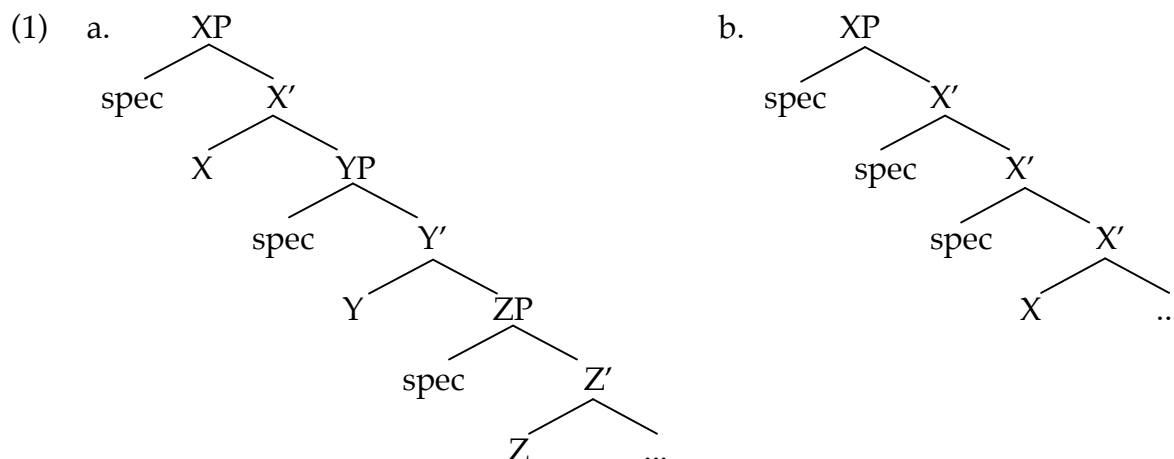


# V1-2-3... in Old High German: multiple projections vs. multiple specifiers

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## 1 Introduction

- Cartographic approach (cf. e.g. Rizzi 1997, Cinque 1999): (i) one-to-one relation between functional heads and morphosyntactic/semantic/pragmatic features; (ii) each head licenses only a single specifier  $\Rightarrow$  massive growth of the number of functional projections.
- Alternative analysis (in many cases): (i) single functional head + multiple specifiers (cf. Chomsky 1995, 2000, Richards 2001, Bobaljik 1999, Lahne 2007); (ii) one-to-many relation between functional heads and features; (iii) features of a single head are hierarchally ordered to account for ordering effects (Richards 2001, Grewendorf & Sabel 1999, Grewendorf 2002, Lahne 2007).



- This paper: Analysis of multiple fronting/V3 in (early) OHG in terms of multiple specifiers of C.

## 2 Background: Matrix V1/V2/V3 in OHG

- Well-known fact: Early OHG is more V2ish than other early Germanic languages such as Old English or Gothic (Lippert 1974, Robinson 1997, Dittmer & Dittmer 1998, Axel 2007):
  - (i) **Systematic verb fronting**: In early OHG translations, deviations from the word order of the Latin original systematically lead to V2 patterns (Dittmer & Dittmer 1998, Petrova & Solf 2007 on the OHG *Tatian*; Axel 2007):<sup>1</sup>

<sup>1</sup> Furthermore, in contrast to Old English, (subject) pronouns regularly undergo inversion in examples with fronted non-operators, which can be taken to indicate that the finite verb moves to C, skipping the position of weak pronouns at the left edge of IP/TP (see (8) for some exceptions).

- (2) *unum tibi deest* → *ein ist thir uuan.*  
 one thing you lack one thing is you-DAT lacking  
 ‘thou lackest one thing’ (*Tatian*, 357,15 [106,3]; Dittmer and Dittmer 1998: 92)
- (ii) **Semantically/pragmatically neutral XP-fronting**: fronting of non-topics such as indefinites/adjuncts (Axel 2007: EPP-feature in C):<sup>2</sup>
- (3) a. [Neoman] **niuirdit** fona gote festi [...]  
 nobody NEG-becomes by God strengthened  
 Lt. *Nemo erit a deo nisi firmus* [...]  
 ‘Nobody will become strengthened by God [...]  
 (*Monsee Fragments*, XL,19; *St. Augustini sermo*; Axel 2007: 120)
- b. [Neo] **nist** zi chilaubanne dhazs fona dhemu salomone  
 never NEG-is to believe that of the Salomon  
 sii dhiz chiforabodot  
 is this prophesied  
 Lt. *Numquid de illo salomone creditur prophetatum? minime*  
 ‘It can never be believed that this was prophesied by Salomon.’  
 (*Isidor*, 638; Axel 2007: 120)
- c. *endi* [chiiuissō] **ist** *christus* in dheru selbun salbidhu chimeinit  
 and certainly is Christ in that same salve meant  
 Lt. *et utique christus ipsa unctione monstratur*  
 ‘And certainly is Christ meant in that same salve.’ (*Isidor*, 144; Axel 2007: 120)

#### *Deviations from V2: (i) V1 declaratives; (ii) V3 orders*

- Existence of V1-declaratives suggests that EPP-feature in C was merely optional:

- (4) **uuarun** thô *hirta* In thero lantskeffi uuahante [...]  
 were then/there shepherds in that country abiding  
 Lt. *Et pastores erant In regione eadem. uigilantes* [...]  
 ‘And there were shepherds in that country abiding [...]  
 (*Tatian*, 85,29; Axel 2007: 113)

