What (if anything) does Complementizer Agreement tell us about Feature Inheritance (and vice versa)?

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The relation between CA and FI

- Is there one?
- Chomsky 2008, fn. 26:

(1)   "Sometimes the φ-features of C are morphologically expressed, as in the famous West Flemish examples."

The relation between CA and FI

(2) a. Kpeinzen **dan-k** (ik) morgen goan
        I-think **that-I** (I) tomorrow go
        "I think that I'll go tomorrow."

   b. Kpeinzen **da-j** (gie) morgen goan
       I-think **that-you** (you) tomorrow go
       "I think that you'll go tomorrow."

   c. Kvinden **dan** die boeken te diere zyn
       I-find **that-pl** the books too expensive are
       "I find those books too expensive."

                          (West Flemish, Haegeman 1992)

The relation between CA and FI

- **Complementizer Agreement (CA)**, according to (1), provides empirical support for *Feature Inheritance* (for which there are few, if any, empirical arguments).

- **Feature Inheritance (FI)** is a "principled" property of the phase system of Chomsky 2007, 2008 (where "principled" = conforms to the SMT = reduces to the "third factor") ...
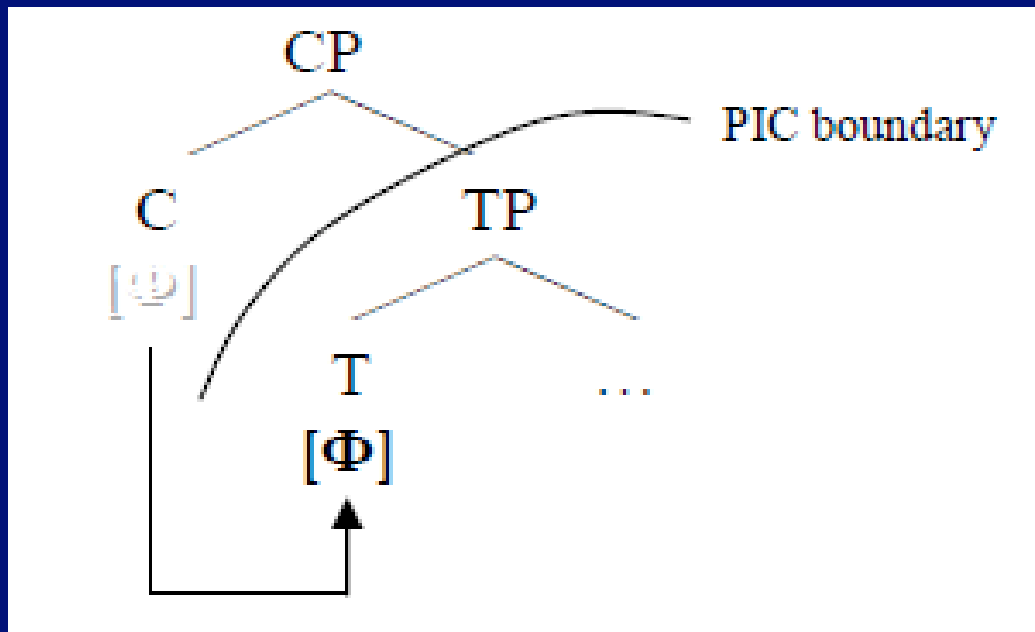
The relation between CA and FI

- **Chomsky's (2007, 2008) phase system:**
  - Unvalued φ-features start out on (and are thus a property of) the *phase heads* (e.g. C, v*).
  - Their valuation triggers immediate Transfer, so that they can be distinguished from interpretable (= inherently/lexically-valued φ-features) at the interface and thus deleted. (Hence: multiple Spell-Out / cyclic Transfer follows, i.e. phases.)
  - These clash two assumptions clash with the PIC, which prevents the phase head from being transferred (Richards 2007).

The relation between CA and FI

- My (2007) suggestion: FI resolves this paradox.

(3)

→ FI follows from "good design"; allows derivations to converge.

The relation between CA and FI

- This approach has the considerable conceptual advantage of providing a "principled" account for *three* properties of the system *at a single stroke*:

  (i)   FI,

  (ii)   cyclic Transfer, and

  (iii)   the very existence of uFs (uninterpretable features) in the first place.

