

PROBING FOR C: WHAT GERMANIC CAN LEARN FROM GALICIAN

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1. INTRODUCTION

Complementizer agreement (C-AGR) has been explained via three theoretical avenues:

- True agreement (e.g. Carstens 2003)
- Cliticization (e.g. van Alem 2020 a,b)
- Post-syntactic insertion (e.g. Fuß 2014)

Theories that support either agreement or cliticization have followed clear, independent reasoning

- It has been argued, however, that post-syntactic insertion can account for all types of C-AGR
- This includes instances of double agreement (e.g. Gruber 2008) and first conjunct agreement (e.g. Haegeman & van Koppen 2012)

I argue that post-syntactic insertion is incapable of accounting for all C-AGR varieties

- Galician (Romance)
- Nez Perce (Plateau Penutian/Lepitan)

In particular, I argue against the idea that PF has syntactic-like machinery in order to realize the agreement morphemes and C-AGR patterns that these languages boast

If your theory X requires ‘post-syntax’ or the ‘PF-branch’ to traffic in [...] the finer details of syntactic phrase structure, then your theory is a bad one.

(Preminger 2018)

The idea of a high powered ‘second-syntactic’ mechanism in the PF-branch has bled into work on head movement, case assignment, chain uniformity, agreement, etc.

- But this has muddied the waters regarding what must be truly syntactic and what should be left to the post-syntax

A great deal of work on numerous phenomena has now shown that many aspects of grammar that were once argued to be morphological are, indeed, syntactic

- Person Case Constraint (PCC) (Béjar & Rezac 2003, 2009; Preminger 2014, 2019; Coon & Keine 2020; Deal 2020, *i.a.*), Dependent Case (Levin & Preminger 2015), head movement (Den Dikken 2007, Roberts 2010, Preminger 2019, *i.a.*), etc.
- ... And I argue here that C-AGR is no different.

GOALS

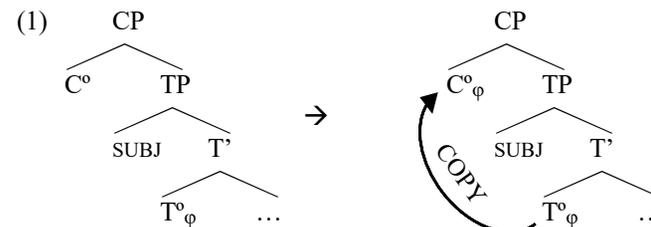
- To show that while there are C-AGR varieties that seem to tolerate a post-syntactic insertion account, this is based on evidence from the Germanic language family alone (and not all of them tolerate it well)
- To provide evidence that C-AGR is not always dependent on the ϕ -features found on T (and that assuming so overgenerates in costly ways)
- To dispense with the notion that we must leave (seemingly) morphological phenomena to the post-syntactic branch— in most cases, this is the work of the syntax

I shall present data from Galician and Nez Perce, demonstrating how the two variations of complementizer agreement are vastly dissimilar in their realizations, yet I argue that both must be accounted for within the syntax

2. POST-SYNTACTIC INSERTION AS C-AGR

Fuß (2014) provides an approach that aims to dispense with the need to account for C-AGR phenomena within the syntax proper

- Instead, he claims that there is a C-T dependency and that the features on T are simply copied post-syntactically from T to C



More concretely, he defines this procedure in the following manner:

(2) STEPS FOR POST-SYNTACTIC INSERTION

Syntactic computation

- a. AGREE: T° probes for and agrees with the subject

Post-syntactic computation

- b. COPY: The ϕ -set on T° is copied
 c. FEATURE INSERTION: The copied ϕ -set on T° is inserted on C°
 d. VOCABULARY INSERTION: The realization of the same exponent on C° as on T°

(Fuß 2014:63)

ARGUMENT #1: The morphological exponent on C is often (but not always) the same on T

- (3) ob-st du noch Minga kumm-st
 whether-2SG you to Munich come-2SG
 ‘... whether you come to Munich...’

Bavarian

- In fact, when T is elided, C may not show agreement

- (4) a. D’Resl is gresser [als wia-st du bist]
 the-Resl is taller than as-2SG you are
 b. *D’Resl is gresser [als wia-st du]
 the-Resl is taller than as-2SG you
 c. D’Resl is gresser [als wia du]
 the-Resl is taller than as you
 ‘Resl is taller than you (are).’

