# Chapter 1 Doubly filled COMP in Czech and Slovenian interrogatives

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This article investigates the syntax of doubly filled COMP patterns in Czech and Slovenian interrogatives from a cross-linguistic perspective, concentrating on the differences between Germanic and Slavic doubly Filled COMP. In Germanic, dialects that allow the doubly filled COMP pattern do so to lexicalize a C head specified as [fin] with overt material, which is regularly carried out by verb movement in main clauses (e.g. V2 in German, T-to-C in English interrogatives) and by the interrogative complementizer in embedded polar questions. The insertion of the complementizer has no interpretive effect on the clause and is restricted to embedded clauses. By contrast, in Czech and Slovenian a complementizer can be inserted even in main clauses, and while its presence is optional, its insertion triggers an interpretive difference, resulting in an echo reading. I argue that while in Germanic, the C head is specified as [wh] and is checked off by the wh-element, in Slavic the C is not specified as [wh] and the type of the clause hence matches the properties of the inserted declarative head. In turn, the wh-element moves because it is focused: echo questions are closer to focus constructions than to ordinary questions.

**Keywords**: complementizer, doubly filled COMP, echo questions, finiteness, interrogative clause, wh-movement

### 1 Introduction

Doubly filled COMP patterns and especially their absence from the standard varieties are well known in the literature on West-Germanic languages.<sup>1</sup> In order

<sup>&</sup>lt;sup>1</sup>The West-Germanic languages to be discussed here include English, German, and Dutch. Note that there have been claims in the literature, notably by Emonds & Faarlund (2014) that English is not a West-Germanic but a North-Germanic language. However, as shown convincingly by Bech & Walkden (2016), this claim has serious problems and it cannot be maintained.



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to illustrate the phenomenon, consider first the following interrogatives from Standard English:

- (1) a. Which book did she buy?
  - b. Did she buy a book?
  - c. I don't know which book (\*that) she bought.
  - d. I don't know if she bought a book.

The ban on the insertion of *that* in (1c) is traditionally referred to as the "doubly filled COMP filter", which is supposed to prohibit lexical material in both the specifier and the head of the same XP projection (Chomsky & Lasnik 1977: 446, see also Koopman 2000). Hence, the wh-element *which book* cannot co-occur with the complementizer *that* in embedded constituent questions. The same issue does not arise in embedded polar questions containing *if*, since the interrogative marker is the complementizer in these cases: the impossibility of the sequence *if that* follows from the two elements being in complementary distribution and need not be accounted for by an additional filter rule.

One problem that arises with the doubly filled COMP filter as a general rule is that it is not obeyed in main clause constituent questions. As can be seen in (1a) and (1b), the verb moves up to C in main clause questions in English (and more generally in Germanic), and this results in the co-occurrence of an overt wh-element in SpecCP with the verb in C in main clause constituent questions, see (1a). While one could in principle argue that main clause questions with verb movement are subject to different requirements, another problem arises in connection with various non-standard dialects (as indicated by van Gelderen 2009, Bayer 2004 and Bayer & Brandner 2008, such dialects are found across West Germanic without a very clear geographical restriction), which show clear violations of the doubly filled COMP filter (cf. the data in Baltin 2010):

(2) I don't know which book that she bought.

As can be seen, the co-occurrence of the wh-phrase and *that* is allowed in the non-standard pattern; this is attested across Germanic. This obviously raises the question why doubly filled COMP patterns arise in Germanic and, if applicable, cross-linguistically.

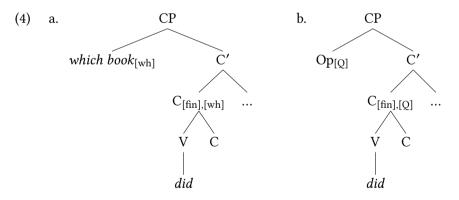
In this article, I propose the following. First, doubly filled COMP patterns in Germanic arise when a finite complementizer is inserted in addition to a whelement in SpecCP and the complementizer serves to lexicalize [fin] in C. In principle, lexicalization can be carried out by other elements, too (such as verbs in main clauses), and the insertion of *that* causes no interpretive differences compared to *that*-less interrogatives. I argue that the lexicalization requirement on [fin] is more generally attested in the syntactic paradigm and is related to V2 and to T-to-C movement. Second, there is no such lexicalization requirement in Slavic languages and the insertion of a complementizer causes an interpretive difference (namely, the clause is interpreted as an echo). I argue that this difference is related to syntactic features as well: while wh-movement in Germanic doubly filled COMP structures is driven by a [wh] feature on the C head, there is no such feature on C in Slavic doubly filled COMP structures.