- Fronted XPs may intervene between clausal particles (e.g., the interrogative marker *inu/eno*) and the finite verb:

- (5) *Inu ni* [angil] **nist** anaebanchiliih gote?  
 INU NEG angel-NOM NEG-is identical God-DAT  
 Lt. *Num angelus equalem cum deo habet imaginem?*  
 ‘Is an angel not identical to God?’ (*Isidor* 184; Axel 2007: 206)

- Topics may occur to the left of fronted *wh*-phrases:

- (6) [Uuexsal dhes nemin] huuazs **bauhnida?**  
 changing-NOM of-the name what meant  
 Lt. *Mutatio nominis quid significabat?*  
 ‘The changing of the name, what did it mean?’  
 (*Isidor*, 532; Axel 2007: 209)

<sup>2</sup> In contrast, XP-fronting was confined to referential topics (apart from operator contexts) in earlier stages of Germanic (i.e., Gothic), suggesting that XP-fronting was originally triggered by semantic/pragmatic factors only (topic/focus/operator properties), cf. Axel (2007: 198ff.).

- Multiple XP-fronting (most frequent in the *Isidor*, cf. Robinson 1997, Axel 2007):

- (7) a. [Dhea uuehhun] [ auur] [in heilegim quhidim] **arfullant** sibun iaar.  
 the weeks however in sacred language fulfil seven years  
 Lt. *Ebdomada namque in sacris eloquiis septem annis terminatur.*  
 ‘The weeks, however, take seven years in sacred language.’  
 (*Isidor*, 457; Robinson 1997: 26)
- b. [So] [auh in andreru stedi] [ dhurah dhen selbun heilegun forasagun]  
 so also in other places through the same holy prophet  
**uuard** dhera dhrinissa bauhunc sus araughtit: [...]  
 became the-GEN Trinitiy-GEN meaning in this way demonstrated  
 Lt. *Item alibi per eundem prophetam trinitatis sic demonstratur significantia: [...]*  
 ‘In this way, also elsewhere the meaning of the Trinity was demonstrated by  
 the same holy prophet: [...].’ (*Isidor*, 328; Robinson 1997: 27)

- *Isidor*: Small number of examples exhibiting V3 with pronouns (see Fourquet 1938, Lippert 1974, Eythórsson 1995, Tomaselli 1995, Robinson 1997, and Axel 2007):

- (8) a. [Erino portun] *ih* **firchnissu**, iisnine grindila firbrihu  
 bronze portals I destroy-1SG iron locks break-1SG  
 endi [dhiu chiborgonun hort] *dhir* **ghibu**  
 and the hidden treasures you give-1SG  
 Lt. *Portas aereas conteram et uectes ferreos confringam et dabo tibi thesauros absconditos*  
 ‘I destroy bronze portals, break iron locks and give you the hidden  
 treasures.’ (*Isidor*, 157; Robinson 1997: 17)
- b. [Dhes martyrunga endi dodh] *uuir* **findemes** mit urchundin  
 of-his martyrdom and death we prove with testimony  
 dhes heilegin chiscribes  
 of-the holy scripture  
 Lt. *Cuius passionem et mortem in suo loco scripturarum testimoniis*  
*adprobabimus* (*Isidor*, 516; Robinson 1997: 17)

- V3 with pronouns soon disappeared: (i) much less frequent in the *Tatian* (around 850, cf. Dittmer & Dittmer 1998); very rare in late OHG records (cf. Axel 2007).<sup>3</sup>
- Generalizations on possible orderings/left periphery of OHG (Axel 2007: 210):<sup>4</sup>

- |     |    |  |
|-----|----|--|
| (9) | a. | <i>inu/eno</i> > disloc. topic > <i>wh</i> > (pron.) > V <sub>fin</sub> ... (interrogatives) |
|     | b. | disloc. topic > XP > (pron.) > V <sub>fin</sub> ... (declaratives)                           |

<sup>3</sup> Note that in the majority of relevant V3 orders, the finite verb appears in absolute clause-final position (17 examples, according to Eythórsson 1995: 327), as in (8a). Possible conclusions: (i) The order XP-pron.-V<sub>fin</sub> represents matrix SOV order, a residue of an earlier (Pan-Germanic) grammatical system (Lenerz 1984); (ii) the pattern XP-pron.-V<sub>fin</sub> was triggered for (archaic) metrical reasons (Behaghel 1932, Eythórsson 1995) “to avoid an unstressed element in absolute clause-final position.” (Eythórsson 1995: 327f.); (iii) orders such as (8b) can be attributed to extraposition.

