

# *For, zu* and feature inheritance

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## Abstract

This paper discusses consequences of the feature inheritance proposal for the clausal left periphery. It argues that the German *zu* is an infinitival complementizer, as the English *for* or the French *de* and that the difference in grammaticality between German *wh*-infinitives with *zu* and English *wh*-infinitives with *to* can be accounted for in terms of feature inheritance. It is argued that in contrast to main/matrix clauses, CP of the embedded clause has no specifier position. This is based on the fact that all features of the embedded C are inherited by T. This derives effects of the Doubly Filled COMP Filter and makes an interesting prediction for movement. The paper also presents a novel analysis of ECM constructions and provides a new argument for feature inheritance.

## 1. Introduction

According to Chomsky (2007, 2008),  $\varphi$ -features and tense features are not inherent to T; they are inherited from C (for the rationale, see Richards 2007, 2011). Chomsky (2013) extends feature inheritance to all features of C (e.g. to the Q feature).

Chomsky (2013) also proposes that in the case of the syntactic object {XP, YP}, there are two ways in which the element can be labeled. Either the syntactic object is modified so that there is only one visible head (i.e. one of the phrases is moved) or X and Y share some prominent feature, which is then taken as the label of the syntactic object. Thus, according to Chomsky (2013: 47), in example (1a), the *wh*-phrase subject is in its criterial position as sister-of-QP and “its Q-feature agrees with the head of the sister phrase QP, so it therefore need not – in fact cannot – raise any further (and  $\alpha$  is labeled Q)”, as shown in (1b).

- (1) a. They asked [if-Q [ $\alpha$  [how many mechanics] [T-Q fixed the cars]]]  
b. \*How many mechanics did they ask if fixed the cars?

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It is obvious that the subject “need not” raise, given that the resulting phrase can be labeled (as QP) and so be properly interpreted at the interfaces. Chomsky is not very specific about why the *wh*-phrase subject “cannot” raise but given his discussion of the *that*-trace effect, it seems that the movement is also blocked by the possibility of agree and labeling (given feature sharing). Note, however, that if the subject moves, its copy will be invisible to minimal search and  $\alpha$  can also be labeled (as TP). This paper will elaborate on this issue. More generally, it is concerned with restrictions on merger in the clausal left periphery.

The overall outline of the paper is as follows. In section 2, it is argued that the German verbal marker *zu* is an infinitival complementizer like the English *for*, French *de* or Italian *di*. Section 3 discusses the difference between main and embedded clauses. It shows that given feature inheritance and the architecture of embedded clauses, the embedded C cannot have specifiers, which gives rise Doubly Filled COMP Filter effects. Section 4 is concerned with successive-cyclic movement. It is argued that the moving element moves through specifiers of phase complements. That section also discusses the *that*-trace effect and the difference between subject and object extraction. Section 5 analyzes ECM constructions and argues that ECM data support the view that *zu* is an infinitival complementizer. Section 6 summarizes the major conclusions of the paper.

## 2. Infinitival complementizers

The reasoning from the preceding section can be extended to infinitival *for-to* clauses like in (2). Since *her* stops in SpecTP (in fact, Spec $\Phi$ P, as we will see below), there must be some feature that is shared by both *her* and T. Since *her* bears  $\varphi$ -features, the case feature and possibly the categorial feature, the optimal candidate for the label is  $\varphi$ -features because the projected phrase does not behave like a noun and in Chomsky’s system case is not a feature of probes (the probe just “determines” the case value). As to features on T, T is [ $-\text{fin}$ ] since the *for*-complement is infinitival and  $\varphi$ -complete because it is selected by C (Chomsky 2000, 2001, 2008). In the feature inheritance proposal, T inherits these features from C *for*.<sup>1</sup> Thus, the shared  $\varphi$ -features are taken as the label of

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<sup>1</sup>Given the  $\varphi$ -features agree (sharing) between T and *her*, accusative on *her* can be analyzed as a reflection of this agree operation (if the accusative case value is also inherited), as in the case of nominative in finite clauses. This means that also in *for-to* constructions non-finite T assigns

the projection (2a), hence the structure can be properly interpreted, and the subject *her* cannot move further, as shown in (2b) and (2c).<sup>2</sup>

- (2) a. John asked [<sub>C</sub> for [<sub>φP</sub> her to accompany you]].  
 b. \*John asked her for t to accompany you.  
 c. \*Her John asked for t to accompany you.

