




ANSWERING NEGATIVE POLAR QUESTIONS IN GALLO

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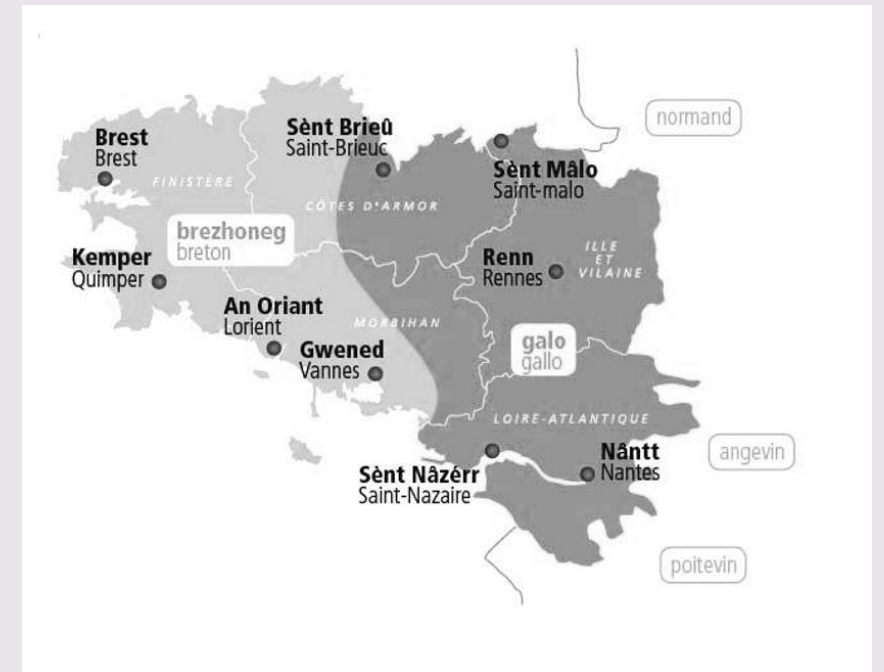
1 Introduction

- Use the interpretation of answer particles to Negative Polar Questions (NPQs) to diagnose the locus and interpretation of negation.
- Case study: Negation in Gallo.
- See Becerra Zita (2021) “Negation, polarity and answers to negative polar questions in Romance: the case of Gallo”.

- Interpretation of answer particles (*yes/no*) to NPQs :
 - *whether NO yields Double Negation (DN)*
 - *whether NO yields Negative Concord (NC)*
 - *whether YES confirms p or NOT p*
- Diagnostics for the position and interpretation of negation
 - Whether negation is low, middle or high. (Holmberg 2013, 2015)
 - Where negation is semantically interpreted
i.e. whether morphological negation is INEG/UNEG.
(cf. Zeijlstra 2004, Penka 2012)

2 Gallo

- Regional language of France.
- Known as the Romance Language of Brittany.
- Oil language.
- Spoken in: Upper Brittany, Lower Normandy and Maine.
- Nowadays: spoken in Plohua, Côtes d'armor, south of Paimpol, Rhuys and Morbihan.
- *Gall* was used by Breton speakers to refer to foreigners/speakers of French.



3 NEG-Diagnostics

- Based on Holmberg (2013, 2015), we formulate the following:

5. Neg-Diagnostics (Becerra Zita 2021)

- LowNegD.** L has low NEG if YES asserts that *not p* is true, while NO asserts that *not p* is false (thus confirming *p*).
- MidNegD.** L has middle NEG if bare YES cannot be used to assert that *p* is true, while NO asserts that *p* is false. To assert that *p* is true, L can resort to reversal particles (reversing the polarity of *not p*), or to extended yes answers.
- HighNegD.** L has high NEG if YES asserts that *p* is true, while NO asserts that *p* is false.

3.1 Low NEG Diagnostic

L has Low NEG:

If YES asserts that *Not p* is true, while NO asserts that *Not p* is false (thus confirming *p*).

Adverbs (e.g., typically, usually, sometimes) force NEG to be in a lower position (Holmberg 2013, 2015).

6. Do cats typically not like rotten food?

- 7. a. * Yes (Cats typically like rotten food.)
- b. ✓ Yes. (Cats typically don't like rotten food.)
- c. *No. (Cats typically don't like rotten food.)
- d. ✓ No. (Cats typically like rotten food.)

LowNeg

Yes (*Not p*)
Asserts *not p* holds
(*p* is false)

No (*Not p*)
Assert *not p* does **not** hold
(DN → *p* true)

3.1 Low NEG Diagnostic in Gallo

LowNeg
Yes (<i>Not p</i>) Asserts <i>not p</i> holds (<i>p</i> is false)
No (<i>Not p</i>) Assert <i>not p</i> does not hold (DN → <i>p</i> true)

8. *Ton chat, i maunj ti pouint du pâtë d coutum?*

Your cat he eats Q° not the pâté often

9. a. **Vèrr.*
true

b. ✓ *Sia.* Reverses polarity *not p* to *p*, asserts *p* is true
yes

c. ✓ *Nouna.* (your cat doesn't often eat pâté) Not DN : asserts *p* is false.
no

10i *Sia* is not an affirmative particle

a. *Sabrina viènt èl caté nouz?*

Sabrina comes she with us
'Is Sabrina coming with us?'

b. *Vèrr.* true

c. **Sia.* yes

- *vèrr* 'yes' cannot be used to assert that *Not p* is true.
- *nouna* 'no' cannot assert that *Not p* is false (DN reading), unlike English *yes* and *no*.
- *Nouna* confirms *Not p* and to confirm *p* the reversal particle *sia* must be used.