#### 2 Doubly filled COMP in Germanic

I adopt the general idea of Bacskai-Atkari (2018a), according to which a C with [fin] specification is regularly lexicalized in Germanic, with some inter-language variation. English is somewhat exceptional as it is not a V2 language: the lexicalization rule applies to interrogatives and is manifest in the phenomenon of T-to-C movement. In German, it applies to declaratives as well and results in the matrix V2 configurations. Consider the following matrix interrogatives in English:

- (3) a. Which book did she buy?
  - b. Did she buy a book?

The corresponding structures are shown in (4) below:



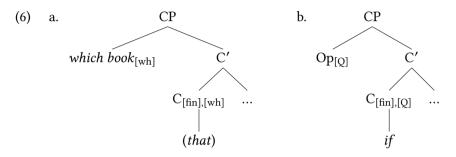
In either case, the C head is lexicalized by way of the verb moving up to C via head adjunction, and the SpecCP position is filled by an operator element. Note that there is a distinction between [wh] and [Q], following the idea of Bayer (2004), whereby [Q] essentially stands for disjunction; wh-elements are [Q] but not all elements with a [Q] specification are [wh] (see Bacskai-Atkari 2018a for [Q] in Germanic). Further, the operator in (4b) is a covert polar operator. The polar operator can in principle be overt (e.g. English *whether*) or covert, and it

marks the scope of a covert *or* (Larson 1985). This operator is inserted directly into SpecCP (Bianchi & Cruschina 2016).

Consider now the following English embedded interrogatives:

- (5) a. I don't know which book (% that) she bought.b. I don't know if she bought a book.
  - 5. Tuon third, in she sought a soon

The corresponding structures are shown in (6):<sup>2</sup>



The interrogative feature has to be marked overtly in embedded questions (there being no distinctive interrogative intonation) and it is done either by an overt complementizer or by an overt operator. Accordingly, the interrogative feature on C can be checked off by inserting an element into C (*if*) or by inserting an element into the specifier (*which book* in (6a) above). By contrast, [fin] can be lexicalized only by an element inserted into C (*that* and *if* in (6) above, but not by e.g. *which book* in the specifier).

Regarding the lexicalization of [fin] in C, the following can be established. In matrix clauses, as shown in (4), [fin] in C is lexicalized via verb movement,

<sup>&</sup>lt;sup>2</sup>Contrary to Baltin (2010), I assume that doubly filled COMP structures are literally doubly filled COMP, that is, there is only a single CP involved; see Bacskai-Atkari (2018b) for arguments on this. Essentially, Baltin (2010) assumes that the ban on overt material in C in sluiced clauses (Merchant 2001) follows directly from the fact that the ellipsis position is located in the highest C head, eliding the complementizer in a lower C position. However, this is in fact not a sound argument since the lack of a complementizer in these cases can be due to phonological factors as well (the complementizer cliticising onto the clause in the languages he examined), which may indeed be subject to cross-linguistic variation. In Slovenian, for instance, wh-sluices can contain a complementizer (e.g. *da* 'that' but apparently also *če* 'if'), see Marušič et al. (2015), indicating that the generalization does not hold. Note that the Slovenian data contradict the judgements given by Merchant (2001: 76), who suggests that while doubly filled COMP patterns are possible in Slovenian in the same way they are attested in other languages (see, for instance, the Danish and Irish data given by Merchant 2001: 76–77), the sluiced version of doubly filled COMP clauses (containing an overt complementizer) is uniformly rejected.

whereby the verb adjoins to C (head adjunction). In embedded clauses, a complementizer is inserted:<sup>3</sup> there are two possible ways here. One is to insert an interrogative complementizer, see (6b), which also checks off the [Q] feature. Further, the insertion of the regular finite subordinator is possible if [wh] is checked off by an overt operator, hence in structures like (6a): this option can be observed in nonstandard varieties. Since, as the structures above demonstrated, lexicalization of [fin] in C is generally attested in the syntactic paradigm, standard varieties in West Germanic have an exception in (6a) by not lexicalising the C head,<sup>4</sup> while nonstandard varieties are completely regular in this respect. Note that the insertion of an interrogative complementizer is not a viable option in cases like (6a) since the insertion of the complementizer would check off the active interrogative feature on the C head,<sup>5</sup> and hence there would be no feature attracting the wh-element to move to the CP (since [Q] is a subset of [wh], an interrogative complementizer would not be incompatible with the feature specification of the head) and thus prevent the movement of the wh-element.