In a parallel fashion, we can also exclude German infinitival interrogatives containing *zu*; compare (2b) and (3).

- (3) \*Ich weiß nicht, was zu tun.  
 I know not what to do

I propose that the ungrammaticality of (3) results from movement of the whP *was* across C *zu*, similarly to the movement of *her* across *for* in (2b). Given that all features of C should be inherited, the Q-feature of the embedded interrogative C is transmitted to the lower head, where it raises *was* to the specifier position (of QP). Then, however, there is no reason for movement of *was* to CP.

This means that *zu* spells out the infinitival complementizer, for instance, as the English *for*, the French *de* and the Italian *di*. Thus, (3) is parallel to the French and Italian data in (4b) and (5b), respectively.

- (4) a. Je lui ai dit où aller.  
 I him have told where go.INF  
 b. \*Je lui ai dit où d'aller.  
 I him have told where de.go.INF  
 'I told him where to go.' (Kayne 1981: 350)

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case (which has been proposed for control constructions, where PRO receives null case; see Chomsky and Lasnik 1993).

In addition, if this inheritance analysis is correct, it provides an argument for the presence of the tense feature and  $\varphi$ -features on Ps (see Bowern and Aygen-Tosun 2000, Pesetsky and Torrego 2004, 2006, Baker 2008, Biskup 2009, Lohndal 2009*b*, van Gelderen 2011, Biskup and Putnam 2012); see also languages with tensed prepositions like Titan and Māori and languages with P agreement as Abaza, Abkhaz, Hungarian, Irish, Iwaidjan languages, Jacalteco, Tsakhur, Welsh.

<sup>2</sup>In an approach treating cases like tense features, e.g. Pesetsky and Torrego (2001), the projection could also be labeled as TP.

- (5) a. Gli ho detto dove andare.  
 him have told where go.INF  
 b. \*Gli ho detto dove di andare.  
 him have told where di go.INF  
 ‘I told him where to go.’ (Kayne 1981: 351)

Kayne (1981) argues persuasively that *de* and *di* are infinitival complementizers. A comparison of the French and Italian *de*, *di* with the German *zu* shows that *zu* behaves like its French and Italian counterparts in most respects. For instance, if the wh-infinitive does not contain *zu*, the sentence is grammatical; compare (6) with (3).<sup>3</sup>

- (6) Ich weiß nicht, was tun.  
 I know not what do  
 ‘I do not know what to do.’

Like French and Italian, German does not have the English *believe*-type of ECM constructions; only the control pattern (PRO plus the overt complementizer) can be used in this case. If the ECM construction is possible, as with the verb *see*, then the presence of the complementizer leads to ungrammaticality (for the analysis of ECM constructions, see section 5).

As the French and Italian *de*, *di*, *zu* also occurs in various control constructions. Where *zu* differs from its French and Italian counterparts are the raising constructions of the *seem*-type. Whereas in French and Italian these constructions are grammatical only without *de*, *di*, in German the constructions are grammatical only with *zu*. Note, however, that the raising status of *scheinen* ‘seem’ has been questioned in the literature (Reis 1982).<sup>4</sup> It is also worth noting that *zu* - like *de*, *di* - belongs to the category of prepositions and that there is a close relation between prepositions and complementizers (e.g. Emonds 1985, Kayne 2004, Pesetsky and Torrego 2006, Tortora 2008). Thus, in what follows, I take *zu* to represent the infinitival complementizer, in line with Reis (1973), Leys (1985) and Wilder (1988).