The relation between CA and FI

- Background assumption:

Full Interpretation – the Interface Condition requiring that all features reaching the interface must receive an interpretation (i.e. cannot simply be ignored): "no redundant symbols".

The relation between CA and FI

- Naturally, if we deny Full Interpretation and allow the interface to 'simply' ignore valued uFs, then the above reasoning does not go through: No need for immediate/cyclic Transfer, or for FI (or indeed for uFs at all, as they then lose their 'viral' potency).

- These properties then remain unexplained ('imperfections') unless alternative rationales can be provided.

- I thus prefer to maintain Full Interpretation, with the conceptually linked uFs, Transfer and FI that it allows, over alternatives such as Epstein et al (2010), which seek to explain each property separately.

The relation between CA and FI

- Nevertheless, as has been made clear in the recent literature, this system faces numerous problems, **empirical** and **theoretical**, that prevent a straightforward connection between CA and FI as in (1), and thus speak against using CA as evidence of the C-T relation brought about by FI.

The relation between CA and FI

- **<u>Empirical problem</u>:** Dissociations between CA and T-related subject-verb agreement (SA), foremost amongst these being **First Conjunct Agreement** (FCA) – Haegeman & van Koppen 2012, van Koppen 2012, etc.

The relation between CA and FI

(4)   *First Conjunct Agreement*

a. **de-s** [doow en ich] ôs treff-**e**

that-2.sg [you.sg and I]-1.pl each.other-1.pl meet-**pl**

(Tegelen Dutch; van Koppen 2012)

b. **dass-sd** [du und da Hans] noch Minga geh-**ts**

that-2.sg [you.sg and the Hans]-2.pl to Munich go-**2.pl**

(Bavarian; Fuß 2012)

The relation between CA and FI

- The φ-set on C cannot simply be a duplication of T's valued φ-set: CA in these dialects is with the first conjunct, whereas SA is with the whole coordinated subject.

- This is a general problem for approaches to CA in which there is just a **single φ-set** shared by C and T (including, e.g., T-to-C movement accounts such as Zwart 1993, 1997, 2001).

The relation between CA and FI

- **<u>Theoretical problem</u>:** If CA is an overt reflex of the φ-set that starts out on C, then that φ-set must survive Transfer/deletion and remain on C post-inheritance after all.

- The appearance of valued uFs in the phase edge seems to go against the FI rationale, which says that valued uFs must be removed from the phase edge.

The relation between CA and FI

- Conversely, if FI *removes* the features from the phase head in passing them onto the complement, how can they still be realized on the phase head under CA?

- Chomsky 2012 suggests that FI is in fact *copying* after all (like movement/internal merge). But the copy of the valued uF that remains on C might be expected to be 're-transferred' at the next phase level, where it will violate Full Interpretation (by virtue of then being indistinguishable from iF); a problem for Ouali's (2008) 'KEEP' approach too.

The relation between CA and FI

- Clearly, unlike the empirical problem of FCA, these technical/theoretical issues are unique to the FI implementation of the C-T dependency. (They do not arise under T-to-C movement accounts, of course.)

- In light of these problems, one might simply conclude that CA has nothing to do with FI, i.e. to deny the relation suggested in (1).

The relation between CA and FI

- This is the negative stance taken in Richards 2012: FI is about SA alone, not CA; the two are logically and empirically independent.
- CA might then be, e.g.:
  - a post-syntactic doubling of (a subset of) verbal agreement features on C at PF (e.g. Fuß 2007, 2012);
  - the product of a separate set of φ-features and a separate instance of agreement (syntactic Agree with the subject in Carstens 2003, Haegeman & van Koppen 2012, van Koppen 2012; PF-checking/valuation in Ackema & Neeleman 2004, arguably also Miyagawa 2010).

The relation between CA and FI

- Instead, let's see if a more positive outcome is possible, one that allows CA to be properly reconciled with the FI system (i.e. no separate φ-probe on the non-phase head T) whilst maintaining that CA is the result of syntactic Agree with the subject (rather than PF/prosodic checking/doubling).

- I'll first tackle the theoretical problem, before attempting to derive some of the problematic data (FCA).