→ This is the answer pattern of **Middle Negation**, not Low Negation.

3.2 Middle vs. High Negation

Preposed negation in English (*Doesn't Max drink?*) is ambiguous.

2 contexts: (Ladd 1981, Romero & Han 2004) with different answer patterns.

NPI-context	PPI-context												
Question double-checks <i>Not p</i> → Middle Neg	Question double-checks <i>p</i> → High Neg												
Doesn't Max drink <u>either</u> ? / Ne boit-il pas non plus?	Doesn't Max drink <u>too</u> ? / Ne boit-il pas aussi?												
<table border="0"> <tr> <td>× Yes.</td> <td>/</td> <td>× Oui.</td> </tr> <tr> <td>✓ Yes, he does.</td> <td>/</td> <td>✓ Si.</td> </tr> <tr> <td>Extended-YES</td> <td>/</td> <td>Reversal particle</td> </tr> </table>	× Yes.	/	× Oui.	✓ Yes, he does.	/	✓ Si.	Extended-YES	/	Reversal particle	<table border="0"> <tr> <td>✓ Yes.</td> <td>/</td> <td>✓ Oui</td> </tr> </table>	✓ Yes.	/	✓ Oui
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Extended-YES	/	Reversal particle											
✓ Yes.	/	✓ Oui											
<p>10ii <i>Si</i> is not an affirmative particle Max vient ? Max is coming × Yes. ✓ Si.</p>													

3.2 Middle NEG Diagnostic

L has **Middle** NEG:

If NO asserts that p is false,

But bare YES cannot be used to assert that p is true. To assert that p is true, L resorts to reversal particles (reversing the polarity of *Not p*), or extended YES answers.

NPI-context:

11 a. Ali and Sabrina are two phonologists who will present at the Berber language conference.

b. A: Ali is not coming, so we don't have any phonologists in the program.

c. B: **Isn't Sabrina coming either?**

12. English

a. × Yes (She is coming.)

b. × Yes. (She is not coming.)

c. ✓ **Yes, *(she is).** Extended YES.

d. ✓ **No.** (She is not coming.) NC not DN

13. French

a. × Oui (Elle vient.)

b. × Oui. (Elle ne vient pas.)

c. ✓ **Si.** (Elle vient.) Reversal particle

d. ✓ **Non.** (Elle ne vient pas.) NC not DN

MidNeg

*Yes (*Not p*)

Extended-Yes (p),
Reversal: Si (p)

No (*Not p*) → NC
Asserts *not p* true.

3.2 Middle NEG Diagnostic in Gallo

NPI-context (Question double-checking *Not p*)

14a. *L' gâ Ali e la Sabrina, s'ée deûz fon-nolojist qhi von p-rzentë dé cheûzz*
the guy Ali and the Sabrina are two phonologists that are going to present the thing
den la préchée su lé lang bèrbèrr.

in the talk about the language berber

b. A: *L' gâ Ali, i ièn pouint. Donq j' avon pouint d fon-nolojist den l' program.*
the guy Ali he comes not so we have not the phonologist in the program

c. B: *La Sabrina, è vièn pouint non pu?*
the Sabrina she comes not either

15. a. * *Vèrr.* (Elle vient.)
true she is coming

b. * *Vèrr.* (Elle ne vient pas.)

c. ✓ *Dame sia ! / Sia.* (Elle vient.)
sure yes / yes

d. ✓ *Dame nouna ! / Nouna.* (Elle ne vient pas.) → NC not DN
sure no / no

→ Gallo has **Middle Negation**, just like French or English.

MidNeg

*Yes (*Not p*)

Extended-Yes (*p*),
Reversal: Si (*p*)

No (*Not p*) → NC
Asserts *not p* true.

3.3 High NEG Diagnostic

L has **High** NEG:

If YES asserts that p is true, while NO asserts that p is false.

PPI-context:

16 a. A: Ok, now that Stephan has come, we are all here. Let's go!

b. B: **Isn't Jane coming too?**

17 a. ✓ **Yes.** (She is coming.)

b. * **Yes** (She isn't coming.)

Asserts p is true.

c. ✓ **No.**

Asserts p is false.

HighNeg
Yes Asserts p is true.
No Asserts p is false.

3.3 High NEG Diagnostic in Gallo

PPI-context:

18 a. A : *Entendu. Le Stephan ée arivë, mézë. Tout l' mondd son arivë. S'éé parti !*
understood the Stephan is arrived now all the world are arrived let's go

b. B : ?? *La Jane, è vièn pouint (*itou) ?*
The Jane she comes not also

19 a. * *Vèrr* (Elle vient.) / (Elle ne vient pas.)
true she is coming / she is not coming

b. ✓ *Dame sia ! / Sia* (Elle vient.) Si_{REV}
sure yes yes

c. ✓ *Dame nouna / Nouna* (Elle ne vient pas.)
sure no no

- *Vèrr* cannot be used to assert p , to assert the positive proposition, *sia* is used.
- *Nouna* asserts p is false.

→ Again, this is the answer pattern of **Middle Negation**, not High Negation.

HighNeg
Yes Asserts p is true.
No Asserts p is false.