COUNTER ARGUMENT #1: Double-agreement C-AGR varieties show the different (spelled-out) morphological exponents on C than on T (Gruber 2008)

- (5) wem-ma mia noch Minga kumm-an
 when-1PL we to Munich come-1PL
 ‘... when we come to Munich...’

Lower Bavarian

SOLUTION TO COUNTER ARGUMENT #1: The identical morphological nature of the agreement on C and that of T is only assumed if one takes the operation in (2b) to resort to copying of the spell-out of the T morpheme rather than the featural identity of the ϕ -set

- (6) a. T: [PL] → /-an/ (1PL and 3PL are identical)
 b. C: [1], [PL] → /-ma/ (C-AGR)

ADDITIONAL EVIDENCE FOR POST-SYNTACTIC INSERTION PLAUSIBILITY

Fuß argues that a post-syntactic account is feasible even in instances in which the ϕ -set of C and that of T are not the same (e.g. first conjunct agreement)

- (7) Ich denk de-s [toow en Marie] kump
 I think COMP-2SG you and Marie come_{PL}
 ‘I think that you and Marie will come.’

Limburgian (Haegeman & van Koppen 2012:443)

Whereas C-AGR as FCA has been argued to be syntactic in nature (van Koppen 2005, Haegeman & van Koppen 2012), Fuß argues that this may be managed post-syntactically via an impoverishment rule that deletes the second ϕ -set of the conjunction

- (8) a.

- b. $\langle [\phi1], [\phi2] \rangle \rightarrow [\phi1 / \{ _ [\phi1] \}]$

INTERIM CONCLUSION: The argument for post-syntactic insertion in Germanic seems viable with minimal post-syntactic repair in order to derive grammaticality, even in more complex varieties such as those of FCA

3. GALICIAN C-AGR

Complementizer agreement in Romance is extremely rare¹

Via several diachronic developments, a main-clause C-AGR phenomenon was engendered around the beginning of the 19th century (Gravely 2021)²

- Headed by a select few presentative complementizers
 - *Velaí/Velaquí* ('Behold')
 - Intransitive verbs only (motion or state)
 - *vir* ('to come'), *ir* ('to go'), *estar* ('to be'), etc.
 - The C-AGR morpheme is morphologically identical to accusative clitics; full paradigm (10)
 - Agrees with the subject in [NUMBER] and [GENDER]
 - Galician is *pro-drop* (Gupton 2014)
 - Overt subjects must be in post-verbal position
 - Typically found in the present or imperfect
 - T inflects for [PERSON] and [NUMBER] in Romance
- (9) a. *Velaí os están (os nenos)*
 behold CL_{M,PL} be.PRS.3PL the_{M,PL} kids_{M,PL}
 'There are the children!'
- b. *Velaquí a ía po-la beira*
 behold CL_{F,SG} go.IMPV.3SG by-the bank
 'There she went by the river bank.'
- c. **Velaquí o fican as nenas*
 behold CL_{M,SG} stay.PRS.3PL the_{F,PL} girls_{F,PL}
 Intended: 'There remain the girls.'
- There are small, geo-linguistically unrelated regions that do permit (9c); however, I leave these cases alone, as they present an even more difficult road for a post-syntactic insertion account

¹ I do not consider the Italian cases provided by Parry (2007) and Ledgeway (2013) as instances of complementizer agreement but, instead, complementizer alternation.

² Although main-clause complementizer agreement is rare, it has also been attested in Wolof (Torrence 2012)

(10) GALICIAN C-AGR MORPHEME PARADIGM

	SG	PL
1 st	<i>o, a</i>	<i>os, as</i>
2 nd	<i>o, a</i>	<i>os, as</i>
3 rd	<i>o, a</i>	<i>os, as</i>

→ NOTE: This cannot be an instance of clitic doubling due to the fact that 1st- and 2nd-person subjects are licit, as well; mismatch in [PERSON]³

- (11) a. *Velaquí os estamos*
 behold CL_{M,PL} be.PRS.1PL
 'Here we are!'
- b. *Velaí as ides*
 behold CL_{F,PL} go.PRS.2PL
 'There you (PL) go!'

(12) THE COARSENESS PROPERTY OF CLITIC DOUBLING

If CL^o is the result of clitic doubling of some noun phrase α , then CL^o will reflect the full set of ϕ -features on α .