<sup>4</sup> Furthermore, adverbial clauses always occur at the outermost left edge of the clause (in both main and embedded contexts), giving rise to another deviation from V2:

(i) / [thane ih iuuuuh santa/ uzzan seckil] / [...]/ eno **uuas** iu iouuiht thes uuan  
 when I you sent without bag PRT was you anything of-that need

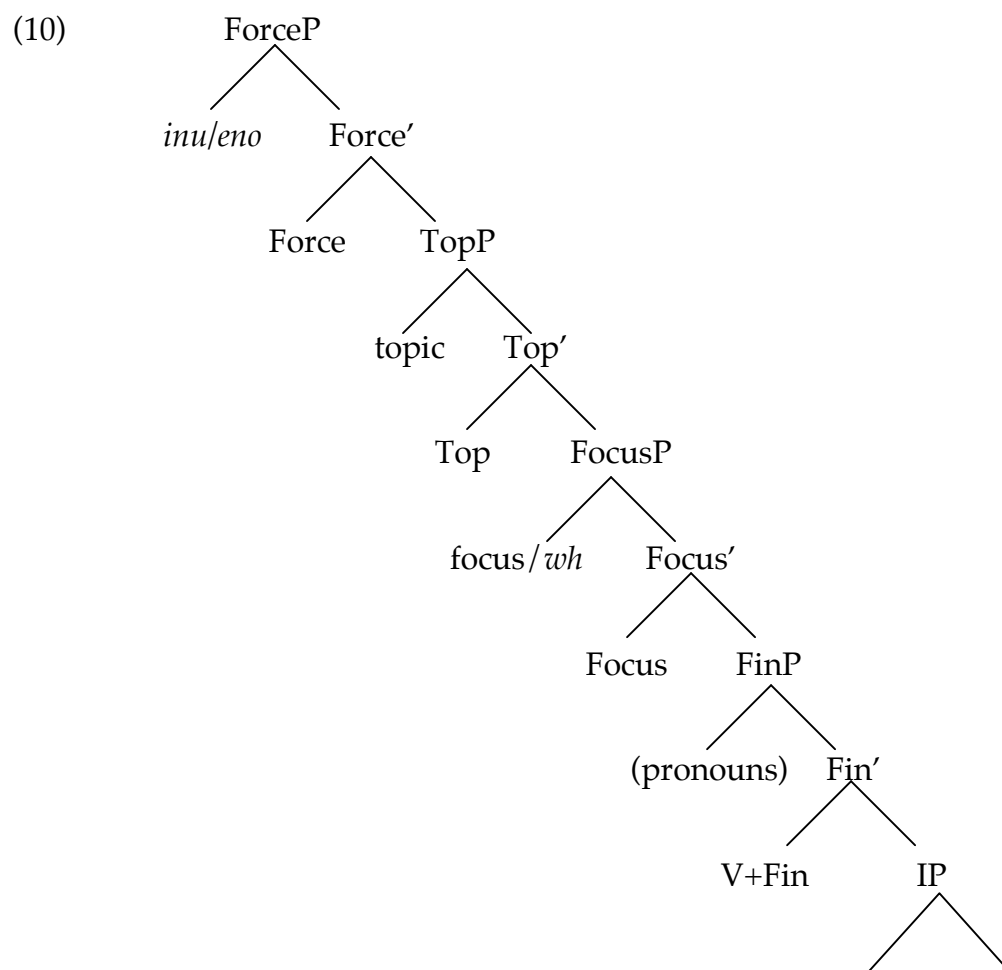
Lt. */quando misi uos / sine sacco / [...]/ numquid aliquid defuit uobis*

‘When I sent you without a bag [...], did you lack anything?’ (*Tatian*, 575,1; Axel 2007: 210)

Possible analyses include (i) adjunction to ForceP (Axel 2007); (ii) countercyclic late Merge, which applies (optionally) to a given syntactic object at the point of Spell-Out/Transfer (Fuß 2008, following Nissenbaum 2000, Chomsky 2004).

### 3 Multiple projections: Axel (2007)

- Axel (2007): fronted XP and finite verb do not (necessarily) enter into a spec-head relation in early OHG; verb movement targets a low head in the C-domain (Fin), while XPs can be fronted to a number of specifiers in a split CP:<sup>5</sup>



- Movement to spec positions triggered by:
  - (i) semantic/pragmatic factors such as topic, focus, *wh*
  - (ii) a semantically vacuous EPP-feature (fronting of indefinites)
- Indefinites/ adjuncts occupy SpecFinP, which may also host pronouns (the latter being an archaic trait).
- Loss of V3: At some point, the formerly split CP was conflated into a structure with only two positions in the CP:

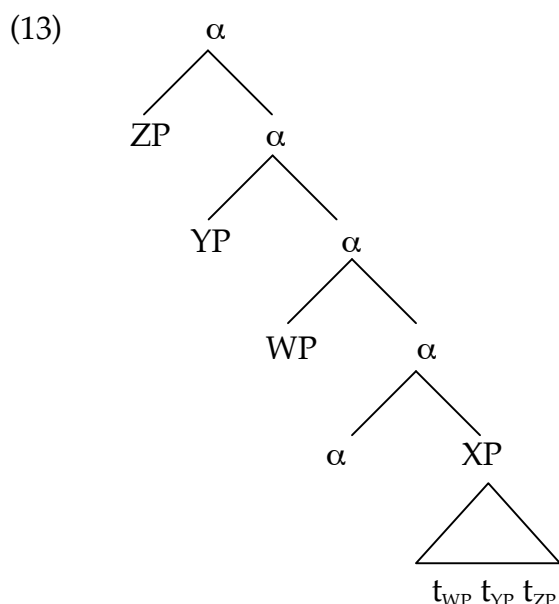
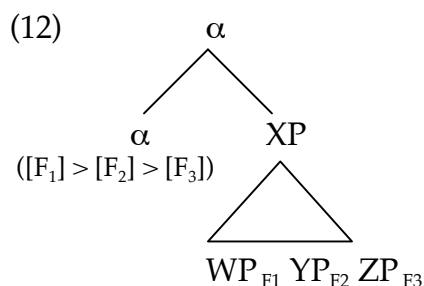
(11)  $[_{FinP} XP_i [_{Fin'} V_j + Fin [ \dots t_i \dots t_j ] ]]$