The insertion of the complementizer is thus in line with the general V2 property of Germanic languages and with T-to-C movement in English interrogatives. Further, the insertion of the finite complementizer causes no interpretive difference, and several dialects show optionality with respect to the insertion of the complementizer.<sup>6</sup>

<sup>&</sup>lt;sup>3</sup>While [fin] is lexicalized by verb movement in main clauses, this is generally not possible in embedded clauses: certain verbs in German allow embedded V2 and there are certain dependent clauses (such as hypothetical comparatives and conditionals) that likewise allow verb fronting. As argued by Bacskai-Atkari (2018a), this is due to restrictions from the matrix predicate.

<sup>&</sup>lt;sup>4</sup>According to Bacskai-Atkari (2018a), this has to do with licensing conditions on zero complementizers (i.e., they are licensed in these environments in the standard language). In addition, the "doubly filled COMP filter" is rather the consequence of an economy principle against multiple elements with overlapping functions, which interacts with a principle favouring overt marking, see van Gelderen (2009). This question cannot be examined here in detail.

<sup>&</sup>lt;sup>5</sup>The C head is specified as [wh] and the complementizer has the feature [Q]. The two features are not fully incompatible, though, as [Q] is a subset of [wh] (cf. Bayer 2004). The problem with inserting the complementizer is the deactivation of the feature, as described above, not feature incompatibility.

<sup>&</sup>lt;sup>6</sup>Optionality arises in certain dialects with head-sized wh-phrases that may be inserted into either the specifier or the head, see Bacskai-Atkari (2018b), following Bayer & Brandner (2008). Not all dialects have optionality, though. As there is no interpretive difference between configurations with and without the complementizer, it is actually expected that at least some dialects show optionality; note that while optionality is considered to be problematic for minimalist approaches, dialect data and diachronic data in fact support the view that at least some optionality is allowed in language, to allow gradual variation and change. These issues cannot be pursued here in detail.

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Doubling is possible in polar interrogatives as well if the operator is overt. In English, the operator *whether* can appear in embedded clauses overtly and doubling with *that* can be observed both historically and synchronically (see van Gelderen 2009 for modern substandard varieties); in main clauses, its appearance is restricted to historical examples.<sup>7</sup> Consider:

- (7) a. Whether did he open the Basket? (*The Tryal of Thomas Earl of Macclesfield*; source: Salmon, Thomas and Sollom Emlyn (1730) A complete collection of state-trials, and proceedings for high-treason, and other crimes and misdemeanours: 1715–1725)
  - b. I wot not whether that I may come with him or not. 'I do not know whether I may come with him or not.'

(Paston Letters XXXI)

As can be seen, *whether* is similar to ordinary wh-operators in triggering verb movement to C in main clauses and in allowing the insertion of *that* in embedded clauses; hence, its behaviour contrasts with that of *if*. Importantly, just like in constituent questions, there is no interpretive difference between the version with *that* and the version without *that* of the same sentence.

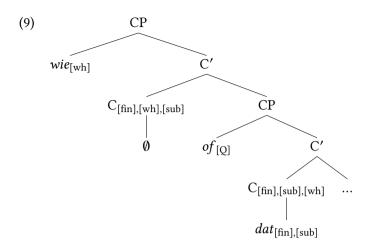
Regarding the separation of [wh] and [Q] mentioned above, it must be mentioned that the co-occurrence of two interrogative elements is possible in certain languages (Bayer 2004). This can be observed in Dutch dialects in examples like (8) below:

(8) Ze weet wie of dat hij had willen opbellen she knows who if that he had want call 'She knows who he wanted to call.'

(Bayer 2004: 66, ex. 17, citing Hoekstra 1993)

As can be seen, in this case three overt elements appear in the CP-domain: the wh-operator itself, the Q-element *of* 'if' and the finite complementizer *dat* 'that'. Again, no interpretive difference can be attributed to the insertion of multiple elements: clauses with the combination *wie dat* 'who that' and clauses with a single *wie* 'who' have the same interpretation, too. The structure for the CP-domain in (8) is shown below:

<sup>&</sup>lt;sup>7</sup>As mentioned above, verb movement to C in embedded clauses is subject to restrictions (due to the matrix predicate).