Tackling the theoretical problem of valued uFs in the phase edge

- Often taken to be part of a larger problem facing the FI rationale in Richards 2007 (cf. Epstein et al 2008, 2010) going beyond the particular case of CA:

- Valued uFs appear freely in phase edges, as part of movement operations, such as valued uCase on *who(m)* in *Whom do they like?*

- *Whom* moves via spec-vP to spec-CP, both phase edges, and thus valued uCase survives the domain in which it is valued (VP).

- Therefore (supposedly), the relevant uF can't have been transferred upon valuation by v*, otherwise it would be forced to be "pronounced inside VP" (Epstein et al 2008), i.e. inside its domain of valuation/Transfer.

Tackling the theoretical problem of valued uFs in the phase edge

- **<u>But</u>:** This argument doesn't seem right to me. It implies that:
  - (i) transferred material cannot be moved;
  - (ii) Transfer (to PF) is literally "pronounce", freezing/trapping transferred material in situ (cf. Obata 2011).

  But the movement of transferred, inactive material is commonplace: *piedpiping*.

Tackling the theoretical problem of valued uFs in the phase edge

- There is no problem piedpiping the transferred embedded complement of CP inside a complex nominal:

(5)   [Which claim [$_{CP}$ that [$_{TP}$ doughnuts are bad for you]]] did John ignore t_{wh}?

- The transferred, inactive material inside the embedded CP/TP is still able to move along with *which claim* to the matrix CP-edge: it is linearized as part of the **higher** *wh*-copy. Crucially for the FI rationale, this material is still ***only transferred once*** (namely in its domain of deactivation).

Tackling the theoretical problem of valued uFs in the phase edge

- Similarly, there is nothing stopping the uCase on *whom* from being transferred as soon as it is valued and still being 'piedpiped' along as inactive material.

- All that matters for the FI rationale in Richards 2007 is that the relevant uFs be *transferred* upon valuation; it doesn't matter where they subsequently end up (i.e. where they are realized).

Tackling the theoretical problem of valued uFs in the phase edge

- *Key point*: The FI rationale is a (derivational) claim about where valued uFs can't **remain**, not a (representational) claim about where they can't **appear**.

Tackling the theoretical problem of valued uFs in the phase edge

- ***Key point***: The FI rationale is a (derivational) claim about where valued uFs can't **<u>remain</u>**, not a (representational) claim about where they can't **<u>appear</u>**.

- Returning to CA: The appearance of valued uFs on C *is* still a problem assuming (as I do) that these are a realization of features that have remained on C (rather than being inherited to T and then moved back up to C again).

Tackling the theoretical problem of valued uFs in the phase edge

- Still, the FI rationale has a couple of loopholes that would allow valued uFs to remain on C after all, and which CA seems to exploit.

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- ***First loophole***: The distinguishability problem motivating FI only applies to the **semantic** interface (SEM/CI); valued uFs are **interpreted/-able at PF** (i.e. realized in the form of agreement morphemes).

Tackling the theoretical problem of valued uFs in the phase edge

- It is perfectly fine, then, in principle, for FI to leave a copy in C that is later transferred to and interpreted at PF – a 'PF copy'.

- All we need is for that copy not to show up (again) at SEM.

Tackling the theoretical problem of valued uFs in the phase edge

- Given the visibility of valued uFs at PF, deletion of these features is only part of Transfer to SEM/CI, not of Transfer to PF.

- The SEM-invisibility of the copy remaining on C follows if, once deleted from the SEM-transferred copy on T, the valued uFs count as SEM-deleted from *all* copies.

Tackling the theoretical problem of valued uFs in the phase edge

- This is the same principle whereby, e.g., valuation of u*wh* on the highest copy in a '*wh*-chain' also values and deletes those features from all lower copies (same for uCase on *they*):

(6) Whom~uwh~ C_Q [$_{TP}$ do they~uCase~ T [$_{vP}$ <whom~uwh~> <they~uCase~> v [$_{VP}$ like <whom~uwh~>?]]]

- Since copies are occurrences of *one and the same item*, valuation/deletion of one copy applies to them all.

Tackling the theoretical problem of valued uFs in the phase edge

→ It suffices for there to be one valued and deleted copy for all copies to count as such.

• Deletion of valued uϕ on T at SEM under FI marks every occurrence of that ϕ-set as SEM-deleted.