3.3 High NEG Diagnostic in SF

We find 2 dialects for SF:

PPI-context:

20 a. A : *Ok, maintenant que Stéphane est arrivé, nous sommes tous ici. Allons-y!*
ok now that Stéphan has.arrived we are all here let's go

b. B : *Jane ne vient pas aussi ?*
jane NE comes not also

21. SF-Dialect 1

- a. ✓ **Oui** (Elle vient)
yes she is coming
- b. × **Oui.** (Elle ne vient pas.)
yes she ne is coming not
- c. × **Si.**
- c. ✓ **Non.**

English answer pattern



22. SF-Dialect 2

- a. × **Oui** (Elle vient)
yes she is coming
- b. × **Oui.** (Elle ne vient pas.)
yes she ne is coming not
- c. ✓ **Si.** ((si), elle vient.)
- c. ✓ **Non.**

Gallo answer pattern (Middle NEG)



HighNeg
Yes Asserts p is true
No Asserts p is false

→ SF-Dialect 2 has **Middle**, but not **High** Negation, just like Gallo .

3.4 Typology

- Holmberg's typology :

23.

- i) Languages with all 3 positions: high, low, middle negation (English, Standard French (SF))
- ii) Languages with high and middle –but not low– negation (Swedish, Finish)
- iii) Languages with low –but neither high, nor middle– negation (Japanese)

Adding two language-types to the typology:

iv) Languages with middle –but neither high, nor low– negation (Gallo)

v) Languages with middle and low –but not high– negation (SF-Dialect 2)

- Why doesn't Gallo have Low Negation?
- Why don't either Gallo or SF-Dialect 2 have High Negation?

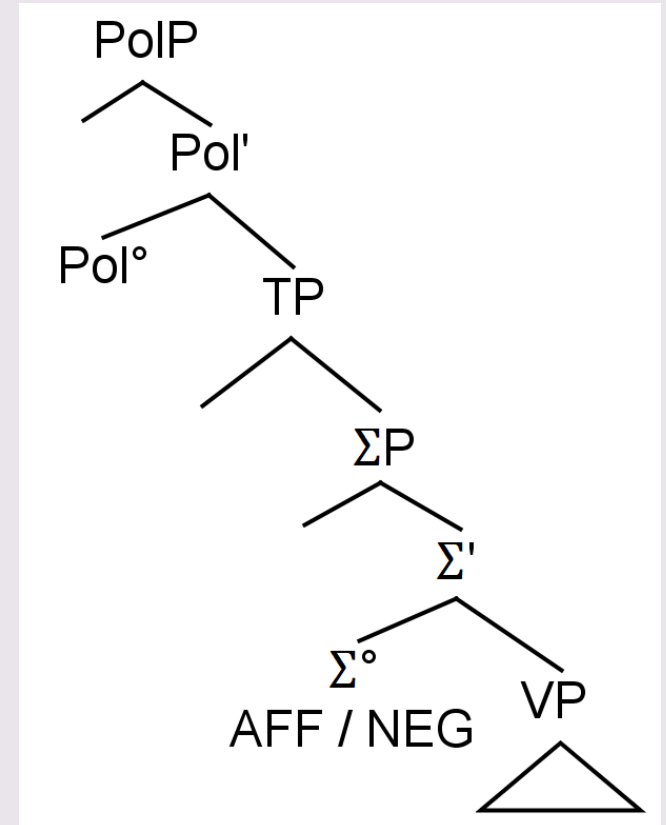
4 The clausal architecture of negation

Ingredients for our analysis:

- Following Holmberg (2015), we assume 3 possible positions for the locus and interpretation of negation:
 - LowNeg → inside TP.
 - MidNeg & HighNeg → above TP.

4 The syntax of polar answers to NPQs

- Adapting Holmberg, a.o., response particles are generated as the head of a polarity phrase (PolP) taking TP as its complement.
- Following Pasquereau (2020), we replace NegP inside TP by Σ P (Laka 1991) to represent that TP ranges over either affirmative or negative propositions.
- Lexical entries for affirmative vs. negative operator.
 - $[[\Sigma^+]] = \lambda p.p$
 - $[[\Sigma^-]] = \lambda p.\neg p$



4.1 Syntax of Low NEG answer patterns (e.g. English)

LowNeg

Yes (*Not p*)

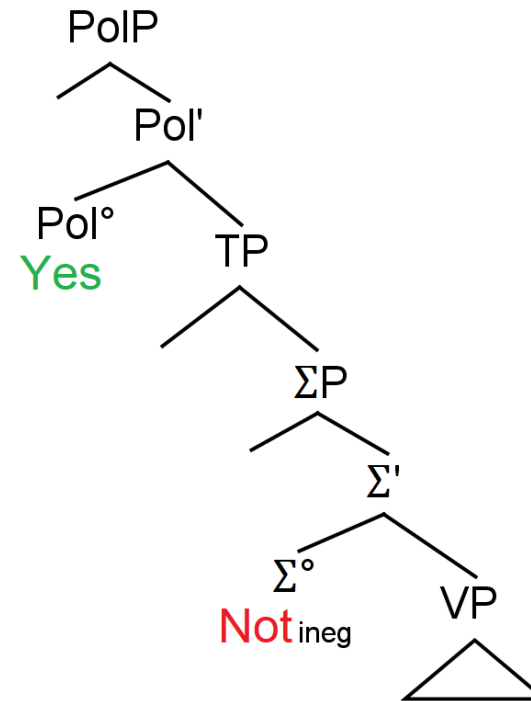
Asserts *not p* holds
(*p* is false)

No (*Not p*)