The polar operator is in the scope of a wh-operator, and the clause is ultimately specified as [wh]: hence, even if the Q-element *of* is inserted into the lowest SpecCP, [wh] is not checked off and the CP projects further (essentially, the [wh] feature of the lower C is inherited by the higher C).

To conclude this section, it can be established that doubly filled COMP patterns in Germanic interrogatives follow from a requirement on lexicalising [fin] on C, which ultimately follows from the V2 property of Germanic languages, whereby English is slightly exceptional in that V2 is no longer attested, but the same applies to T-to-C movement in interrogatives. The expectation is therefore that genuine doubly filled COMP patterns should be different or not available in languages where there is no lexicalization requirement on [fin] in main clause interrogatives.<sup>8</sup>

#### 3 Czech

In this section, I am going to overview the possible patterns in Czech main and embedded questions. I will show that doubling is possible, yet while the resulting combinations are in part surface-similar to their Germanic counterparts, they are associated with a particular (echo) interpretation.

<sup>&</sup>lt;sup>8</sup>Note that while V2 (or T-to-C) is probably necessary for genuine doubly filled COMP, it is not true the other way round: it is indeed possible that the lexicalization of [fin] does not hold in all constructions and a language may be V2 without showing doubly filled COMP effects: for instance, Standard German (and any variety of German lacking doubly filled COMP patterns) is such a language.

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Just like in English, constituent questions in Czech contain an overt wh-element fronted to the left edge of the clause:<sup>9</sup>

- (10) a. Kdo přijel? who arrived.3sg 'Who arrived?'
  - b. Ptala se, kdo přijel. asked.3sg.F REFL who arrived.3sg
     'She asked who arrived.'

I assume that the wh-element moves to SpecCP, following Rudin (1988) and Kaspar (2015).

Regarding doubly filled COMP patterns, the insertion of  $\check{z}e$  'that' is possible. However, this results in an interpretive difference from ordinary questions and essentially renders echo questions where the speaker asks for the value of the wh-element<sup>10</sup> (see Kaspar 2015, Gruet-Skrabalova 2011):

- (11) a. Kdo že přijel? who that arrived.sg.m 'WHO has arrived?'
  - b. ? Ptala se, kdo že přijel. asked.sg.F REFL who that arrived.sg.M
    'She asked who was said to have arrived.'

<sup>&</sup>lt;sup>9</sup>Note that I am only considering questions involving a single wh-phrase in this paper and do not venture to examine multiple wh-fronting. As argued by Bošković (2012), multiple wh-questions actually involve the movement of a single wh-phrase due to a [wh] feature, and the remaining wh-elements are either located in situ or are fronted as focused phrases: crucially, the CP does not contain multiple [wh] features attracting various wh-elements. See also Gruet-Skrabalova (2011) on Czech and Mišmaš (2016) on Slovenian. In this sense, further wh-phrases and their position in the clause are not relevant to the present discussion, which is centred on clause-typing issues.

<sup>&</sup>lt;sup>10</sup>As Jiri Kaspar (p.c.) informs me, constituent questions with *že* can be interpreted as canonical echo questions (where the value of the wh-element was inaudible), reminder questions (the speaker has forgotten the value), verification questions (the speaker is unsure about the value), and surprise questions (the speaker assumes a different value). Since all these types have been subsumed under the umbrella term "echo questions" in the literature, as opposed to ordinary questions, I will simply use the label "echo questions" in this paper but it should kept in mind that this term subsumes various subtypes (this applies to the Slovenian data, too).

The sentence in (11a) is an appropriate reaction to a statement such as 'Peter arrived'. The sentence in (11b) is the embedded version thereof; its markedness stems from the fact that it is relatively difficult to find contexts in which an embedded echo is felicitous. As far as the status of  $\check{z}e$  is concerned, I follow Kaspar (2015) in assuming that this element is located in C;<sup>11</sup> hence, its co-occurrence with the wh-element in SpecCP makes the doubly filled COMP effect possible.

Consider now the following polar questions:

- (12) a. Přijela Marie? arrived.sg.F Mary 'Has Mary arrived?'
  - b. Ptala se, jestli Marie přijela. asked.sg.f REFL if Mary arrived.sg.f 'She asked if Mary arrived.'

As can be seen, the embedded polar question in (12b) is introduced by *jestli* 'if', while its matrix interrogative counterpart in (12a) has no morphophonological marker.