• These features, however, are not 'PF-deleted' (since deletion is not part of PF-Transfer). Thus FI leaves a 'dead copy' on C, inert and invisible to SEM but interpretable/realizable at PF upon Transfer of the higher phase.

Tackling the theoretical problem of valued uFs in the phase edge

- **In sum**: What remains on C is a copy of something that's already been SEM-deleted (in the previous phase, via inheritance to T).

- All that Feature Inheritance needs to do to solve the SEM-distinguishability problem is to provide *one* copy *somewhere* that can be immediately transferred to CI and deleted there. All other 'copies' are then taken care of automatically.

Tackling the theoretical problem of valued uFs in the phase edge

- ***Second loophole***: The only consequence of not undergoing FI upon valuation is that valued uFs will be forced to be interpreted (i.e. treated at SEM/CI on a par with lexically valued iFs).

- *Roberts's (2010) theory of head movement/incorporation*: a valued φ-probe is identical to an (incorporated) **clitic**.

Tackling the theoretical problem of valued uFs in the phase edge

- In other words, Agree is formally indistinguishable from movement just in case the Goal is entirely represented on the Probe (i.e. Goal is a subset of Probe).

  (7) Post-Agree:
  C/v*[uPers: 1, uNum: Pl] … *clitic*[iPers: 1, iNum: Pl]

- If the values of all the formal features of the Goal are copied to the Probe, the Goal (iφ) can be interpreted (PF/SEM) at the position of the probe.

Tackling the theoretical problem of valued uFs in the phase edge

- In this spirit, the FI rationale predicts/requires that a valued uφ-set remaining on C will be interpreted as the equivalent iφ-set (i.e. pronominal φ-set) incorporated into C, i.e. it will have the status of a **clitic** (PF-form and SEM-interpretation).

- Cf. Josef's talk: C-inflection as "cliticization in disguise"; C-clitics as the historical origin of CA.

Tackling the theoretical problem of valued uFs in the phase edge

- Put another way, the iɸ/clitic realizing C's ɸ-set removes the Transfer trigger (as no valuation takes place), suppressing Transfer (and FI).

- Cf. Jeroen & Marjo's talk: The phasehood of a phase head containing a clitic is 'voided' – same effect.

Tackling the theoretical problem of valued uFs in the phase edge

- CA will generally be amenable to treatment under the first loophole (i.e. as a 'PF copy') unless FI is independently blocked, forcing a valued φ-set to remain on C. In the latter case, a clitic form/realization is expected.

- *Diachronic speculation*: **Merge** (of clitic/iφ to C) gets reanalysed as **Agree** (i.e. pure 'PF-copy' of uφ, yielding CA as an agreement morpheme).

Tackling the data

- We can now proceed to how some of the main CA facts and patterns (incl. FCA) may be analysed within the above framework.

- *The approach*: Syntactic Agree (SA: φ-Agree between C/T and the Subject) yields a valued φ-set which may remain on C for PF to manipulate in various ways.

Tackling the data

- *Background assumption*: No early, preemptive inheritance in the syntax. Unlike for Chomsky, I assume that FI takes place only when it's triggered to, i.e. by valuation, as part of Transfer. C's probes thus remain on C until *after* Agree.

Tackling the data

‘Simple’ CA (non-conjoined subjects)

e.g. West Flemish (8), Tegelen Dutch (9)

(8)   Kvinden **dan** die boeken te diere zyn
        I-find **that-pl** the books too expensive are
        "I find those books too expensive."

(9)   Ich dink **de-s** doow morge kum-**s**
        I think **that-2.sg** you.sg tomorrow come-**2.sg**
        "I think that you will come tomorrow."

                                                    (van Koppen 2012)

Tackling the data

'Simple' CA (non-conjoined subjects)

- Here, we can write simple realization rules for the PF-copy of the valued φ-set on C (assuming a late-insertion model of the Halle & Marantz 1993 kind).

- E.g.:

(10)   *West Flemish*:

    C[3.pl]   ↔   /-n/ (etc.)

(11)   *Tegelen*:

    C[2.sg]   ↔   /-s/

- Where the form of SA (V-agr) differs, we simply use a T-specific rule (following Fuß 2012: *contextual allomorphy*).