Let us consider the position of *was* in (3). Although German complementizers take their complement to the right, (3) cannot be taken to show that *was* occurs in SpecCP because *zu* behaves like a bound morpheme and must co-occur with

<sup>3</sup>The wh-infinitive construction is constrained to a certain extent; not all verbs can appear in it.

<sup>4</sup>French also has “raising” verbs (in sense of Perlmutter 1970) with the overt complementizer; see Kayne (1981: 353, n.9).

the (rightmost) verb, which is usually analyzed as staying in situ in embedded clauses. For instance, (7a) shows that *zu* intervenes between the (prefixed) verb and its object and (7b) that *zu* is sandwiched between the verb and the particle.

- (7) a. Er bat sie, morgen zwei Bücher zu lesen/ver-kaufen.  
 he asked her tomorrow two books to read/ver-sell  
 ‘He asked her to read/sell two books tomorrow.’  
 b. Er hofft, sie morgen wieder-zu-sehen.  
 he hopes her tomorrow again-to-see  
 ‘He hopes to see her tomorrow.’

For this reason, it has been proposed that *zu* lowers in German; see e.g. von Stechow and Sternefeld (1988), Sternefeld (1990), Salzmann (2013). In the same vein, I will assume here that *zu* – representing the head C, which takes its complement to the right – is moved to the (rightmost) verb in the PF component. As to the difference between the position of *zu* (and the accent pattern) in prefix verbs (7a) and particle verbs (7b), I follow Biskup et al. (2011), who argue that verbal prefixes are incorporated prepositions – in contrast to particles (prepositions), which do not incorporate – therefore *zu* cannot be inserted between the prefix and the verb later in the derivation.

Although we do not have a direct evidence for the SpecCP position of whPs in German wh-infinitives, there is indirect evidence that the whP in sentences like (3) occurs in SpecCP. Firstly, there are parallel French and Italian data, like (4b) and (5b). Also the English counterpart in (8) shows that when the whP unambiguously occurs in SpecCP, the result is ungrammatical.

- (8) \*I don’t know what that to do.

Secondly, we know independently that German or English embedded clauses can be CPs – they have a complementizer – and that if the complementizer and SpecCP are filled (with a whP), the sentence is ungrammatical; see, for instance, (9) and (10).<sup>5</sup> Consequently, since (3) has the complementizer *zu* with the whP and is ungrammatical, it suggests that *was* occurs in SpecCP. Moreover, if the whP (*et*)*was* occurs lower in the structure, as in (11a), (11b), the sentence is grammatical.

<sup>5</sup>I will show in section 3 how the Doubly Filled COMP Filter effects are derived.

- (9) \*Ich weiß nicht, was ob/dass sie gelesen hat.  
I know not what whether/that she read has
- (10) \*I asked what for John to do. (Bresnan 1972: 30)
- (11) a. Ich beschloss, was zu tun sei.  
I decided what to do be  
'I decided what is necessary to do.'
- b. Ich beschloss, (et)was zu tun.  
I decided what to do  
'I decided to do something.'
- c. \*Ich beschloss, [<sub>CP</sub> was [o [<sub>IP</sub> PRO t zu tun]]].  
I decided what to do  
(von Stechow and Sternefeld 1988: 384)

The English counterpart of the grammatical (6) can be found in (12).

- (12) I don't know what to do.

Since the infinitival marker *to* represents T in English, the word order in (12) is compatible with the analysis according to which *what* occurs in SpecTP (in fact SpecQP, and PRO occupies SpecΦP, given the feature sharing approach to labeling; in the earlier minimalist approach, they would be multiple specifiers of T). The same holds for the grammatical German sentence without *zu* in (6). Given the feature inheritance proposal, the Q-feature inherited from C raises *was* and *what* to the specifier of the complement of C. Given the Q-feature agree, the resulting phrase is labeled as QP and can be properly interpreted at the interfaces. Thus, the whPs do not need to move further. And crucially, the whPs cannot move to CP because C has no feature any more that could raise them.

