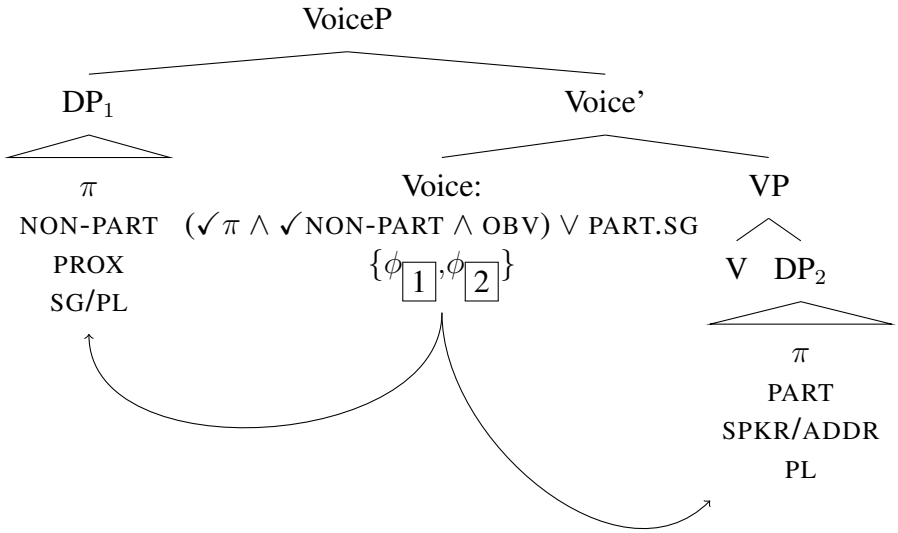
- The second disjunct contains one complex feature: the feature that checks that the goal is a singular participant.
- This disjunct basically serves as a stop-condition: the moment Voice will find a singular participant, it will stop its search.
- This allows us to get the pattern in (50). The $\{$3(3), PART.PL$\}$ configuration is represented in (55): FG is created.