Tackling the data

'Adjacency-sensitive' CA

- For dialects with additional 'PF-sensitivity' (often/usually the 'double agreement' dialects), we can make these realization rules *prosodically context-sensitive*, in the manner of Ackema & Neeleman 2004.

- E.g. *Hellendoorn*

(12) a.   datt-**e** wiej noar't park loop-**t**

              that-**1.pl** we to-the park walk-**1.pl**

    b.   dat/*datt-e [op den wärmsten dag van't joar]

              that/that-1.pl on the warmest day of-the year

              wiej tegen oonze wil erwärkt hebt.

              we against our will worked have

Tackling the data

'Adjacency-sensitive' CA

(13) *Hellendoorn*

C[1.pl] $\leftrightarrow$ -e/$\{$_ [1.pl]$\}_{\phi}$

i.e. valued [1.pl] on the PF-copy in C may only be realized as *-e* when C is adjacent to (or contained in the same prosodic domain as) the 1.pl pronoun.

Tackling the data

<u>'Adjacency-sensitive' CA</u>

- Haegeman & van Koppen's (2012) persuasive arguments against the A&N PF approach (e.g. lack of agreement with adjacent focussed object) only speak against the **checking/valuation** itself taking place at PF (i.e. against A&N's *prosodic checking*).

- That is, they show that the source of CA has to be the **subject**, not simply the linearly closest/adjacent DP/φ-set.

- The above approach avoids these problems by adopting A&N-style rules only for determining the PF-**realization** of features on C acquired through **syntactic Agree** with the **subject.**

Tackling the data

<u>'Adjacency-sensitive' CA</u>

- The rule in (13) also captures the adjacency restriction on CA with conjoined subjects in Hellendoorn, as well as lack of CA with fronted subjects, etc. (Data from van Koppen 2012.)

(14)   a.   darr-**e** [wiej en Marie] oonszelf in de spiegel ziet.
                    that-**CA** [we and Marie]-1.pl ourselves in the mirror see
        b.   dat/*darr-e [Marie en wiej] oonszelf in de spiegel ziet.

(15)   WIEJ denkt Jan dat/*darr-e die pries ewönnen hebt, nie ZIEJ.
           we think Jan that/that-1.pl that prize won have not they

Tackling the data

First-Conjunct Agreement (FCA)

Two major problems for the current, FI-based approach:

- SA and CA have *different goals*: Whole conjoined DP for SA, first conjunct for CA.

- FCA seems to exhibit an adjacency effect even in dialects that don't exhibit such a requirement with simple subjects…

Tackling the data

First-Conjunct Agreement (FCA)

(16) *Tegelen Dutch* (van Koppen 2012)

No adjacency effect with simple subjects (unlike, e.g. Hellendoorn):

a. **de-s** /*?det auch **doow** merge kum-**s**

that-**2.sg** also you.sg tomorrow come-**2.sg**

b. **DOOW** denk ik **de-s** / *det de wedstrijd winnen zal-**s**.

you.sg think I that-**2.sg** / that the game win will-**2.sg**

Tackling the data

First-Conjunct Agreement (FCA)

(17)	*Tegelen Dutch* (van Koppen 2012)

But: adjacency effect emerges with FCA; cf. (17b):

a.	**de-s** / *det [doow en ich] ôs treff-e

that-**2.sg** / that [you.sg and I]-1.pl each.other-1.pl meet-pl

b.	[Doow en Marie] denk ik, ***de-s** / ?det het spel zull-e winnen.

[you.sg and Marie] think I that-2.sg / that the game will-pl win

Tackling the data

First-Conjunct Agreement (FCA)

Towards an analysis

- *First component*: Ratio of Probes to Goals
  - Minimally speaking, we need one probe per goal (per argument / Case-bearing DP); cf. Haegeman & van Koppen's (2012) "two probes, two goals" analysis of West Flemish External Possessor Agreement.
  - In the present system (where probes are located on phase heads), this means **one phase per DP/argument**.
  - Hence e.g. transitive clauses: two arguments (subject and object), two phases (C and v*, the former for valuing the subject, the latter for valuing the object).

Tackling the data

First-Conjunct Agreement (FCA)

Towards an analysis

- *First component*: Ratio of Probes to Goals
    - With co-ordinated subjects, this isn't possible (we can't very well have each conjunct valued in a separate phase).
    - To meet the minimal 'one probe per DP' requirement, we must therefore allow two probes on the same head – a **double probe** on C.
    - We know that multiple probes on a single head must be allowed anyway: e.g. interrogative root C has both a Q/Op-probe (for *wh*-Agree) and a φ-probe (for SA).