### 3. Main versus embedded clauses

It is a well-known fact that there are differences between main and embedded clauses. For instance, inversion in English interrogatives is restricted to the main clause (with the exception of a few dialects, see e.g. McCloskey 1992, Adger 2003); consider (13). If it is correct that the subject occupies SpecTP in English, then SpecCP is filled with the whP, as shown (with the standard notation) in (13a). In contrast, in embedded clauses, there is no inversion

and the word order is also compatible with the whP occurring in SpecTP (SpecQP). This is exactly what the feature inheritance approach proposes. Since the Q-feature is also inherited and C has no features any more that could move the whP, *what* stops in SpecQP, as shown in (13b).

- (13) a. [<sub>CP</sub> What will [<sub>TP</sub> you do]]?  
 b. I know [<sub>CP</sub> C [<sub>QP</sub> what [<sub>φP</sub> you will do]]].  
 c. \*I know what will you do.

More generally, data like these suggest that SpecCP is not realized in embedded clauses; see also (2b), (4b), (5b), (8), (9) and (10). The following German data support this generalization.<sup>6</sup> Given the standard V2 analysis of German main clauses, SpecCP is realized there, as shown in (14).

- (14) a. [<sub>CP</sub> Er [<sub>C'</sub> hat es gemacht ]].  
           he     has it done  
           ‘He did it.’  
 b. [<sub>CP</sub> Was [<sub>C'</sub> hat er gemacht ]]?  
           what     has he done  
           ‘What did he do?’

In contrast, embedded clauses can receive an analysis under which SpecCP is not realized and the whP occurs in the lower projection because of feature inheritance, as shown in (15a). Embedded whPs in SpecCP never co-occur with V2 (see Müller 1995 and references therein); compare (15b) with (14b).<sup>7</sup>

<sup>6</sup>But see Bayer (1984) for the exceptional behaviour of Bavarian.

<sup>7</sup>Certain types of predicates allow V2-embedding like in (i) (see e.g. Helbig and Buscha 1994, Reis 1997, Meinunger 2006, Truckenbrodt 2006). These constructions behave ambiguously with respect to their main/embedded status. In my analysis, the embedded clause will have the internal structure of main clauses.

- (i) Ich weiß, er hat Recht.  
 I know he has right  
 ‘I know he is right.’

In the case of symmetric V2 languages such as Icelandic and Yiddish, the situation is different since in these languages, V2 applies in both main and embedded clauses. The current proposal prefers analyses like Holmberg and Platzack (1995), where the embedded V2 is the result of V-to-I movement.

- (15) a. Ich weiß, [<sub>CP</sub> C [<sub>QP</sub> was [<sub>φP</sub> er [<sub>vP</sub> gemacht hat ]]]].  
 I know what he done has
- b. \*Ich weiß, was hat er gemacht.  
 I know what has he done  
 'I know what he did.'

To sum up, although embedded clauses can be CPs, the SpecCP is not realized because all features of C pass down to the lower head and there are no remaining features on C that could induce merger to SpecCP. This also holds for the edge feature of C.

This approach also excludes cases of external merge to SpecCP; consider the contrast in (16). It has been argued that adverbs like the reason *why* cannot move and merge high in the clausal structure (e.g. Starke 2001). According to my proposal, *why* externally merges in SpecCP in (16a). In contrast, *where* is externally or internally merged in SpecTP.

- (16) a. \*I don't know why to study.  
 b. I don't know where to study.