The insertion of *že* 'that' into clauses with *jestli* is impossible:

(13) \* Ptala se, jestli že Marie přijela.
 asked.sg.f REFL if that Mary arrived.sg.f
 'She asked if Mary arrived.'

The elements  $\check{z}e$  and jestli are in complementary distribution regarding their syntactic position (but not their function<sup>12</sup>); hence, since  $\check{z}e$  is in C, it can be concluded that jestli is in C, too. This is in line with the etymology of jestli, a grammaticalized form of the question particle li and the verb 'be': in Czech, if C is filled by the clitic -li, the verb moves up to C to host the clitic (Schwabe 2004).

In addition to the constructions so far, it should be mentioned that wh-elements may appear in polar questions headed by *jestli*, rendering an echo reading:

 (i) \* Ptala se, že Marie přijela. asked.sg.F REFL if Mary arrived.sg.F
 'She asked if Mary arrived.'

<sup>&</sup>lt;sup>11</sup>As Kaspar (2015) shows, there is in fact more than one *že* element in Czech, see also Gruet-Skrabalova (2012); I will only concentrate on the declarative complementizer appearing in the clauses under scrutiny.

<sup>&</sup>lt;sup>12</sup>This means that while they occupy the same position, C, in syntax, they do not have the same distribution and *že* cannot introduce questions by itself:

- (14) a. Kdo jestli přijel? who if arrived.sg.м 'Did WHO arrive?'
  - b. \* Ptala se, kdo jestli přijel. asked.sg.f REFL who if arrived.sg.M
    'She asked about whom the question arose whether they arrived.'

The sentence in (14a) is an appropriate reaction to a question such as 'Did Peter arrive?', and hence is an echo of a polar question.<sup>13</sup> As can be expected, the insertion of že 'that' is again impossible:<sup>14</sup>

- a. \* Kdo jestli že přijel?
   who if that arrived.sg.м
   'Did WHO arrive?'
  - b. \* Ptala se, kdo jestli že přijel. asked.sg.F REFL who if that arrived.sg.M
    'She asked about whom the question arose whether they arrived.'

Regarding the interrogative patterns in Czech, the following points can be established. First, doubly filled COMP effects are possible with *že* 'that' and with *jestli* 'if': both render echo questions (though these echo questions are licensed in two different kinds of context) and the elements *že* and *jestli* cannot occur together. Second, the insertion of the complementizer (in addition to the element in the specifier) is not attested in ordinary constituent questions. Third, the insertion of either complementizer (in addition to the wh-element) triggers an echo interpretation. Fourth, the complementizer is available in main clause echo questions, contrary to ordinary main clause questions, and in this way the echoed statement/question is surface-similar to an embedded clause, in line with the fact that it is dependent on a particular context in order to be felicitous.<sup>15</sup> This is contrary to what was seen in Germanic, where no echo interpretation is attested and

<sup>&</sup>lt;sup>13</sup>The impossibility of embedding such an echo, as in (14b), may well have pragmatic reasons, i.e. such a sentence is not felicitous in any context. Note that if the Czech pattern were an ordinary doubly filled COMP pattern, such as in (substandard) West Germanic, then (14b) should be grammatical and (14a) should be ruled out.

<sup>&</sup>lt;sup>14</sup>Note that the impossibility of the combinations discussed in this paper is not merely due to their relative order: changing their relative order (e.g. *že jestli*) results in an ungrammatical configuration, too.

<sup>&</sup>lt;sup>15</sup>Note that there are other instances of subordinating C-elements appearing in main clauses, as is the case for German *ob* 'if' in V-final main clause questions that are pragmatically distinct from ordinary questions, see e.g. Zimmermann (2013). Naturally, the discussion of this issue would go far beyond the scope of the present paper.

where complementizers are not inserted in main clause constituent questions. Fifth, the patterns in Czech suggest that the clause type reflects the properties of the complementizer, not those of the wh-element (see the discussion in §5); this is again contrary to Germanic, where the presence of a wh-element indicates that the clause is a true interrogative.

### 4 Slovenian

This section is going to overview the possible patterns in Slovenian main and embedded questions. I will show that doubling is possible in similar ways to what was attested in Czech; again, the resulting combinations are in part surfacesimilar to their Germanic counterparts, yet they are associated with a particular (echo) interpretation.