(Preminger 2014:51)

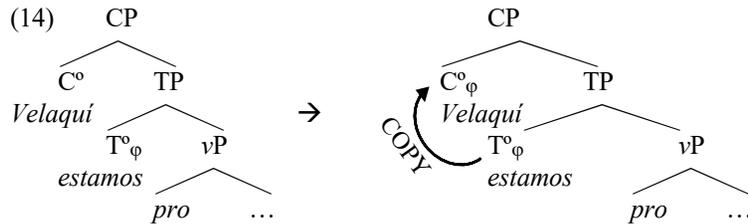
? How does a post-syntactic insertion account hold up in Galician?

- Much like in Germanic, C may not show agreement when T is elided

- (13) **Velaquí os (eles)*
 behold CL_{M,PL} they_{M,PL}
 Intended: 'Here they are!'

³ In Gravely (2021), I posited the idea that both a cliticization (but not a clitic doubling) account and an agreement account are feasible. I explore only the agreement account here.

- This is promising, as it implies some sort of C-T connection as posited by Fuß



- a. T: [1] [PL] → /-amos/ (1PL)
- b. C: [1], [PL] → */-nos/ (C-AGR)
- If we assume a copying mechanism as suggested by Fuß, the realization of agreement on C should be **nos*, contrary to what we find

- (15)
- *Velaquí nos estamos
behold CL_{1PL} be.PRS.1PL
 - Velaquí **os** estamos
behold CL_{M.PL} be.PRS.1PL
Intended: 'There we are.'

? **What type of repair strategy must be implemented in order to recover?**

- There must be at least two procedures in order to render the correct output of the agreement morpheme
 - One that removes the [PERSON] feature
 - One that inserts a [GENDER] feature

(16) *Person stripping on C*: φ: <[1, PL]> → φ: <[PL]>

- The removal of [PERSON] leaves the φ-set with a lone [PLURAL] feature
 - This is problematic, as there is no one realization of [PLURAL] in Romance
 - Ex: For clitic-like morphemes: */-s/

There may be no default [GENDER] feature insertion (which would be [MASCULINE]), as we have seen subjects that bear [FEMININE]

- We must assume, thus, a mechanism that searches for a feature not related to what has been already inserted (and deleted) on C

(17) *Find φ*

- Search for a feature not related to [PERSON] or [PLURAL]
- Copy feature to C
- Realization: C: φ<[PL]> → φ: <[PL, MASC]>

→ This internal mechanism is far more complicated than in Germanic, even in complex cases such as FCA

ARGUMENT: Adhering to simple agreement with the subject within the syntax is far simpler and more economical

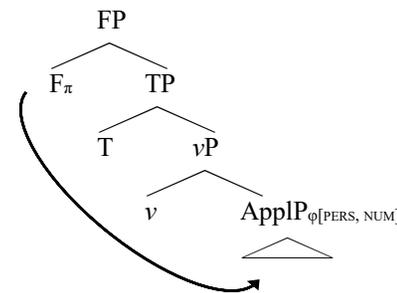
In Gravely (2021), I claimed that C bears a [NUMBER] probe

- In work on Romance cliticization (which, minimally, is where this agreement morpheme comes from in a diachronic sense), 3rd-person accusative clitics are probed by a functional head via [NUMBER]
- As Preminger (2014:51) notes, it is the copying mechanism of this functional head that permits a 1:2 ratio with respect to the probe and its realization

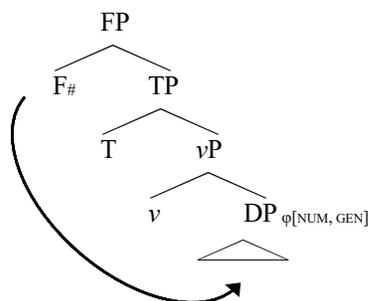
(18) ROMANCE CLITIC PROBES AND THEIR MORPHOLOGICAL REALIZATIONS

- Probe: [PERSON] → φ-features copied: [PERSON], [NUMBER]
- Probe: [NUMBER] → φ-features copied: [NUMBER], [GENDER]

(19) PROBING FOR [PERSON]



(20) PROBING FOR [NUMBER]



- Thus, a [NUMBER] probe that agrees with the subject DP would output the correct features with no need for PF modifications
 - [GENDER] is automatically copied
 - No conflicting [PERSON] feature; optimal for 1st- and 2nd-person subjects

CONCLUSION: Utilizing a post-syntactic insertion account in order to derive Galician complementizer agreement is far more complicated than accounting for this phenomenon within the syntax proper via (true) agreement