The difference between main and embedded clauses derives from the fact that in the main clause there must be a phase head selecting CP. The presence of this head – let us call it Main – is necessary because also elements of the main/matrix CP need to be sent to the interfaces (recall that in Chomsky's model 2000 *et seq.*, only the complement of the phase head is transferred). Since Main is a phase head, its features are inherited by C. Since it also applies to the edge feature of Main, C inherits it and consequently can have a specifier like in (13a) and (14).<sup>8</sup> In addition to the edge feature, Main could also have some left-periphery features (see Rizzi 1997), which are not inherent to embedded clauses; note that main and embedded clauses differ, for instance, in the illocutionary force.

This proposal provides us with a new argument for feature inheritance. If Main bears features triggering movement or merger to Spec, then there must exist feature inheritance; otherwise some parts of the derivation would not be transferred. In fact, only the presence of the edge feature on Main – which is necessary for every merge operation (see Chomsky 2008) – makes

<sup>8</sup>The proposal could also be formulated in terms of the EPP-feature or in terms of Rizzi's (1997) features.

feature inheritance indispensable because the feature can induce several merge operations.

The majority of the ungrammatical data in the preceding discussion were excluded by the Doubly Filled COMP Filter in earlier stages of generative grammar. In the current proposal, effects of the Doubly Filled COMP Filter derive from feature inheritance. Since all features – including the edge feature – of the embedded C are passed down to the head of its complement, there are no features on the complementizer that could trigger merger to SpecCP.

#### 4. Movement

When syntactic objects cannot move to the embedded SpecCP, then how does successive-cyclic movement work? Given feature inheritance and the discussion above, elements must move to the specifier position of phase complements, not to the edge of phase heads. This is supported by findings by Kiss (1987), Rudin (1988), Brody (1995), Bošković (1997, 2002), Richards (1997, 2001), Miyagawa (2001), Meyer (2004), Sturgeon (2006), Preminger (2010), who argue that in languages like Czech, Hebrew, Hungarian, Japanese, Polish, Russian, Serbo-Croatian, *wh*-movement can target TP or a projection lower than CP.

In English, there is a difference in grammaticality between argument extraction from infinitive *wh*-islands and tensed *wh*-islands; compare (17) and (18) (Safir 2004: 168).

- (17) a. Who<sub>*j*</sub> were you wondering what<sub>*i*</sub> to give t<sub>*j*</sub> t<sub>*i*</sub>?  
 b. What<sub>*i*</sub> was Astrid asking how<sub>*j*</sub> to serve t<sub>*i*</sub> t<sub>*j*</sub>?  
 c. Which animal<sub>*i*</sub> did she tell you how<sub>*j*</sub> to feed t<sub>*i*</sub> t<sub>*j*</sub>?
- (18) a. ??Who were you wondering what you gave?  
 b. ??What was Astrid asking how she should serve?  
 c. ?Which animal did she tell you how you should feed?

According to Safir (2004), movement to the matrix clauses in (17) proceeds by adjunction to TP in the embedded clause. In contrast, in the tensed clauses in (18), adjunction to TP is blocked for some reason and movement proceeds through the embedded SpecCP, which leads to a relativized minimality problem.

This can be reinterpreted in my analysis as follows. If it is correct that movement in (18) cannot proceed through SpecTP and goes through the embedded SpecCP, then, given feature inheritance (i.e., the impossibility of

merger to the embedded SpecCP), the data are expected to be degraded. In contrast, the movement through the embedded SpecTP in (17) is grammatical because it is in accordance with feature inheritance.

Thus, using the standard notation, successive-cyclic movement proceeds through SpecTP, then SpecVP, SpecTP etc. Only in the main clause the final step goes to SpecCP, given the presence of the phase head Main. In embedded clauses movement stops in SpecTP.<sup>9</sup> Concerning locality, such movement steps should not pose a problem because Chomsky's model allows feature inheritance and long distance relations like Icelandic quirky constructions with agreement between T and the nominative object in situ at the same time.

Chomsky (2013) discusses the ECP-difference between the ungrammatical subject extraction in (1b) and the grammatical movement of the object in (19) but he is not explicit about how the object movement in (19) works (Chomsky 2013: 41).