Just like in English and Czech, constituent questions in Slovenian contain an overt wh-element fronted to the left edge of the clause:

(16) a. <b>Kdo</b> pride? who comes		who comes	
		'Who is coming?'	(Hladnik 2010: 13, ex. 9)
	b.	Vprašal je, <b>kdo</b> pride. asked.sg.M AUX.3sg who comes	
		'He asked who was coming.'	(based on Hladnik 2010: 14, ex. 11 <sup>16</sup> )

I follow Golden (1997) and Hladnik (2010) in assuming that the wh-element moves to SpecCP.

Just like in Czech, the insertion of da 'that' is possible; this renders echo questions (see Hladnik 2010).<sup>17</sup>

(i) Deček, katerega sem srečal včeraj, me je prepoznal.
 boy that AUX.1SG met yesterday me AUX.3SG recognized
 'The boy that I met yesterday, recognized me.' (Marušič 2008b: 266)

<sup>&</sup>lt;sup>16</sup>As noted, the data are essentially taken from Hladnik (2010); however, the translations have been changed in accordance with what my informants gave as more natural translations.

<sup>&</sup>lt;sup>17</sup>Just like in the Czech examples, the verb immediately follows the wh-element; however, this is not an effect of V2 in either language. In Slovenian, certain clitics, including auxiliaries, appear in a second position, as in (i):

As can be seen, the clitic *je* follows the element *me*, and is hence the second element in the clause. However, as shown by (ii), it appears that *je* can follow both *kdo* and *da* in doubly filled COMP patterns:

(17) a. Kdo da pride? who that comes 'WHO is coming?'

(Hladnik 2010: 13, ex. 9)

b. ? Vprašal je, **kdo da** pride. asked.sg.m AUX.3sg who that comes 'He asked who was said to be coming.'

(based on Hladnik 2010: 14, ex. 11)

The sentence in (17a) is an appropriate reaction to a statement such as 'Peter is coming'; the sentence in (17b) shows the embedded version and is marked for pragmatic reasons, just as was the case for its Czech counterpart. Regarding the status of da, I follow Hladnik (2010) in assuming that it is located in C; hence, when appearing together with a wh-element, (surface) doubly filled COMP effects are possible.<sup>18</sup>

(ii) Kdo da je prišel? who that AUX.3SG come.SG.M 'WHO came?'

Since je appears after the elements kdo and da, one might wonder whether kdo da is a constituent or whether *kdo* is in a higher clause. However, both options are unlikely: an element in the specifier cannot form a constituent with the C head, and postulating a higher clause to locate a single element would be highly problematic, too. I assume that *kdo* is in SpecCP and da in the C head of the same CP, whereby the two elements neither form a constituent nor are they located in different clauses. There is in fact no need to assume a strict surface secondposition requirement on Slovenian clitics. As shown by Marušič (2008b), analyses assuming a fixed syntactic position such as C for clitics, as by Golden & Sheppard (2000), face a number of problems and the relative position of the clitic should rather be considered phonological in nature (in line with general "Wackernagel" phenomena). In this case, the clitic naturally follows the element in the C head even if the specifier of the CP is filled by some additional element since there is no way of inserting the clitic in between the element in the specifier and the element in the head of a single CP projection. If the wh-element and the complementizer were located in separate projections, one might expect the clitic to intrude, which is not the case. Note that, strictly speaking, the same holds even if one assumes a fixed syntactic position for the clitic (a projection below CP or another CP, resulting in a split CP) since the filling of the specifier in a higher projection does not influence the realization of the clitic in some lower projection.

 $^{18}$  Again, one might wonder whether the wh-element is indeed in the same CP as the complementizer *da*. In Slovenian, a null complementizer is licensed only if the wh-element is in the relevant specifier: it is not possible if the wh-phrase undergoes long distance movement, and in these cases *da* is inserted, see Golden (1997), Marušič (2008a). Hence, one might think that the doubly filled COMP effect in echo questions arises merely because the complementizer has to be overt if the wh-element is in a higher clause. However, as shown by Mišmaš (to appear), echo questions in Slovenian are in fact possible even without *da*, which indicates that the wh-element does not move out of the clause where it is base-generated. Consider now the following polar questions:<sup>19</sup>

(18)	a.	A pride?						
		Q comes						
		'Is he coming	g?'		(	based on Hladnik 2010: 15, ex. 12)		
	b.	Vprašal je	-	če	pride.			
	asked.sg.м Aux.3sg whether comes 'He asked whether he was coming.'							
					(	based on Hladnik 2010: 15, ex. 12)		

As can be seen, a question particle -a or  $\check{c}e$  - is licensed both in main clause and in embedded interrogatives. The insertion of da 'that' is possible in both cases and it renders an echo reading (cf. Hladnik 2010):

(19)	a.	A da	pride?				
		q that	comes				
		'Is it tı	ue that	he is comir	1g?'	(based on Hladnik 2010: 15, ex. 12)	
	b.	? Vpraš	al je,	če	da	pride.	
	asked.sg.м Aux.3sg whether that comes						

'He asked whether it was true that he was coming.'