4. NEZ PERCE C-AGR

Nez Perce boasts a complementizer agreement paradigm that is able to show agreement for multiple constituents at the same time with the possibility of more than one individual realization for (at least) one of them

- C-oriented elements that may show agreement are the yes/no particle *weet(e)*, the inferential evidential *'eete*, the conditional/ignorance marker *ku'*, the negator *neecu'*, and the \bar{A} particle *ke*
- It may agree with the subject and the object
- There is both individual [PERSON] and [NUMBER] agreement
- Nez Perce has both subject and object drop

(21) ke-**pe-m-ex** kaa *pro*_{SUBJ} cewcew-tée'nix *pro*_{OBJ}
 COMP-**PL-2-1** then *pro*_{1PL} telephone-TAM *pro*_{2SG}
 'When we call you(SG)'

- In (21), *ke* shows agreement for both [PERSON] and [NUMBER] of the subject, in addition to [PERSON] of the object

(22) ke-**me-ex** kaa *pro*_{SUBJ} cewcew-téetu *pro*_{OBJ}
 COMP-**2-1** then *pro*_{1SG} telephone-TAM *pro*_{2SG}
 'When I call you.'

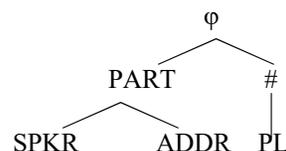
(23) ke-**m** kaa *pro*_{SUBJ} cewcew-téetum *pro*_{OBJ}
 COMP-**2** then *pro*_{2SG} telephone-TAM *pro*_{1SG}
 'When you call me.'

- In (22), however, *ke* only shows agreement for the 1st- and 2nd-person features of the subject and object, respectively
- And in (23), there is only 2nd-person agreement with the subject

Deal takes the stance that Nez Perce shows *interaction* and *satisfaction* conditions

- That is, C is able to *interact* with multiple constituents (and bear multiple features from them), but that a certain feature *satisfies* the probe, forcing it to stop searching for viable goals

(24) FEATURE GEOMETRY OF C IN NEZ PERCE



We have seen that C is able to *interact* with both [SPEAKER], [ADDRESSEE], and [PLURAL] (21)

- However, the probe is *satisfied* by [ADDRESSEE]
 - i.e., once it finds a constituent bearing [ADDRESSEE], it stops probing

Initially, it seems difficult to account for the agreement patterns in (21-23) via a post-syntactic insertion account

- Additionally, as in Galician, the exponents on T need not (and sometimes *cannot*) be those specified on C, as when T shows agreement for 3rd-person
 - This is because C never bears a 3rd-person feature

(25) ke-**x** kaa A-nim **hi**-cwcew-téetu *pro*_{OBJ}
 COMP-**1** then A-ERG **3**_{SUBJ}-telephone-TAM *pro*_{1SG}
 'When A calls me.'

In (25), C interacts with the [SPEAKER] feature of the object, yet it does not find its satisfaction feature [ADDRESSEE]

- As Preminger (2014) notes, failed agreement (i.e., the inability of a probe to find a viable goal) does not necessarily result in a derivational crash

? **How does a post-syntactic insertion account hold up in Nez Perce?**

As in Galician, the fact that C and T often bear different features, with C being able to probe for and agree with more featural exponents than T

- C primarily expones participant features (1st- and 2nd-person)
- T primarily expones non-participant features (3rd-person)

Taking (25) as an example (possibly the simplest of all of those in this section), let us imagine that the ϕ -set on T is copied to C

- There must be knowledge in the PF-branch that C may not bear 3rd-person; this feature must be deleted
- As C must agree with the [SPEAKER] feature of the object, there must be an internal mechanism that searches for and copies this feature to C

... but this is the machinery Agree of the narrow syntax!

- Applying a post-syntactic account to an example as in (21) would require the entire mechanism of Agree to also take place in the PF-branch
- This type of duplicating all of syntax in the post-syntax is simply redundant and unnecessary

5. CONCLUSION

- Although there are Germanic C-AGR varieties for which a post-syntactic insertion account may be viable, it seems dispensable in most cases
- Particularly for the data presented here in Galician and Nez Perce, it seems highly unlikely that these languages would resort to anything but Agree in order to derive their complementizer agreement patterns
- The reduplication of the syntactic machinery in the post-syntax is circular and obscures the line between what is truly syntactic and what should be accounted for at PF

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