(55) Voice agreement in the $\{$3(3), PART.PL$\}$ configuration

a. Voice agrees with the object: $\checkmark\pi$

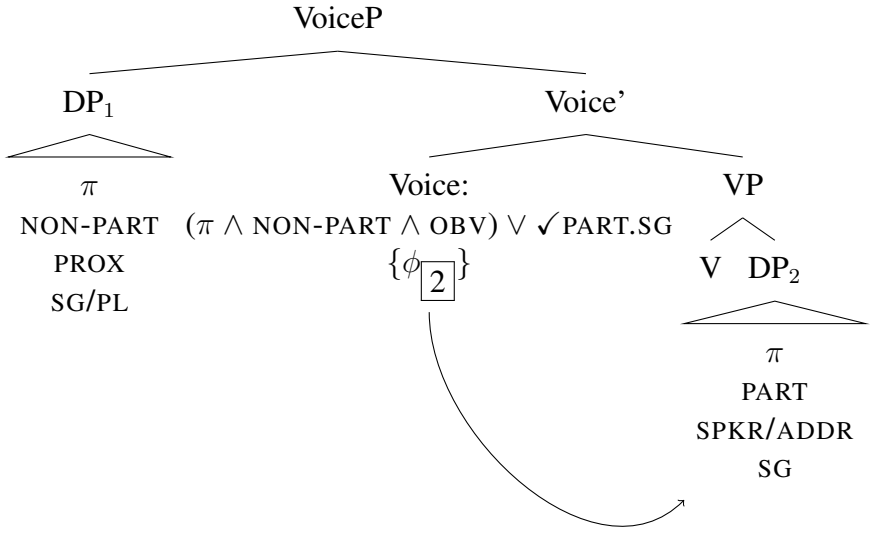


b. Voice agrees with the subject: ✓NON-PART

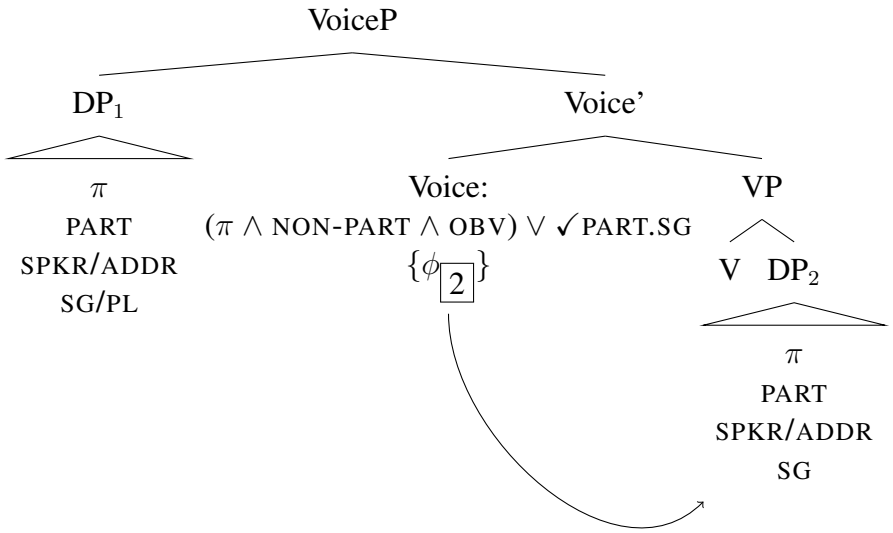


- The other configurations avoid Feature Gluttony: in {3(3), PART.SG} and {PART,PART.SG} the Voice probe gets satisfied due to the satisfaction of the PART.SG disjunct.

(56) Voice agreement in the {3(3), PART.SG} configuration

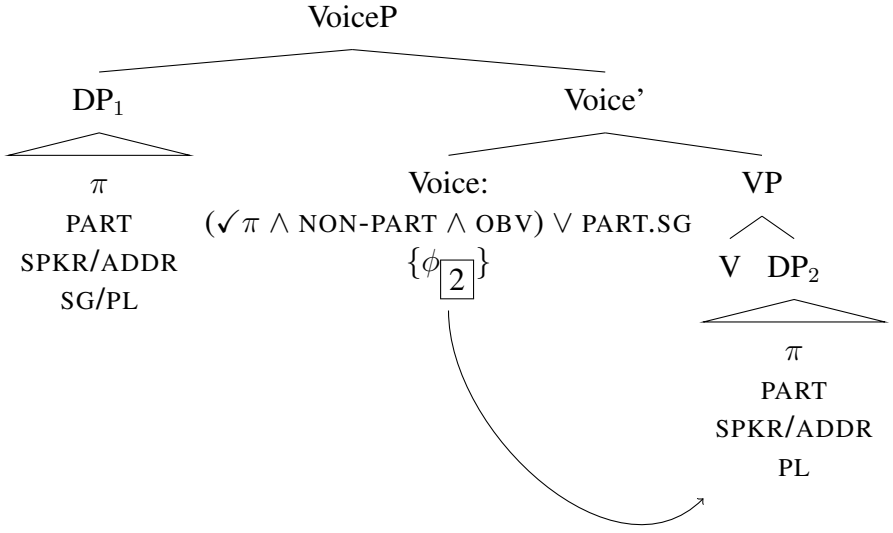


(57) Voice agreement in the {PART, PART.SG} configuration



- In {PART,PART.PL} the object satisfies π in the first disjunct, which commits the whole agreement operation to that disjunct. Thus, the subject will not have any additional features that Voice would agree with. The search will fail, and we will see object agreement.

(58) Voice agreement in the {PART, PART.PL} configuration



- Thus, we achieve the desired result: FG will be created only in {3(3), PART.PL} and {4(4),3(3)} configurations.
- We got this result by suggesting that the hierarchy in the Conjunct is exactly the same as in the Independent (table 24), and that the Voice probe is a disjunction of the specification of the highest category on the hierarchy (obviative NP) and the "singular particiant" feature.

Obviative	3rd person Proximate	Participant
π	π	π
NON-PART	NON-PART	−NON-PART=PART
OBV	OBV	−OBV

Table 24: Hierarchy in Conjunct *(final)*

- What the second disjunct added is that whenever there is a PART.SG object, the probe gets immediately satisfied and no FG is created.
- This makes the {3(3), PART.SG} configuration, which would otherwise result in FG, not create FG and show object agreement.

Prediction:

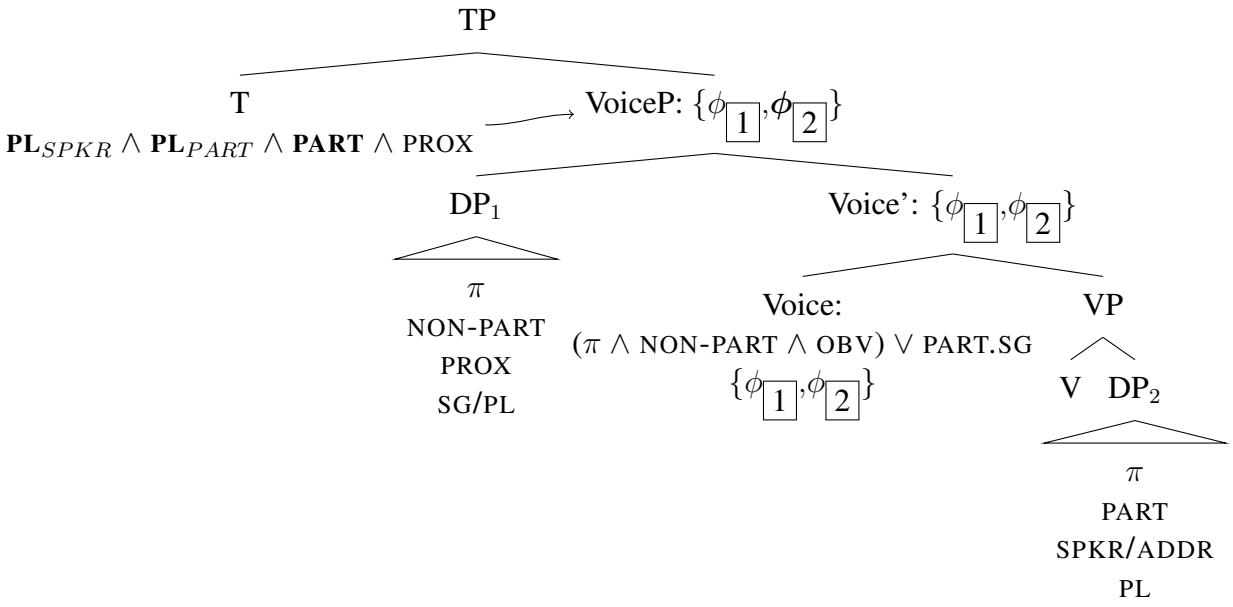
- If the combination of an obviative subject and a singular participant object was possible, it would have a "direct" configuration with no FG emerging.[7]
- This is so because the stop-condition PART.SG (= the second disjunct of Voice) is blind to what the features of the subject are.

Interaction between T and Voice in the {3(3), PART.SG} configuration

- Voice has created a FG, gathering features from the object and the subject. Voice's features will project onto the level of VoiceP, and thus the features of the object that Voice gathered and the features on the subject NP will become equidistant from T.
- T will be searching for the Best Match, and the object features on Voice turn out to be the Best Match.
- Depending on the person features of the participant object, the object features will satisfy either 2 or 3 segments of T, while the subject features can satisfy only one. This is illustrated in (59).

[7]While morphologically obviative subjects can occur with participant objects, this only happens when the subject is obviative due to having a possessor. In these cases it is not clear that the subject is also "obviative" with respect to the NP-external syntax: the verb agrees in the same way as if the subject was a proximate noun phrase. This issue needs more investigation, but at this point it doesn't seem to me that these obviative-marked subjects are obviative with respect to the VoiceP syntax, so I don't think we can draw any conclusions from these configurations.

(59) $\{$3(3), PART.PL$\}$ configuration: T finds Best Match on Voice



where $\{\phi_{\boxed{2}}\}$ = π ∧ PART ∧ SPKR/ADDR ∧ PL

(satisfies 2/4 of T's features (PART and PL$_{part}$) if the object is ADDR;
satisfies 3/4 of T's features if the object is SPKR (PART, PL$_{part}$, PL$_{spkr}$));

DP$_1$'s features = π ∧ NON-PART ∧ PROX (satisfies 1/4 of T's features: PROX)

- Having found the Best Match on Voice within a FG, T checks whether it could expone this FG better than Voice.
- It turns out that it can: T has lexical items that could spell FGs created the $\{$3(3), PART.SG$\}$ configurations better than underspecified portmanteaus, (60)-(61).

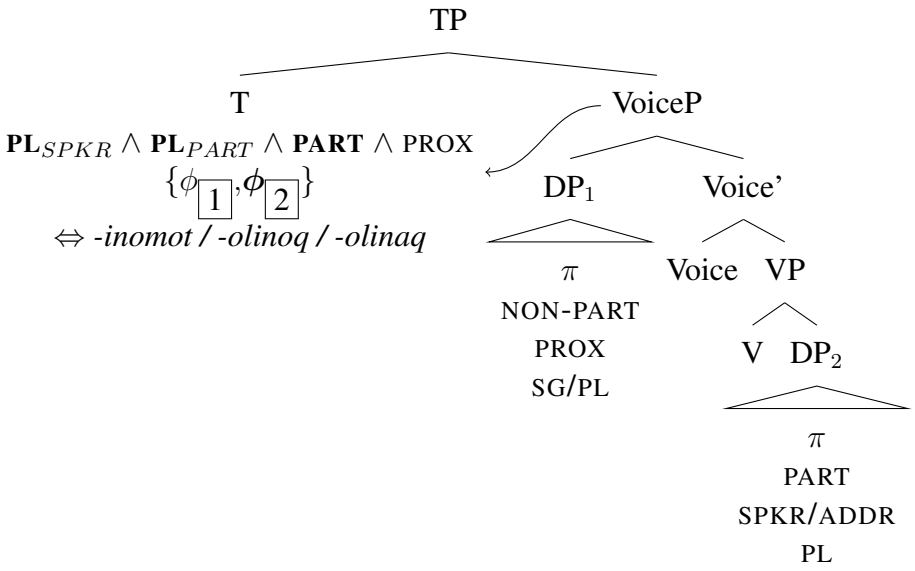
(60) **Portmanteau for $\{$3(3), 1PL.EXCL$\}$**
inomot ⇒ $\{$ $\{\pi$, NON-PART$\}$, $\{\pi$, PART, SPKR, PL$\}\}$