Tackling the data

First-Conjunct Agreement (FCA)

Towards an analysis

- *First component*: Ratio of Probes to Goals

  – Two possibilities for C's double φ-probe:

  either (a) two separate full φ-sets (i.e. both φ-complete)

  or (b) **split** Person and Number probes.

  – Option (a) raises awkward questions, e.g. why stop at two φ-probes? Why not *n* φ-probes for *n* conjuncts (*John, Peter, Mary, Sue … and Dave*)?

Tackling the data

First-Conjunct Agreement (FCA)

Towards an analysis

- *First component*: Ratio of Probes to Goals
  - Option (b) is standard in the literature on case/agreement restrictions and argument encoding (e.g. PCC): uPers and uNum on C/v* may probe separately, each valuing a separate argument/goal (cf. Anagnostopoulou 2003, Rezac 2004, Richards 2008, plus many others; and Chomsky 2001 on defective probes).

Tackling the data

First-Conjunct Agreement (FCA)

Towards an analysis

- *Second component*: Conjoined goals – to resolve or not to resolve?

    – Instead of combining the φ-sets of conjoined DPs in possibly language-specific ways ('resolution' / 'unification' of φ-sets), let's take a different tack:

    – The head of '&P' is an inherent goal in its own right.

Tackling the data

First-Conjunct Agreement (FCA)
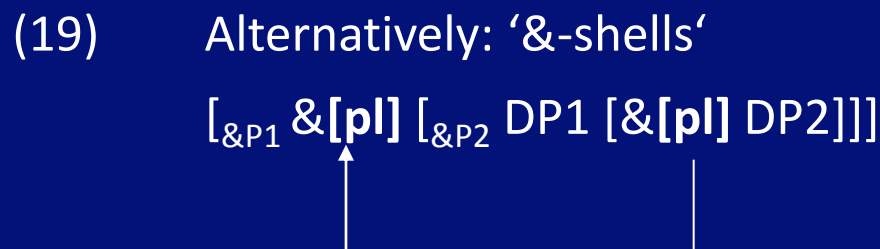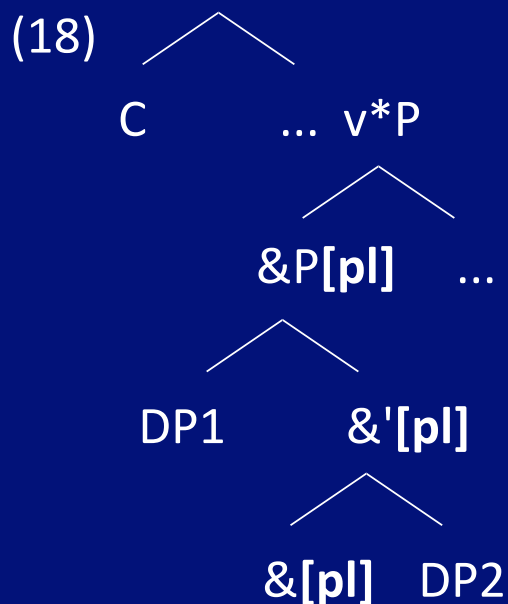
Towards an analysis

- *Second component*: Conjoined goals – to resolve or not to resolve?
  - If 'conjunction' ('&') means anything (φ-wise), it's plurality.
  - Let's therefore assume that '&' bears an interpretable [Num: Pl] feature that can act as a goal for C's [uNum] probe.

Tackling the data

First-Conjunct Agreement (FCA)

- Let's also assume that the structure of &P is such that [plural] on & is the closest goal to C.

(18)

```
      C        ... v*P
                 /\
           &P[pl]   ...
              /\
          DP1    &'[pl]
                   /\
               &[pl]  DP2
```

(19)   Alternatively: '&-shells'

$[_{\&P1}$ &**[pl]** $[_{\&P2}$ DP1 $[\&$**[pl]** DP2]]]

Tackling the data

First-Conjunct Agreement (FCA)

Possible derivation I (Option (a): split probing) – 'resolution'

First step: The first of C's φ-probes to find a goal is [uNum], valued [Pl] by &.