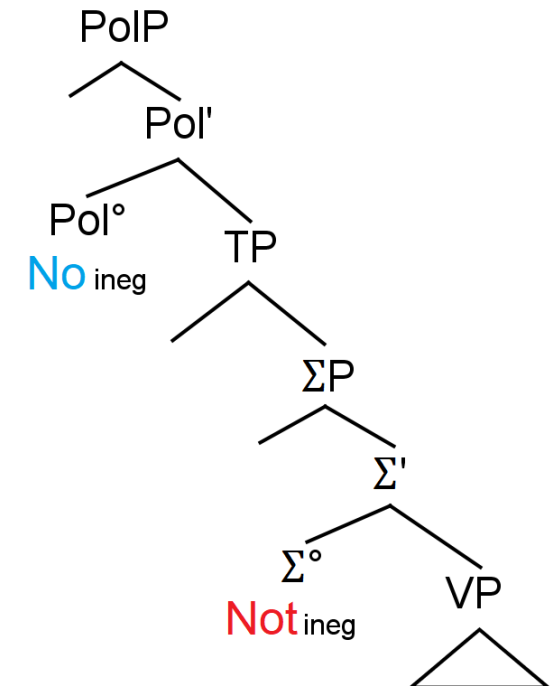
Assert *not p* does **not** hold
(DN \rightarrow *p* is true)

DN pattern available in English when both *no* and *not* an INEG feature.

Yes answer
 \rightarrow asserts *p* false.



No answer
 \rightarrow asserts *p* is true.



Why doesn't Gallo have Low Negation?

5 Why doesn't Gallo have Low Negation?

→ The lack of low negation follows from the general property in Gallo:

Neg-words in Gallo (neg-indefinites, and morphological negation) are not intrinsically negative. As such, they carry an UNEG that needs to be licensed by a covert negative operator $\text{NEG } \emptyset_{\text{INEG}}$ (Guilliot & Becerra Zita 2017, Becerra Zita & Demirdache 2018, Becerra Zita, 2021)

14. Gallo: *Y'a pas persone?*

There-has not no-one

'Is anyone/someone there?' (Becerra Zita & Demirdache 2018: 122)

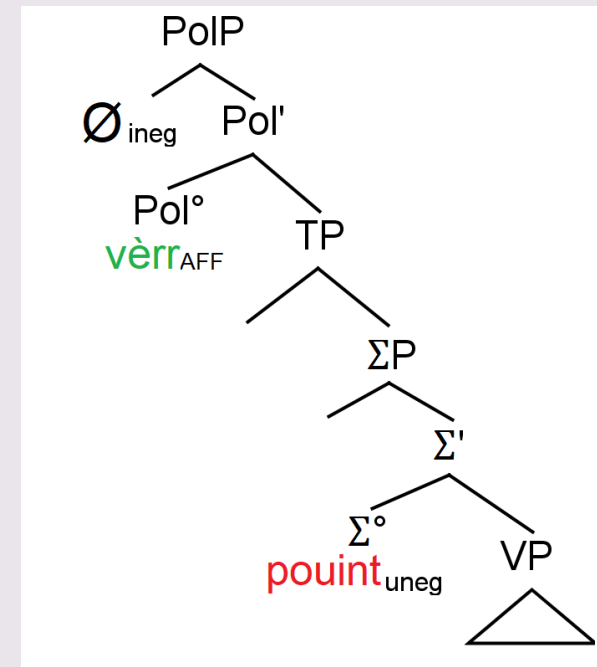
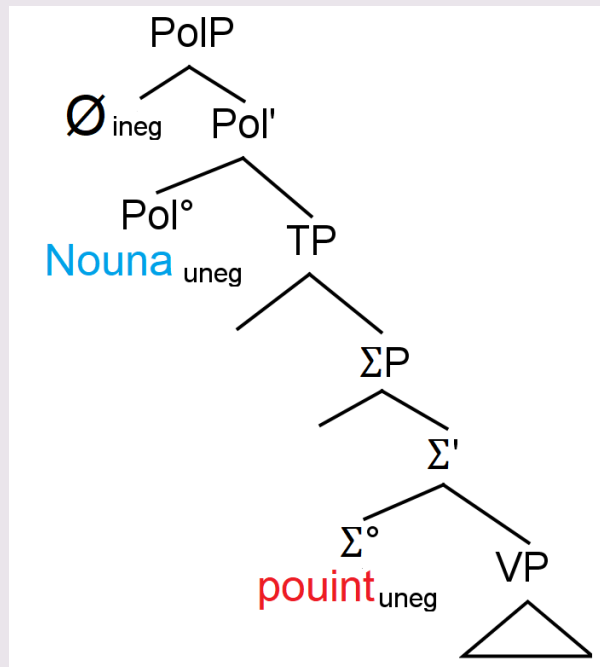
Both *pas* and *persone* co-occur in a yes/no question (NPI context) on a non-negative reading.

→ *nouna* ('no'), just is like any other neg-word in the language (including *pouint* ('not')), is not intrinsically negative.

5 Why doesn't Gallo have Low Negation?

'*nouna*' cannot yield DN since both *nouna* and *point* carry a UNEG feature which must be licensed by \emptyset_{INEG} .

Feature clash between $v\grave{e}rr_{AFF}$ and \emptyset_{INEG} (required to license $point_{UNEG}$)
 'sia' (reversal particle) use to assert the positive proposition.