<sup>5</sup> Axel (2007: 234) notes that “In the OHG sources there is no evidence that topics and *wh*-phrases occupied different positions.” However, this claim is at odds with the word order generalizations she proposes on page 210 (my (9)), where (dislocated) topics appear to the right of *inu/eno* and to the left of *wh*-phrases. In particular, in contrast to what seems to be implied by Axel on page 234, dislocated topics cannot be analyzed in terms of adjunction to the root node, since they should otherwise appear to the left of the interrogative particle. Accordingly, I opted for the structure in (10) with different positions for topics and foci, even if that slightly misrepresents Axel’s original proposals.

- Open questions:
  - (i) No clear evidence for more than a single head position in the C-domain: (a) complementizers uniformly occupy a (single) head position directly above IP/TP, (b) left-peripheral particles are rather specs than heads (see Axel 2007);
  - (ii) Historical development of a rigid V2 syntax in a split-CP model: triggers for conflation of the formerly split CP remain unclear.<sup>6</sup>

## 4 Multiple specifiers

- Proposal: The C-domain of OHG is made up by only a single functional head (C), which may project multiple specifiers hosting fronted XPs, or particles directly merged in the left clausal periphery.
- Features in C are hierarchically ordered (cf. e.g. Grewendorf & Sabel 1999, Lahne 2007), ensuring that they must be checked off in a certain order.
- Higher specifiers correspond to features lower in the hierarchy: If a functional head  $\alpha$  comes with the feature hierarchy  $[F_1] > [F_2] > \dots > [F_n]$ ,  $[F_1]$  first triggers an operation creating the closest specifier of  $\alpha$ . Subsequently,  $[F_2]$  triggers an operation creating an outer specifier etc.:



<sup>6</sup> Alternatively, one might assume that the Modern Germanic V2 languages still have a split CP, but developed a restriction ruling out multiple XP fronting. However, most of the relevant proposals involve hard-wired locality restrictions in the spirit of Relativized Minimality or the Minimal Link Condition (see Grewendorf 2002, Fanselow 2002, 2004, Frey 2004, 2006), which are probably not subject to change.

- At any point during the syntactic derivation, syntactic operations may only be triggered by an active feature of an active head. In more formal terms, this can be expressed by the following condition (Lahne 2007: 10):

(14) *Condition on hierarchy-driven derivation*

- a. A feature [F] of a head  $\alpha$  is to be satisfied at a point P of the derivation iff (i) and (ii):

- (i)  $\alpha$  is the active head.  
(ii) [F] is the active feature.

b. **Active head**

A head is active at a point P of the derivation iff it is a probe at P.

c. **Active feature**

A feature is active at a point P of the derivation iff it is the highest unsatisfied (unchecked/unvalued) feature in the feature hierarchy of an active head at P.

- Notational convention: Features assigned a diacritic \* \_\* require overt movement/PF realization (cf. Roberts and Roussou 2003, Sternefeld 2007).

#### 4.1 Deriving ordering restrictions in the left periphery of OHG

(15) [Uuexsal dhes nemin] huuazs **bauhnida**?

changing-NOM of-the name what meant

Lt. *Mutatio nominis quid significabat?*

'The changing of the name, what did it mean?'

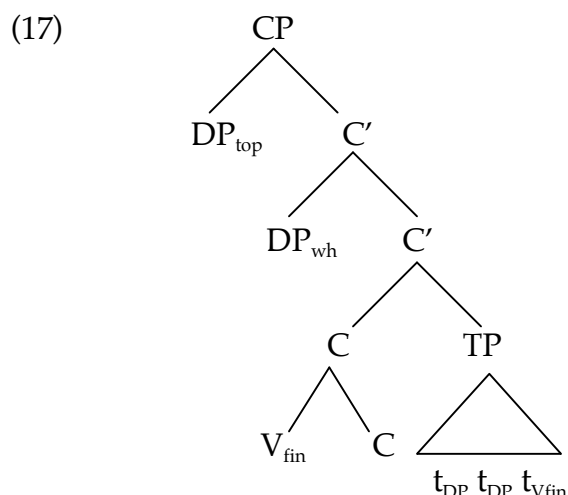
(*Isidor*, 532; Axel 2007: 209)

- Derivation of (15): C hosts the features [ $*\text{fin}/\_V^*$ ] (which requires attraction of a finite element of the category V, cf. Lahne 2007), [ $*\text{wh}^*$ ], and [ $*\text{top}^*$ ], ranked according to the following hierarchy:<sup>7</sup>

(16) [ $*\text{fin}/\_V^*$ ] > [ $*\text{wh}^*$ ] > [ $*\text{top}^*$ ]

- Conceptual consideration: Checking/valuation of purely formal morphosyntactic features is imperative, since if unvalued, these constitute genuine uninterpretable features that cause a derivation to crash at both interfaces (see also fn. 7).
- Accordingly, C must first attract the finite verb. Subsequently, a *wh*-specifier and a topic specifier are added by recursive applications of Merge:

<sup>7</sup> The relevant feature hierarchy for a given functional head is presumably determined by (semantic) conditions holding at the interfaces, in the sense that a 'wrong' hierarchy of specifiers hosting the relevant elements could not be interpreted at the interface to C-I. Furthermore, note that the ranking of semantic/pragmatic features in functional heads represents the reverse of what presumably holds at the interface to C-I, with 'lower' functional features giving rise to higher specifiers (see also Müller 2007). In addition, morphosyntactic features seem to have primacy over 'peripheral' semantic/pragmatic features (i.e., must be satisfied first). This might have to do with the fact that unvalued/unchecked morphosyntactic features lead to a crashing derivation, while unvalued/unchecked semantic/pragmatic features probably merely give rise to deviant interpretations.