(19) How many cars did they ask if the mechanics fixed?

Here is my proposal. The object receives its case from V (given the  $v$ -V relation and feature inheritance) and moves to SpecTP since all feature of C *if* are inherited by T, as discussed above. There its Q-feature agrees with the inherited Q-feature on T, analogously to the agreeing wh-subject in (1a). Since *how many cars* moves further, its copy is invisible to minimal search and  $\alpha$  is labeled as TP, in contrast to QP in the case of the wh-subject. I assume that the object is raised to SpecVP by the edge feature, not to Spec $v$ P, given the general feature inheritance. After that, the object raises to the matrix SpecTP, where its Q-feature agrees with the Q-feature of T inherited from C. In the final step, the edge feature on C – inherited from Main – moves the object to SpecCP.

At this point, the question arises why the subject cannot move from SpecTP/SpecQP in (1b), when the object can in (19). Recall that both arguments bear the Q-feature that agrees with the inherited Q-feature on T. Thus, it cannot be just the possibility of the agree operation and the shared-feature labeling that blocks the subject movement.

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<sup>9</sup>In the literature, there can be found various diagnostics of successive-cyclic movement, reconstruction for binding in English, partial wh-movement in German, Frisian and several other languages, subject inversion in French and European Spanish, agreeing complementizers in Irish etc. Some of them could challenge the presented analysis because they seem to prefer the SpecCP escape hatch, like floating quantifiers in West Ulster English. Because of lack of space, I will not discuss them here.

Here the Activity Condition applies. I assume that an element becomes inactive (invisible to further computation) after movement to the specifier position of its case licenser (cf. Chomsky 2000, 2001, Richards 2001, Boeckx 2008, Lohndal 2011, among others). It is obvious that in (1b) the subject becomes inactive after movement to SpecQP because it is the specifier position of its case licenser. In contrast, the object can move the whole way up in cases like (19) because it was externally merged with its case licenser.

The Activity Condition also bans movement of the embedded subject in the case of *for-to* constructions like in (2). There is a certain redundancy in the system because sentences like (2b) are excluded not only by the Activation Condition but also by the impossibility of the subject to merge in the embedded SpecCP, given the feature inheritance proposal. It is not possible to avoid this redundancy because we need both a ban on movement of elements from the derived case position and a general ban on merger to the embedded SpecCP.

The Activity Condition also derives subject-object extraction asymmetries with *that*-complements, however, what about the *that*-trace effect? Consider the contrast in (20). Example (20a) is ungrammatical because the subject became inactive after movement to the embedded SpecTP and for (20b) one might expect the same (Chomsky 2013: 47).

- (20) a. \*How many mechanics did they say that fixed the cars?  
 b. How many mechanics did they say fixed the cars?

The proposal in Chomsky (2013) is again based on feature sharing (and criterial freezing). If that is deleted, as in (20b), the embedded C lacks the general feature F, which is responsible for agreement with  $\varphi$ -features of the subject. Consequently, since there is no agree relation between the embedded T and the subject, criterial freezing does not apply. An immediate question arises as to how the moved subject receives case in sentences like (20b). Recall also that Chomsky's approach – as it stands – has a problem with the subject-object extraction asymmetry in the case of embedded questions, which I overcame with the Activation Condition.<sup>10</sup>

In order to maintain the standard case assignment under the assumption of the Activation Condition, the *wh*-subject in sentences like (20b) must move

<sup>10</sup>There are also other approaches to the *that*-trace effect in the recent literature, e.g., Rizzi and Shlonsky (2007), Boeckx (2008), Lohndal (2009a, 2011), Bayer and Salzmann (2013), Epstein et al. (2013).

from its base position, that is, skip the specifier position of its case licenser. It should receive nominative *in situ* as a reflection of the agree operation between its  $\varphi$ -features and the inherited  $\varphi$ -features on T and then it should move directly to the matrix clause. If the movement to SpecTP is dependent on the presence of the EPP-feature on T – that is, if the edge feature alone is not sufficient –, then the EPP-feature must be absent from the embedded T in (20b). This can be achieved if the null C selects T without the EPP-feature, in contrast to *that* in (20a), which selects T with the EPP-feature, making the moved subject inactive.<sup>11</sup> In this way, we derive the effects of Chomsky’s proposal, but in addition, we maintain the standard case assignment.