(based on Hladnik 2010: 15, ex. 12)

The sentence in (19a) is an appropriate reaction to a statement such as 'He is coming'. Importantly, da and  $a/\check{c}e$  are not in complementary distribution, which suggests that  $a/\check{c}e$  are not in C, contrary to Czech *jestli*. Instead, in the given constructions they are rather operators located in SpecCP, similarly to English *whether*.<sup>20</sup>

Finally, it must be mentioned that wh-elements may appear in polar questions; this renders an echo interpretation, similarly to what was observed in Czech. Note that the acceptability of these constructions in Slovenian is dependent on the dialect/idiolect, as also indicated by Hladnik (2010) in connection with all the doubling patterns, and this seems to be especially true in the case of the triple

<sup>&</sup>lt;sup>19</sup>Again, I cannot examine the distribution of *a* and *če* beyond the constructions under scrutiny and will discuss only the differences within the given syntactic paradigm.

<sup>&</sup>lt;sup>20</sup>Note that *če* can appear in conditional clauses, too; however, the discussion of this falls outside the scope of the present paper.

combination in (20b) below (this was not accepted as grammatical by my main informant).<sup>21</sup> Consider the following examples:

(20)	a.	% Kdo če	pride?	
		who whether	comes	
		'Is WHO comin	ng?'	(based on Hladnik 2010: 15, ex. 13)
	b.	% Kdo če	da pride?	
		who whether	that comes	
		'Is it true that V	WHO is coming?'	(based on Hladnik 2010: 15, ex. 13)

The sentence in (20a) is an appropriate reaction to a question such as 'Is Peter coming?', and the sentence in (20b) is an appropriate reaction to a question such as 'Is it true that Peter is coming?'. Crucially, in both sentences in (20), the Q-element is  $\check{c}e$  and not *a*, as opposed to ordinary main clause interrogatives.<sup>22</sup> This indicates that the difference from ordinary questions is encoded morphosyntactically, too.<sup>23</sup>

Regarding the interrogative patterns in Slovenian, the following points can be established. First, doubly filled COMP effects are possible with da 'that' and  $a/\check{c}e$  'if'. Second, the complementizer (in addition to the element in the specifier) is not inserted in ordinary constituent questions and may be inserted in ordinary polar questions. Third, the insertion of either complementizer (in addition to the wh-element or the Q particle in the specifier) triggers an echo interpretation. Unlike Czech, the echo of a question (a "double echo" in Hladnik 2010) is

<sup>&</sup>lt;sup>21</sup>Unfortunately, since the focus of Hladnik (2010) is relative clauses, the exact geographical distribution of the interrogative patterns cannot be recovered from his thesis, and it remains unclear whether the acceptability of (20) shows relatively clear regional differences or whether the differences hold rather between idiolects. As Hladnik (2010: 6–8) describes in the introduction, he conducted a larger pilot study of Slovenian dialects, whereby the focus was on syntactic doubling and on variation in dialects. Altogether, over 70 responses were collected from 55 test locations; further, since Slovenian speakers acquire a regional dialect as a rule, the data are quite reliable in that they reflect regional varieties rather than the standard language.

<sup>&</sup>lt;sup>22</sup>As one of the reviewers informs me, this is true also if the clause is sluiced: the element *kdo* can be followed by *če* but not by *a*. This is expected if sluiced clauses are derived from regular interrogatives. Note also that in cases like (20a), the wh-element may remain in situ, in line with the assumption that the movement involved here is not genuine wh-movement but rather focusing (which preferably involves fronting); see the discussion in §5.

<sup>&</sup>lt;sup>23</sup>As was noted before, certain contexts license clauses that are surface-similar to ordinary embedded clauses, such as matrix questions with *ob* 'if' in German. The pattern in (20) again indicates that the particular echo constructions are discourse-dependent and cannot appear in the same environments as ordinary main clause questions.