- XP-fronting in early OHG: triggered by
  - (i) 'strong' (i.e., starred) semantic/pragmatic features, or
  - (ii) a semantically vacuous EPP-feature optionally added to C (leading to generalized V2 effects, Axel 2007).
- Question: How do EPP-features and starred features interact in cases of multiple XP-fronting, i.e., what's the position of the EPP in the feature hierarchy?
- Purely formal features (such as the EPP) must be checked first (see above):

(18) [ $*\text{fin}/\_V^*$ ] > [EPP] > [ $*\text{wh}^*$ ] > [ $*\text{top}^*$ ]

#### 4.1.1 Declaratives

- Observation: Fronted elements for which it is likely that they are attracted by C's EPP-feature (indefinites/adjuncts, discourse-continuative marker *thô* 'then') occur directly to the left of the finite verb (i.e., in the lowest spec of CP):

(19) ... > (disloc.) topic > indef./adjunct/*thô* >  $V_{\text{fin}}$  ...

- Indefinites/adjuncts:

- (20) a. [fon themo tage inti ziti] *nioman* **ni=ueiz**...  
 from that day and time nobody NEG=know  
 Lt. *De die autem illo et hore nemo scit...*  
 (Tatian, Gospel Harmony, 146,6; TITUS)
- b. [Merun therra minna] *nioman* **habet** thanne thaz  
 greater this love nobody has than that  
 uer sin ferah seze furi sina friunta.  
 who his live lay-down for his friends  
 'No one has greater love than this, than that he lay down his life for his friends.'  
 Lt. *Maiorem hanc dilectionem nemo habet quam ut animam suam quis ponat pro amicis suis.*  
 (Tatian, Gospel Harmony, 168,2; TITUS)
- (21) So dhar after auh *chiuuisso* **quhidit** dher selbo forasago: ...  
 so thereafter also certainly said the same prophet  
 Lt. *Sic enim subiecit idem propheta: ...*  
 (Isidor, 5,9; TITUS)

- Discourse-continuative marker *thô* ‘then’: Highly frequent clause-linker introducing V2-clauses:

(22) *Thô gihortun* inan thie iungiron sprechantan inti folgetun themo heilante. *Thô hiiuanta* sih ther heilant inti gisah sie imo folgente, quad in: uuaz suochet ir? Sie quadun imo: rabbi (thaz ist arrekit meistar) uuâr artos? *Thô quad* her in: quemet inti gisehet. (*Tatian* [16.2])

Lt. John 1.37. *Et audierunt eum discipuli loquentem et secuti sunt Ihesum.* 38. *Conuersus autem Ihesus et videns eos sequentes se, dicit eis: quid queritis? Qui dixerunt ei: rabbi (quod dicitur interpretatum magister) ubi habitas?* 39. *Dicit eis: venite et videte.*

‘The two disciples heard him speak, and they followed Jesus. Then Jesus turned, and seeing them following, said to them, “What do you seek?” They said to Him, “Rabbi” (which is to say, when translated, Teacher), “where are You staying?” He said to them, “Come and see.”

- V1-declaratives: *thô* appears directly to the right of the finite verb:

(23) inti **uuas** tho giheilnit ira tothter fon dero ziti  
and was then/there healed her daughter from that hour  
Lt. [...] & *sanata est filia illius ex illa hora.*  
‘And her daughter was healed from that hour.’  
(*Tatian*, 273,31)

- Analysis: *thô* is base-generated in SpecTP and moves to prefinite position if C is endowed with an EPP feature (for reasons of locality, C<sub>[+EPP]</sub> attracts the closest (i.e., highest) element of the IP/TP domain, cf. e.g. Fanselow 2004, Frey 2006):<sup>8</sup>

(24) a. [V+C<sub>[-EPP]</sub> [TP *thô* ... t<sub>v</sub>]] ⇒ V1 declarative  
b. [C<sub>P</sub> *thô* [V+C<sub>[+EPP]</sub> [TP t<sub>thô</sub> ... t<sub>v</sub>]] ⇒ V2 declarative

- In cases of multiple fronting *thô* occurs directly left-adjacent to the finite verb:

(25) / [...] [siu] tho **giuuanta** sih/  
she then turned herself  
Lt. / [...] *conuersa illa*/  
‘She then turned around.’  
(*Tatian*, 665,19; Axel 2007: 224)

<sup>8</sup> In the absence of *thô*, another XP occupying the highest position in the midfield may be fronted to satisfy C’s EPP feature. As argued in Trips & Fuß (2008), Fuß (2008), discourse-continuative ‘then’ (*thô* in OHG) was originally inserted in SpecTP in early Germanic. I assume that in early OHG, the particular meaning of *thô* was still associated with SpecTP, similar to OE (and presumably Gothic). V1 order with postfinite *thô* is then the result of generalized V-to-C movement innovated by the (Western) Continental branch of Germanic (a development which did not take place in OE). Furthermore, the additional innovation of a semantically vacuous EPP feature in C led to V2 orders with prefinite *thô*. Due to the fact that C’s EPP feature is not linked to any peripheral semantic/pragmatic feature (such as [top] or [foc]), the original meaning of *thô* linked to SpecTP is preserved after movement to SpecCP.