6 Clausal architecture of Middle & High NEG

- We adopt Romero & Han's (2004) VERUM hypothesis:

VERUM is a conversational epistemic (focus) operator expressing

“it is for sure that we should add $p/not\ p$ to the Common Ground (CG)”

High vs. Middle negation: scopal ambiguity between negation/VERUM.

- $[NOT [VERUM\ p]] \rightarrow$ Middle NEG
- $[VERUM [NOT\ p]] \rightarrow$ High NEG

- Provide fully integrated syntactic account of high and middle NEG:

by incorporating into the syntax Romero & Han's VERUM hypothesis:

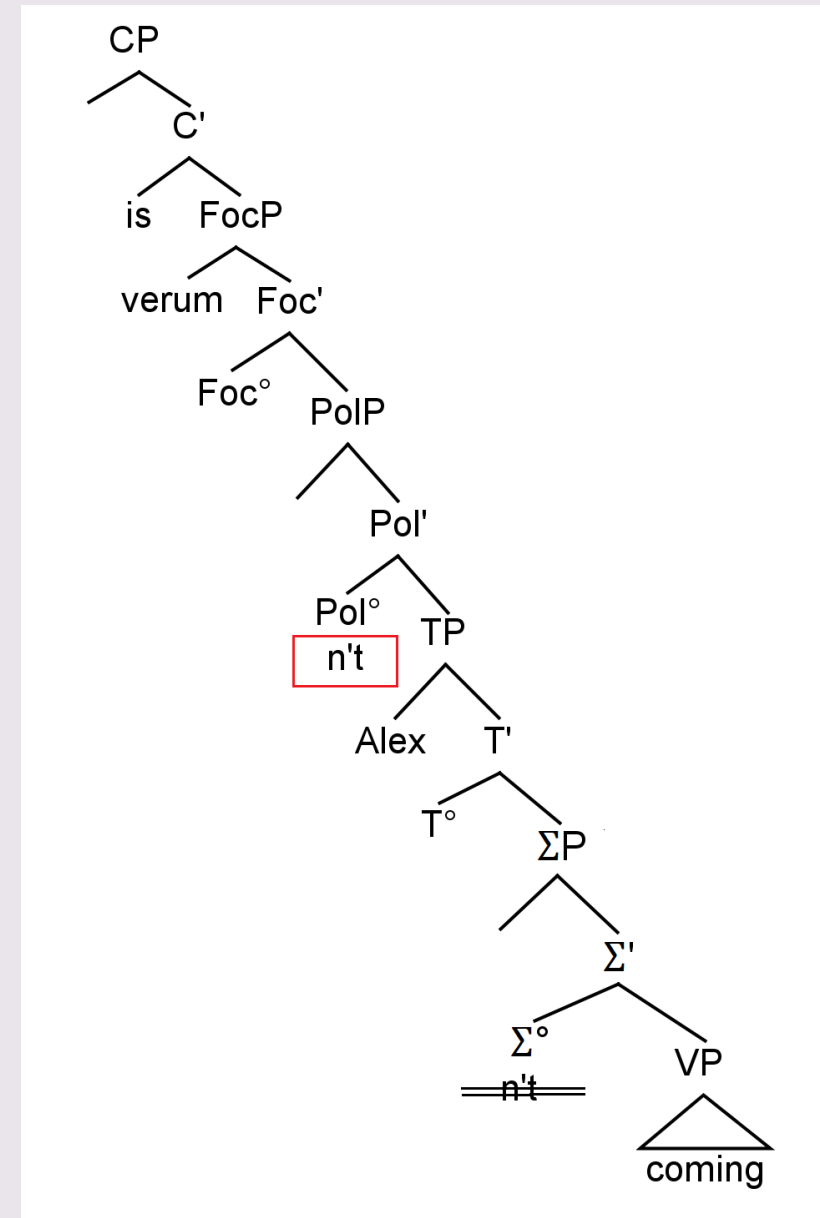
VERUM is projected as a focus operator (Spec/FocP) that can be generated either below or above PolP.

6 Middle NEG

24a. Isn't Alex coming either?

b. [VERUM [**NOT** *p*]] (Question about *Not p*)

When VERUM scopes over negation,
the speaker is double-checking *Not p*.