→This derives the effect that plural invariably 'wins' in resolution (i.e. **SA** never reflects singularity of a conjunct, but always the plurality of the whole conjoined DP).

Tackling the data

First-Conjunct Agreement (FCA)

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Second step: C's remaining φ-probe (uPers) continues probing, finds the next closest goal: the first conjunct.

→ [uPers] is valued by (Agrees with) the Person feature of the first conjunct DP.

Tackling the data

First-Conjunct Agreement (FCA)

The result: C's valued φ-set is an amalgamation of Person from the first conjunct and plural from *&*.

Revisiting Hellendoorn CA: On such an approach, Agree in (20a) delivers [Pers:1, Num: Pl], realized as CA /-e/, but delivers [Pers:3, Num: Pl] in (20b), hence no CA (instead, the default/elsewhere form appears). Both specifications yield the same V-agr (SA) form *ziet* (= 1/2/3 pl).

(20) a. darr-**e** [wiej en Marie] oonszelf in de spiegel ziet.
           that-**CA** [we and Marie]-1.pl ourselves in the mirror see
      b. dat/*darr-e [Marie en wiej] oonszelf in de spiegel ziet.

Tackling the data

First-Conjunct Agreement (FCA)

- Similarly, those Bavarian speakers who allow (21) below (from Fuß 2012) are plausibly deriving [2.pl] the same way: [Num: Pl] from & and [Pers: 2] from the first conjunct.

(21) %dass-**ts** [du und da Hans] noch Minga geh-**ts**.

  that-2.pl you.sg and the Hans to Munich go-2.pl

- The same analysis might extend to other 'amalgamation' (resolution) dialects, like Nieuwkerken-Waas Dutch (van Koppen 2012):

(22) da-**n** [Bart en Jan] mekaar wel kunn-**e** verdraagn

  that-**pl** [Bart and Jan]-**3.pl** each.other PART can-**pl** stand

Tackling the data

First-Conjunct Agreement (FCA)

Possible derivation II (Option (a): double probes) – FCA

Instead of the composite φ-form from split Agree, dissociations (i.e. FCA proper) will emerge for those speakers/dialects in which C bears two separate φ-probes (cf. the two separate probes of Cartsens 2003, Haegeman & van Koppen 2012, van Koppen 2012), with Transfer triggered immediately upon valuation of the first probe.

- The first probe is realized as the SA/V-agr form, the second probe as CA, as follows:

Tackling the data

First-Conjunct Agreement (FCA)

Possible derivation II (Option (a): double probes) – FCA

First step: C's first full probe [uPers: _; uNum:_] is valued [Pl] by &.

Second step: This triggers immediate Transfer and FI of this φ-probe (as there's no split probing in this derivation). T thus receives [uNum: Pl; uPers:_] under FI (i.e. uPers still unvalued).

Should the language lack an unspecified plural exponent (i.e. a form that can realize [uNum: Pl] in isolation), Morphology adds default Person value [3], yielding [3.Pl] SA (V-agr).

Tackling the data

First-Conjunct Agreement (FCA)

Possible derivation II (Option (a): double probes) – FCA

Third step: Second C-probe finds and is valued by the first conjunct, yielding e.g. [uPers: 2, uNum:Sg] on C for CA.

NB. &'s [Pl] cannot act as goal a second time, valuing C's second φ-probe, if we assume it bears [uCase] (perhaps instead of the second conjunct), and that this is valued under Agree with C's first φ-probe (cf. Chomsky's *Activity Condition*).

Tackling the data

First-Conjunct Agreement (FCA)

The result: Dissociations of CA and V-agr/SA of the kind found for those Bavarian speakers who allow (23) and (24) (from Fuß 2012), and Tegelen Dutch (25).

(23) dass-**sd** [du und da Hans] noch Minga geng-**an**

that-**2.sg** you.sg and the Hans to Munich go-**3.pl**

(24) %dass-**ts** [ihr/ees und I] noch Minga miaß-**n**

that-**2.pl** you.sg and the Hans to Munich go-**1/3.pl**

(25) **de-s** [doow en ich] ôs treff-**e**

that-**2.sg** [you.sg and I]-1.pl each.other-1.pl meet-**pl**

Tackling the data

First-Conjunct Agreement (FCA)

- According to Fuß (2012), yet further speakers/varieties of Bavarian allow **full** resolution for the V-agr/SA form, as in (26).