### 4.1.2 *Wh*-questions

- Observation: fronted *wh*-phrases are directly left-adjacent to the finite verb in main clauses (Petrova & Solf 2007):

(26) \*... *wh* > XP > V<sub>fin</sub>

- Question: Why does EPP-checking by an element such as *thô* not preempt *wh*-movement to the closest specifier of C (if [EPP] is ranked higher than [\*wh\*])?
- Possible answer: The distribution of *wh*-phrases can be attributed to the following principle (Chomsky 2001: 15):

(27) Maximize matching effects.

- If there are two elements that may in principle check/value features of C, C will attract only the element that checks/values the greatest subset of features contained in C:
  - (i) Fronting of *wh*-phrases serves to check/value both (i) C's EPP feature and (ii) C's [\*wh\*] feature.
  - (ii) Purely EPP-driven fronting merely checks a single feature (EPP).
- Accordingly, C will attract the *wh*-phrase, leaving *thô* in a lower, postfinite position.
- *thô* cannot occupy a second/outer specifier: (i) *thô* does not constitute a possible topic/focus and therefore cannot be attracted by features other than the EPP; (ii) the relevant EPP feature has already been eliminated by *wh*-movement.
- This prediction is borne out by the facts: There are apparently no cases where a fronted *wh*-phrase is preceded by a non-topic such as *thô* (cf. Petrova & Solf 2007):

(28) \*... *thô* > *wh* > V<sub>fin</sub>

### 4.1.3 Further issues: multiple topics & clausal particles

- OHG *Isidor*: Multiple fronting of the type XP-XP-V<sub>fin</sub> is more productive than in other OHG texts (cf. Robinson 1997):

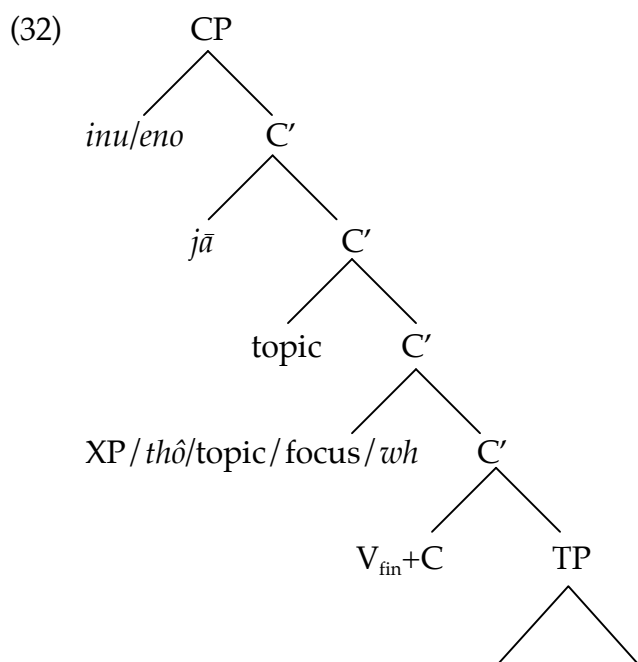
- (29) a. [Dhea uuehhun] [aur] [in heilegim quhidim] **arfullant** sibun iaar.  
 the weeks however in sacred language fulfil seven years  
 Lt. *Ebdomada namque in sacris eloquiis septem annis terminatur.*  
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- b. [So] [auh in andreru stedi] [dhurah dhen selbun heilegun forasagun]  
 so also in other places through the same holy prophet  
**uuard** dhera dhrinissa bauhunc sus araughtit: [...]  
 became the-GEN Trinitiy-GEN meaning in this way demonstrated  
 Lt. *Item alibi per eundem prophetam trinitatis sic demonstratur significantia: [...]*  
 'In this way, also elsewhere the meaning of the Trinity was demonstrated by  
 the same holy prophet: [...]'  
 (*Isidor*, 328; Robinson 1997: 27)

- In (29a), the fronted XPs have a different information-structural status: (i) *dhea uuehhun* is a topic (which refers back to given information); (ii) *in heilegim quhidim* is most likely a contrastive focus.<sup>9</sup>
- Analysis in a mult-spec setting: slight modification of the feature hierarchy in (18), replacing the feature [*\*wh\**] by the more general feature [*\*foc\**] (see e.g. Sabel 1998 for the idea that *wh*-movement is triggered by a focus feature):

(30) [*\*fin/\_V\**] > [EPP] > [*\*foc\**] > [*\*top\**]

- (29b) most likely involves multiple fronting of topics.
- Analysis: feature hierarchy may include more than a single [*\*top\**] feature each instance of which triggers a separate move operation.<sup>10</sup>
- Clausal particles (*inu/eno* etc.): correspond to two more features linked to the coding of affirmativity and the typing of all kinds of interrogatives:

(31) [*\*fin/\_V\**] > [EPP] > [*\*foc\**] > [*\*top1\**]/[*\*top2\**] > [*\*affirm\**] > [*\*interrog\**]



<sup>9</sup> Compare the relevant passage from the OHG *Isidor*:

Chiuuisso nu, ibu dhea sibunzo uuehhono fona daniheles zide uuerdhant chizelido, buuzssan einigan zuuiiun ist dhanne archennit, dhazs dher allero heilegono heilego druhtin nerrendeo christ iu ist langhe quhoman. Dhea uuehhun auur in heilegim quhidim arfullant sibun iaar.