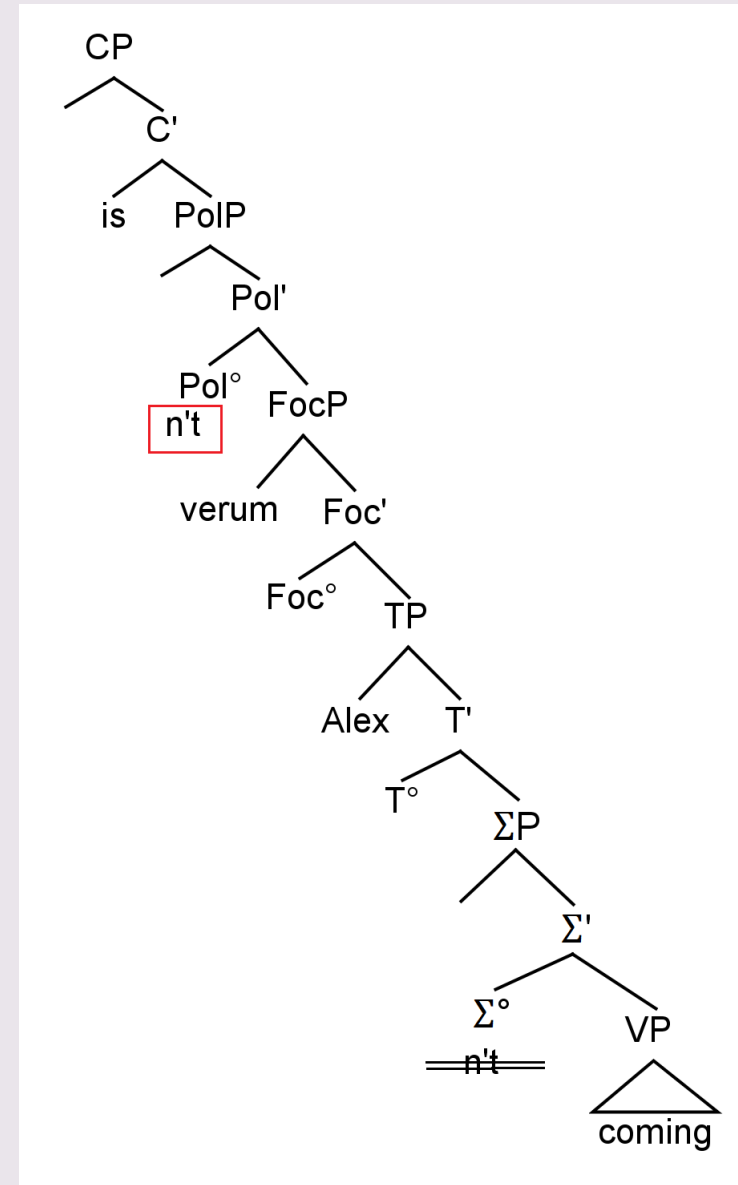


6 High NEG

25a. Isn't Alex coming too?

b. [**NOT** [VERUM *p*]] (Question about *p*)

When negation scopes over VERUM,
the speaker is double-checking *p*.

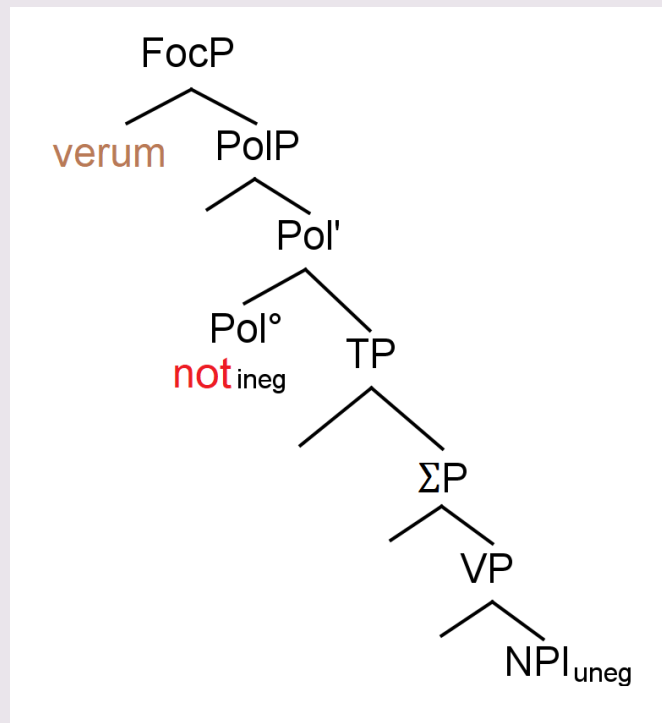


Why don't either Gallo or SF-Dialect 2
have High Negation?

7 English vs. Gallo: Middle NEG (VERUM < NEG)

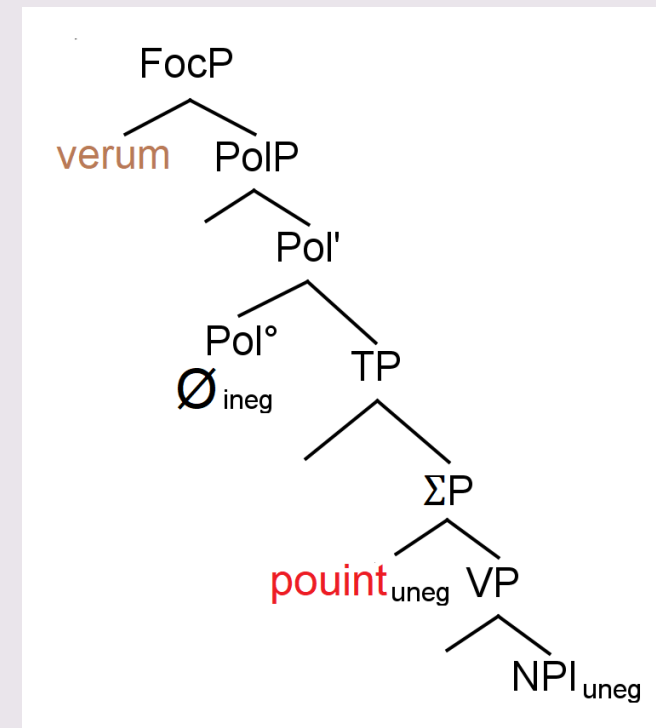
26. English

Not_{INEG} generated under Pol° below VERUM and can license an NPI_{UNEG} inside TP.



27. Gallo

∅_{INEG} is generated under Pol° below VERUM and can license morphological NEG *pouint_{UNEG}* and the NPI_{UNEG} inside TP.