## 5. ECM constructions

In this section, I show that ECM data support the view that *zu* is an infinitival complementizer. German ECM constructions are grammatical only without *zu*, as shown in (21).

- (21) a. Er sah ihn liegen.  
           he saw him lie  
       b. \*Er sah ihn zu liegen.  
           he saw him to lie  
           ‘He saw him to lie.’

If *zu* is a complementizer, as argued in section 2, then the data in (21) neatly fits with the standard approaches to ECM complements, which analyze them as IPs (TPs). The example with *zu* in (21b) is ungrammatical because the complement is too big. What does that mean in the present approach?

Recall that *zu* is present in German control constructions and that non-finite T can also assign case, as discussed for control and *for-to* constructions in section 2.<sup>12</sup> In control complements, T is  $\varphi$ -complete, hence the subject PRO receives null case. Given feature inheritance,  $\varphi$ -features of T are inherited from C, that is, from *zu*. Thus, the presence of *zu* is responsible for case.

<sup>11</sup>T can also have its own features but if the selectional relation is undesirable, the EPP-feature could also be inherited from C.

<sup>12</sup>There are also coherent control constructions in German, which contain *zu* – i.e., the embedded clause is CP according to my analysis – but also show certain transparency phenomena. For a proposal how to analyze these constructions, see e.g. Grewendorf and Sabel (1994).

It is obvious now how it works in ECM constructions. In cases where T is selected by C, that is by *zu*, like in (21b), T inherits  $\varphi$ -features and assigns case to the subject. The problem is that the matrix V is also a probe. More precisely, when the embedded subject receives null case and moves to SpecTP/SpecCP, it becomes inactive, as discussed in the preceding section. Consequently,  $\varphi$ -features of V remain unvalued, which will cause the derivation to crash.

If one restricts null case only to PRO, then under the standard assumption that case and agreement are two sides of the same coin,  $\varphi$ -features of the embedded T remain unvalued in (21b) and the derivation will crash as well.

If case were dissociated from agreement and the embedded subject *ihn* agreed with the embedded T without receiving case in (21b), the Inverse Case Filter would be violated.

As we know, because of feature inheritance, T can assign case only if it is selected by C. Therefore in (21a), where *zu* is missing, the infinitival complement is just TP, the embedded T has no probing  $\varphi$ -features, cannot enter into an agree relation and cannot assign case. For this reason, the pronoun *ihn* can agree only with the matrix V and can receive only the matrix case, hence the sentence is grammatical.

## 6. Conclusion

In this paper, I examined wh-infinitives and argued that the German *zu* is an infinitival complementizer, like, for instance, the English *for* and French *de*. I proposed that the difference in grammaticality between German wh-infinitives with *zu* and English wh-infinitives with *to* can be accounted for in terms of feature inheritance. I discussed differences between main and embedded clauses and argued that C of the embedded clause does not have a specifier position. This derives from the fact that only the main/matrix clause must have the head Main and from the fact that all features of the embedded C are passed down to the head of its complement. Thus, since there are no features on the embedded C that could trigger merger to SpecCP, feature inheritance derives effects of the Doubly Filled COMP Filter. In addition, the current proposal provides us with a new argument for feature inheritance. We also saw that the proposal makes an interesting prediction with respect to movement. Specifically, given feature inheritance, elements move through the specifier position of phase complements and not through the edge of phase heads. I also

presented a new analysis of *zu* ECM constructions and showed that ECM data support the view that the verbal marker *zu* is an infinitival complementizer.

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