(26) dass-**sd** [du und da Hans] noch Minga geh-**ts**

that-**2.sg** you.sg and the Hans to Munich go-**2.pl**

- Here, I must assume that & bears unified/combined [Pers: 2] as well as its own inherent [Num: Pl].

Tackling the data

First-Conjunct Agreement (FCA)

Consequences specific to the FI analysis of FCA:

I. Since valuation of the first C-probe triggers immediate Transfer and FI of that probe, the remaining probe is unable to undergo FI (because C's complement, TP, has already been transferred; it cannot be transferred again).

→ The valued uφ of the second probe is thus forced to remain on C and be SEM-interpreted at the next phase level. CA in FCA should thus have the status of a clitic.

Tackling the data

First-Conjunct Agreement (FCA)

- This consequence may be undesirable, insofar as CA and FCA exponents are identical in a language (at SEM as well as PF?).

- It may be relevant, however, that in Nieuwkerken-Waas Dutch, a dialect that usually exhibits full-conjunct agreement (i.e. the 'split probes' derivation above), a clitic appears with FCA (i.e. when a 'double probes' derivation is chosen), as reported by van Koppen 2012:

(27) ᵗda-**n** [**ze.**zulder en gulder] mekaar wel kun-t verdraagn.
that-**pl** [**cl**.they and you]-2.pl each.other PART can-2pl stand

Tackling the data

First-Conjunct Agreement (FCA)

Consequences of the FI analysis of FCA:

    II. The second instance of Agree (i.e. Agree with C's second φ-probe) follows Transfer of TP (triggered by valuation of C's *first* φ-probe). For this to be possible under the PIC, Transfer must be 'weak' in the sense of Chomsky 2008:

(28) *Weak Transfer*: material sent to the interfaces remains present in the syntax, and thus visible to probes (hence long-distance agreement in Hindi, Tsez, etc.); it just cannot be "modified" (e.g. **moved**).

Tackling the data

First-Conjunct Agreement (FCA)

Consequences of the FI analysis of FCA:

→If the double-probes analysis of FCA under FI is right, then the second instance of Agree will **not be able to be accompanied by movement of the goal**, since this is *post-Transfer* Agree, and Transfer freezes items in place.

Tackling the data

First-Conjunct Agreement (FCA)

→We thus derive the general 'adjacency effect' found with FCA (i.e. even in dialects which do not normally exhibit such adjacency-sensitive CA), such as Tegelen Dutch (29), from van Koppen (2012), and Bavarian (30), from Fuß (2012):

(29)   [Doow en Marie] denk ik, ***de-s** / ?det het spel zull-e winnen.

           [you.sg and Marie] think I **that-2.sg** / that the game will-pl win

(30)   [Du und da Hans] hoab-**ts**/*hoa-st an Hauptpreis gwunna.

           [you and the Hans] have-**2.pl**/have-2.sg the first.prize won

In (30), no second Agree/φ-probe is possible with movement (as predicted). The convergent derivation (with 2.pl CA on V) must therefore involve a *single* φ-probe on C, with full unification of the two conjuncts' φ-sets on *&*.

Concluding remarks

- There are many analytical options under an FI analysis of CA (split vs. double probes, with or without Person-unification/resolution on &, etc.), yielding the possibility of plenty of speaker variation. FI thus lends itself surprisingly well (given its status as a universal 'good design' property) to capturing a somewhat messy empirical situation.

- Though not without numerous problems, the FI approach to CA makes certain welcome predictions (e.g. freezing under FCA, clitichood). Relating CA to FI, as in (1), is both possible and desirable, then.

Concluding remarks

- Unlike movement, FI involves the copying of *inactive* material, placing a (PF-)copy of that material in two separate phase domains. Each copy is thus separately linearized and realizable (yielding SA on T/V and CA on C), unlike cross-phasal/successive-cyclic movement, in which usually only the *highest* copy is realized (the lower copies being *active* at the point of Transfer and thus evading linearization, cf. Richards 2004). An FI account can thus help explain *why* agreement is spelled out twice (CA and SA).