7 English vs. Gallo: High Negation NEG < VERUM

28. English

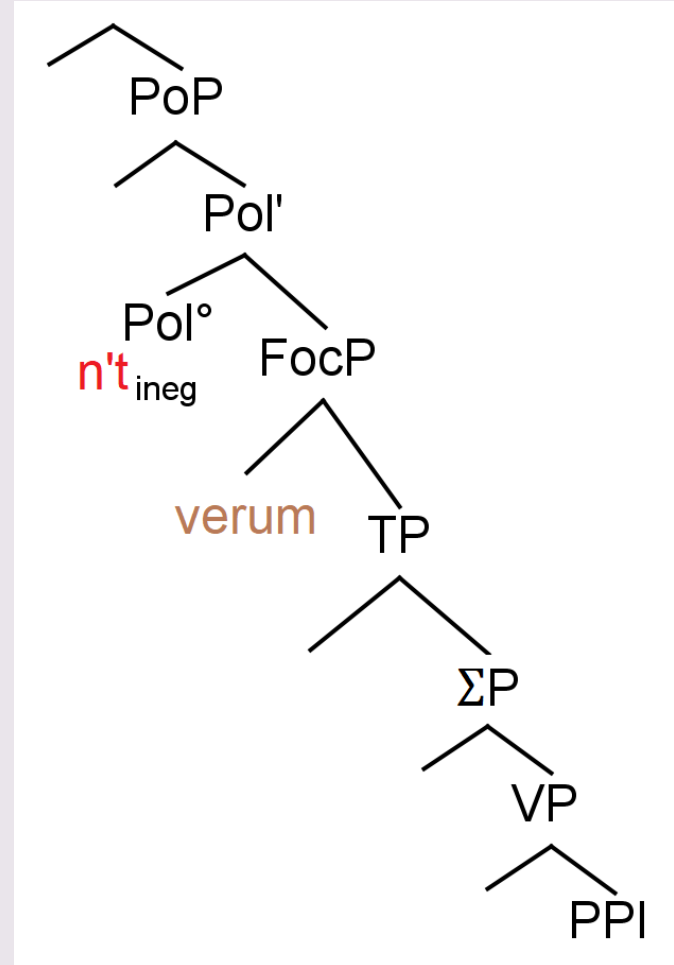
$N't_{\text{INEG}}$ is generated under Pol° .

NEG generated above VERUM.

VERUM intervenes between NEG and the PPI

→ VERUM shields the PPI inside TP.

→ PPI is licensed.



7 English vs. Gallo: High Negation NEG < VERUM

29. Gallo

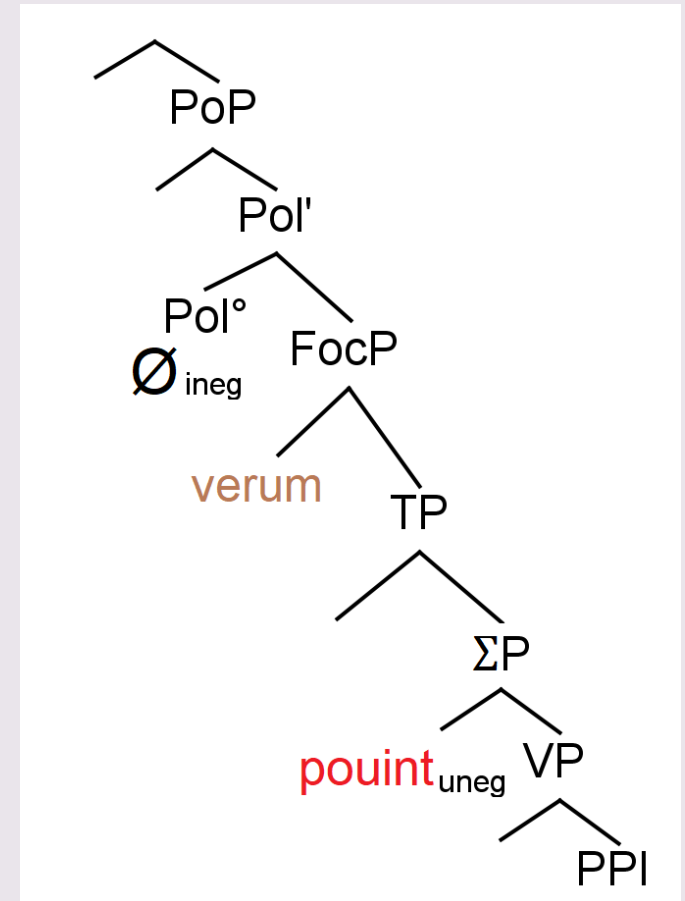
*pouint*_{UNEG} behaves like an NPI!

\emptyset _{INEG} is generated under Pol° .

NEG generated above VERUM.

VERUM intervenes between \emptyset _{INEG} and *pouint*_{UNEG}.

→ If VERUM shields the PPI from negation, *pouint* cannot be licensed.



8 Cross-linguistic variation

- Why does **Gallo & SF-Dialect 2** not have High negation?

Because VERUM intervenes between high NEG (I.E. \emptyset_{INEG}) and *pas* carry an UNEG feature that needs to be licensed by \emptyset_{INEG} .

- Why does **Gallo** not have Low negation?

Because both morphological NEG *pas* and the response particle answer *nouna* carry an UNEG feature that needs to be licensed by \emptyset_{INEG} .

- Why does **SF-Dialect 2** have Low negation?

Because the response particle *non* carries INEG (as English) and can thus yield DN in conjunction with \emptyset_{INEG} .