Lt. *Quę scilicet LXX ebdomadę, si a tempore danielis numerentur, procul dubio sanctus sanctorum dominus iesus christus olim uenisse cognoscitur. Ebdomada namque in sacris eloquiis septem annis terminatur.*

‘Certainly now, if the 70 weeks are counted from Daniel’s time on, it is without doubt that the holiest of the holy, Christ the Lord has already come. The weeks, however, take seven years in sacred language.’

(*Isidor*, 453-457; TITUS)

<sup>10</sup> Thus, it must be ruled out that *Maximize matching effects* leads to multiple checking of both [*\*top\**] features. This can be achieved either by a uniqueness principle ensuring that a single element can maximally satisfy a single substantial semantic/pragmatic feature, or by a more fine-grained distinction between different kinds of [*\*top\**] features linked to the well-known distinction between aboutness topics, familiarity topics etc.

## 4.2 Summary: multiple projections vs. multiples specifiers

- Multiple projections vs. multiple specifiers – major differences:
  - (i) absence/presence of multiple head positions in the left periphery;
  - (ii) nature of the specifier closest to the position of the finite verb:
    - (a) SpecFinP in a multiple projections analysis (reserved for pronouns and non-topic/non-focus elements attracted by C's EPP feature, cf. Axel 2007);
    - (b) multi-purpose position in a structure like (32); content is determined by various factors including:
      - (i) the feature hierarchy in (31),
      - (ii) the actual feature content of C in each individual sentence;
      - (iii) the interaction between C's EPP feature and other substantial semantic/pragmatic features in terms of *Maximize matching effects*.
- The multi-purpose character of this position carries over to present-day German (cf. e.g. Fanselow 2004, 2006), the only difference being that in present-day German, C has apparently lost its ability to project more than a single specifier.

## 5 The loss of V3 and the role of *thô*

- V2 order was generalized in the course of OHG; late OHG texts exhibit consistent V2 and inversion with fronted non-subjects, cf. Behaghel (1932), Näf (1979), Lenerz (1984), Schrodtt (2004: 204f.), Axel (2007: 200f.), and Petrova & Solf (2007).
- New analysis based on structure (32): rise of rigid V2 results from a simple parametric change, namely the loss of multiple specifiers in the CP.
- Claim: this change was triggered by two factors:
  - (i) Fossilization: when the original semantic/pragmatic function of XP-fronting became opaque (possibly due to the multi-purpose character of the lowest SpecCP), learners posited a semantically vacuous EPP-feature in C to mimic the relevant patterns (instead of discarding the relevant data, cf. Simpson 2004).<sup>11</sup>
  - (ii) Reanalysis of clause-initial *thô* as an expletive satisfying C's EPP-feature: Overuse of *thô* as clause-initial element led to a reanalysis in which learners took clause-initial *thô* to be base-generated in SpecCP, discarding the movement operation that accomplished *thô*-fronting in the target grammar (possibly driven by least effort strategies that favor the least costly derivation in case the input is ambiguous, cf. Roberts and Roussou 2003):

- (33) a.  $[_{CP} \dots \textit{thô} [_{C'} V_{fin} + C_{[+EPP]} [_{TP} t_{\textit{thô}} T [_{VP} \dots]]]] \Rightarrow$   
 b.  $[_{CP} \textit{thô} [_{C'} V_{fin} + C_{[+EPP]} [_{TP} \dots T [_{VP} \dots]]]]$

- The expletive use of clause-initial *da* can still be observed in present-day German dialects, which make only sparse use of the *Vorfeld-es*:

- (34) Do is a *Unglugg* bassierd.  
 there is an accident happened  
 'An accident has happened.'  
 (Weiß 1998: 102)

<sup>11</sup> This possibility can be attributed to a mechanism devised by Chomsky (2000) to the effect that semantically vacuous, structure-building EPP features may be optionally added to phase heads, possibly in the course of the syntactic derivation (Chomsky 2000, 2001; cf. Müller 2007 for discussion):  
 (i) The head H of phase Ph may be assigned an EPP-feature (Chomsky 2000: 109)

- Question: How did this change affect *C*'s capability of projecting multiple specs?
- Claim: Presence of expletives signals to the learner that a functional head may project only a single specifier.
- Expletives in Germanic:
  - (i) subject-type (occurring in SpecTP: English, Scandinavian, and Dutch (?));
  - (ii) V2-type (occupying SpecCP in all Germanic V2 languages).
- In both cases, the existence of an expletive correlates with the following facts:
  - (i) The relevant syntactic position must be obligatorily filled (subject position of tensed clauses in English, *Vorfeld* of main declaratives in V2 languages);
  - (ii) The relevant syntactic position is unique, in the sense that the relevant head (T or C) may project only a single specifier (no scrambling to pre-subject position in English/Scandinavian, absence of V3 effects in V2 languages).