(61) **Portmanteau for $\{$3(3), 1PL.INCL$\}$**
olinoq ⇒ $\{$ $\{\pi$, NON-PART$\}$, $\{\pi$, PART, SPKR, ADDR, PL$\}\}$

(62) **Portmanteau for $\{$3(3), 2PL$\}$**
olinaq ⇒ $\{$ $\{\pi$, NON-PART$\}$, $\{\pi$, PART, ADDR, PL$\}\}$

- Thus, T pied-pipes the whole FG, relieving Voice from having to spell it out. The FG is lexicalized as a portmanteau which expones the T head, (63).

(63) {3(3), PART.PL}: T expones the FG that Voice created



- The undisruptability of the portmanteau by negation follows from the fact that it is a lexical item that expones features on T.
- My proposal also makes the following prediction:

  (64) **Prediction about the complementary distribution:**
  Given that undisruptable portmanteaus are an alternative spell-out of a Feature Gluttony created on Voice, I predict complementary distribution of the inverse marker and the undisruptable portmanteaus.

- This is a good prediction. Oxford(2018) notes that across Algonquian languages, portmanteaus and inverse markers are always in complementary distribution.
- My approach also makes **further predictions:**
  - ▷ If an undisruptable portmanteau is lost, I predict that a language should start using the inverse marker instead.
  - ▷ This is attested: Oxford (2014) shows that in Plains Cree, Parry Island Ojibwe, Listuguj Mi'gmaq and Cheyenne the inverse extends in Conjunct forms to the {3(3), PART.PL} configurations.
  - ▷ If an undisruptable portmanteau emerges as a VI, I predict that a language should start using it instead of the inverse marker.
  - ▷ Passamaquoddy's *iht* is such a case ({4(4),3}).

6 Concluding remarks

- I argued based on data from Passamaquoddy that an account of hierarchy effects that appeals to the creation of a feature gluttony (Coon & Keine 2020) can be used to explain the direct/inverse marking in Algonquian languages.

- I proposed that the probe on Voice, that corresponds to the direct/inverse agreement (Oxford 2018), is a probe that is searching for obviative arguments and that the inverse marker is an underspecified portmanteau spelling out feature gluttony.
- I have noticed a further hierarchy effect in Conjunct forms that has to do with disruptability of portmanteaus being created, and proposed that undisruptable portmanteaus are yet another way of saving the FG created on Voice.
- **Question for the future:** can my proposal extend to those Algonquian languages that have made innovations in their agreement systems since the Proto-Algonquian times, and have extended the inverse marker in Independent and Conjunct forms to more cells of the paradigm?

7 References

Béjar, Susana. 2003. Phi-syntax: A theory of agreement. Toronto, ON: University of Toronto.

Béjar, Susana, and Milan Rezac. 2003. Person licensing and the derivation of PCC effects. *Amsterdam studies in the theory and history of linguistics*, Science series 4: 49–62.

Béjar, Susana, and Milan Rezac. 2009. Cyclic Agree. *Linguistic Inquiry*. Vol. 40, P. 35-73.

Coon, Jessica, and Stefan Keine. 2020. Feature gluttony. Ms., McGill University and University of Southern California.

Deal, Amy Rose. 2015. Interaction and satisfaction in ϕ-agreement. In *Proceedings of NELS 45*, ed. Thuy Bui and Deniz Özyıldız, 179–192. Amherst, MA: GLSA.

Francis, David A., Robert Leavitt, and Margaret Apt. 2008. A Passamaquoddy-Maliseet dictionary. University of Maine Press.

Harley, Heidi, and Elizabeth Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language:* 482–526.

Oxford, Will. 2014. Variation in TA theme signs. Presentation at *the 46th Algonquian Conference*, Uncasville, Connecticut.

Oxford, Will. 2019. Inverse marking and Multiple Agree in Algonquin. *Natural Language & Linguistic Theory* 37.3: 955–996.