Conclusion

- Derive cross-linguistic variation across languages, from the setting of 2 parameters: whether morphological NEG and negative polar response particles both /each contribute semantic NEG.
- 2 more language types are added to Holmberg's typology: **Gallo and Standard French Dialect 2.**
 - i) Languages with all 3 positions: high, low, middle negation (English, Standard French (SF))
 - ii) Languages with high and middle –but not low– negation (Swedish, Finish)
 - iii) Languages with low –but neither high, nor middle– negation (Japanese)
 - iv) Languages with middle –but neither high, nor low– negation (Gallo)
 - v) Languages with middle and low –but not high– negation (SF-Dialect 2)

8 Selected references

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- Zeijlstra, H. 2004. *Sentential Negation and Negative Concord*. Ph.D. diss., University of Amsterdam. Utrecht: LOT Publications.



THANK YOU



Derive cross-linguistic variation across 5 languages, from the setting of 2 parameters:
 whether morphological NEG and negative polar response particles both /each contribute semantic NEG.

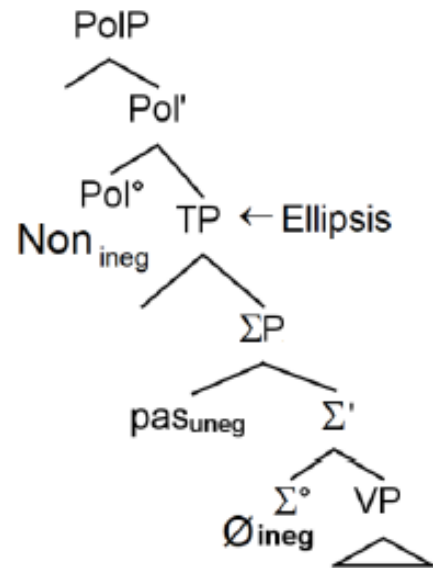
Language	Gallo	SF-Dialect 2	SF-Dialect 1 / Spanish / English
Negative Response particles	Nouna _{UNEG}	Non _{INEG/UNEG}	Non _{INEG/UNEG} / No _{INEG/UNEG} / No _{INEG/UNEG}
Sentential Negation	Pas/pouint _{UNEG} / Ø _{INEG}	Pas _{UNEG} / Ø _{INEG}	Pas _{INEG} / No _{INEG} / Not _{INEG}

2.1 The interpretation of Answers to NPQs

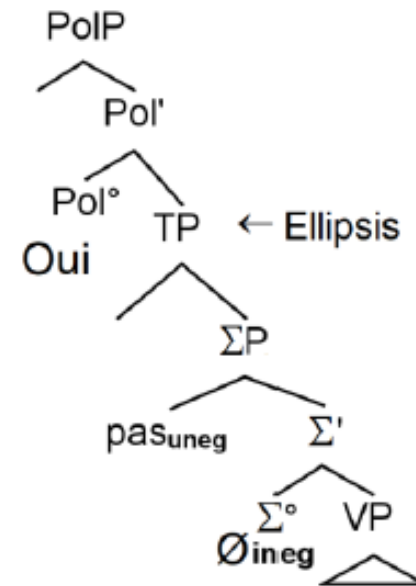
Polar response particle	LowNeg question about: NOT p	MidNeg question about: NOT p	HighNeg question about: p
	2. Is John sometimes not coming over the weekend?	3. Isn't John coming (either)?	4. Isn't John coming (too)?
yes	yes (<i>NOT p</i>)	*yes (<i>p</i>) *yes (<i>NOT p</i>)	yes (<i>p</i>)
si-reversal		yes, he is. (eng) si (<i>p</i>) (fr)	
no	no (<i>p</i>) → DN /*NC	no (<i>NOT p</i>) → NC /*DN	no (<i>NOT p</i>)

(76) Answers for a polar question with low negation in French Dialect 2

a.



b. *



4 Annexe: lack of low negation in Gallo

<p>11. Jean ét-ti <u>gheugefais</u> q' il manje pas de paen ? Lit.: 'Jean, are there sometimes that he does not eat bread?'</p>	<p>13. Do cats typically not like rotten food? (Holmberg, 2013)</p>
<p>12. a. * Ver b. ✓? Ver c. ✓ Sia Sia_{REVERSE} d. ✓ Nouna ! NC e. * Nouna ! DN</p>	<p>14. a. * Yes (Cats typically like rotten food.) b. ✓ Yes (Cats typically don't like rotten food.) c. * No (Cats typically don't like rotten food.) NC d. ✓ No (Cats typically like rotten food.) DN</p>

6.5 Standard French-Dialect 2: Low Neg

30. *Est-ce que (parfois) Jean (parfois) ne mange pas de pain ?*

Q.PRT sometimes Jean sometimes NE eats not of bread

Does Jean sometimes not drink soda?

31 a. * *Oui (Jean parfois mange du pain.)*

Yes (John sometimes does drink soda.)

b. √ *Oui (Jean parfois ne mange pas du pain.)*

Yes (John sometimes does not drink soda.)

c. * *Si (Jean mange toujours du pain).* SI-REVERSE

Yes-rev (John always does drink soda.)

d. * *Non (Jean parfois ne mange pas du pain.)* *NC

No (John sometimes does not drink soda.)

e. √ *Non (Jean mange toujours du pain.)* DN

No (John always does drink soda.)

	Low Neg
Dialect 1	oui (<i>NOT p</i>) no (DN)
Dialect 2	oui (<i>NOT p</i>) no (DN)

→ SF-Dialect 2 has **Low Negation**.