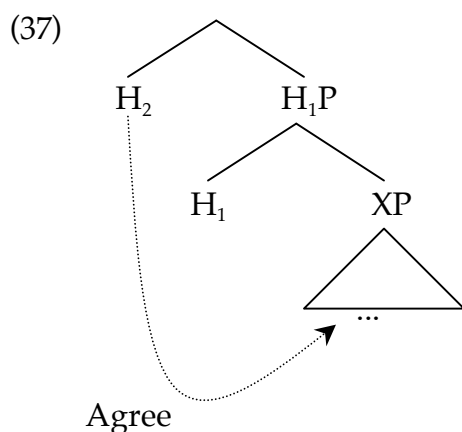
(35) *Generalization: Expletives and multiple specifiers*

A functional head *F* can project multiple specifiers only if the grammar does not contain an expletive related to *F*.

- The fact that expletives 'close off' the projection of a functional head follows from:
  - (i) strict cyclicity;
  - (ii) the assumption that the expletive itself acts as a probe, initiating an Agree relation with a functional head *F* after the expletive has been merged as specifier of *F* (Chomsky 2000, 2004).
- Strict cyclicity: A lower head *H*<sub>1</sub> may not any longer trigger syntactic operations after a higher head *H*<sub>2</sub> has been merged, acting as a probe (Chomsky 2000: 132):

(36) Properties of the probe/selector  $\alpha$  must be satisfied before new elements of the lexical subarray are accessed to drive further operations.

- In a structure like (37), *H*<sub>1</sub> is inert after *H*<sub>2</sub> (which has been subsequently added to the structure) has initiated an Agree operation:<sup>12</sup>

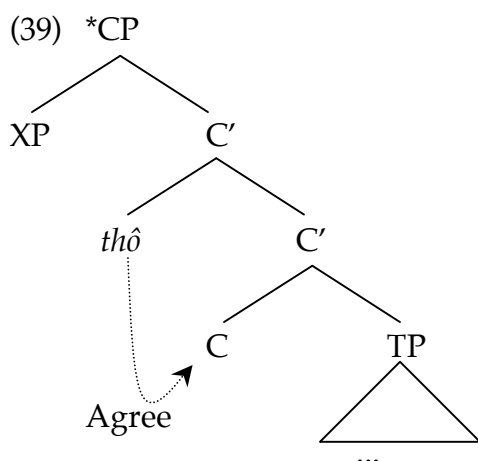


<sup>12</sup> This assumption seems to be implicit in most work on the strict cycle (for related discussion cf. e.g. Chomsky 1995: 234f., Collins 1997: 81ff., and in particular Chomsky 2000: 132f.); it follows more or less directly if phases are equated with phrases as for example in Müller (2007). The status of (36) is somewhat less clear under the assumption that T may initiate syntactic operations only after it has inherited the relevant uninterpretable features from C (Chomsky 2004). One might argue, however, that this particular situation does not conflict with (36), since T in fact has no probe properties prior to Merge of C. After C has been added, the relevant features (e.g.,  $u\phi$ , EPP) are handed over to T, giving rise to cases of 'parallel probing' where operations triggered by C and T apply in parallel.

- Expletives as probes: The checking/valuation relation between a functional head F and an expletive merged in F's specifier is initiated by the expletive itself (cf. Chomsky 2000: 128, 2004: 114).
- Derivation of generalization (35): After an expletive has established an Agree relation with C or T, C/T become inert and may not trigger further operations. As a result, they can neither attract further elements nor project additional specifiers.
- Loss of V3 in OHG – reanalysis of *thô* as an expletive-like element:

- (38) a. [<sub>CP</sub> ... *thô* [<sub>C</sub> V<sub>fin</sub> + C<sub>[+EPP]</sub> [<sub>TP</sub> t<sub>*thô*</sub> T [<sub>VP</sub> ...]]]] →  
 b. [<sub>CP</sub> *thô* [<sub>C</sub> V<sub>fin</sub> + C<sub>[+EPP]</sub> [<sub>TP</sub> ... T [<sub>VP</sub> ...]]]]

- (i) insertion of *thô* in SpecCP eliminates C's EPP-feature.
- (ii) *thô* carries an uninterpretable feature [uF] that renders it active and must be eliminated as well.<sup>13</sup>
- (iii) Following Chomsky (2000, 2004), *thô* acts as a probe that accesses C as the closest goal. As a result, *thô*'s [uF] deletes.
- (iv) Crucially, C is inert and cannot trigger any further operations after it has been accessed by the expletive probe. Thus, C may not project further specifiers, ruling out a structure as in (39).



- After the reanalysis, examples with clause-initial *thô* provided positive evidence to the learner that at least in a certain context, C could not project more than a single specifier.
- The relevant examples were particularly frequent in OHG, which suggests that they played an important role in the PLD constructed from the input.
- Together with the fact that the original semantic/pragmatic motivation for XP-fronting was becoming more and more opaque, the reanalysis (33) can be taken to have tipped the scales in favor of a strict V2 grammar that lacks the possibility of multiple specifiers in the C-domain.

<sup>13</sup> As to the nature of [uF], we might speculate that it relates either to C's clause type features (i.e., [+declarative] in the case at hand) or to the fact that C in V2 languages is typically linked to finiteness. The latter might be taken to indicate that both C and the expletive *thô* carry an uninterpretable tense specification [uTns]. This seems to make the correct typological prediction that cross-linguistically, C-related expletives are confined to V2 languages. I leave this point open for future research.

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