Sequence	Clause-typing feature	Clause type	Examples
WH Q FIN	[wh]	constituent question	(8)
WH Q	[wh]	constituent question	-
WH FIN	[wh]	constituent question	(2)
WH	[wh]	constituent question	(1c)
Q FIN	[Q]	polar question	(7b)
Q	[Q]	polar question	(1d)

Table 1: Clause typing and Germanic doubly filled COMP

possible in Slovenian (at least dialectally, see (20) above). Fourth, the complementizer is available in main clause echo questions, contrary to ordinary main clause questions, and in this way the echoed statement/question is surface-similar to an embedded clause, in line with the fact that it is dependent on a particular context in order to be felicitous. This is similar to Czech and contrary to what was seen in Germanic, where no echo interpretation is attested and where complementizers are not inserted in main clause constituent questions. Fifth, the patterns in Slovenian, just like in Czech, suggest that the clause type reflects the properties of the complementizer, not those of the wh-element (see §5); this is again contrary to Germanic, where the presence of a wh-element indicates that the clause is a true interrogative.

#### 5 The analysis

The present paper investigates various patterns involving wh-elements, Q elements and finite subordinators in Germanic and in Slavic languages. In this section, I am going to overview the behaviour of these combinations first.

The combinations observed in Germanic are given in Table 1; these combinations are attested in embedded clauses only.

As can be seen, the type of the clause always matches the leftmost element in the linear sequences. That is, once a wh-element is inserted, the clause can only be a constituent question. If there is no wh-element but a Q element is present, the clause can only be a polar interrogative. Naturally, a clause is always typed by the C head but certain features on the C head are checked off by elements moving to the specifier, as in wh-questions (yet the wh-elements do not themselves type the clause).

Sequence	Clause-typing feature	Clause type	Examples
WH Q FIN	[FIN]	declarative, double echo	(20b)
WH Q WH FIN	[Q] [FIN]	polar question, echo declarative, echo	(14a), (20a) (11a), (17a)
WH	[wh]	constituent question	(11a), (17a) (10b), (16b)
Q FIN	[FIN]	declarative, echo	(19a)
Q	[Q]	polar question	(12b), (18b)

Table 2: Clause typing and Slavic doubly filled COMP

The combinations observed in Slavic (Czech and Slovenian) are given in Table 2; these combinations are attested both in embedded and in matrix clauses. As indicated, the type of the clause always matches the rightmost element in the linear sequences, contrary to the Germanic pattern. That is, once the finite complementizer is inserted, the clause is typed as a declarative, but the presence of the interrogative elements leads to an echo interpretation. Consequently, there is a split between form and function that is not attested in Germanic. If there is no finite complementizer but a Q element is present, the clause is a polar interrogative, but the presence of the wh-element leads to an echo interpretation. Again, a clause is always typed by the C head but the Slavic pattern is crucial because the insertion of an operator into the specifier does not involve feature checking with the head: the C head lacks the features associated with the operator. Ordinary questions are possible only when a single interrogative element is present.

Regarding Germanic doubly filled COMP patterns, the following can be established. On the one hand, the movement of the wh-operator or the insertion of the polar operator into SpecCP take place for clause-typing reasons and can be thus drawn back to question semantics and to the requirement on feature checking with C. On the other hand, the insertion of the finite complementizer takes place in order to lexicalize [fin] in C.

By contrast, regarding Slavic doubly filled COMP patterns, the following can be established. On the one hand, the insertion of the operator (either a wh-operator or the polar operator) into SpecCP takes place due to an [EDGE] feature on the C head containing the elements introducing the echoed question, and there is no feature checking with C (given that there is no interrogative feature to be checked, as echo questions are not typed as interrogatives, see Bošković 2002: 363).<sup>24</sup> On the other hand, the insertion of the complementizers into C takes place because they type the echoed clause.

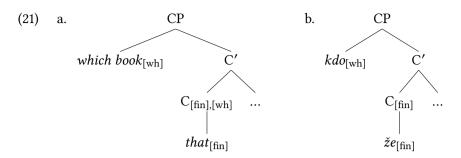
As far as echo questions are concerned, I assume that they are not true questions and are closer to focus constructions (cf. Bošković 2002, Artstein 2002). This is in line with the analysis of Bošković (2002), who claims that the fronting of echoed wh-phrases, as well as that of non-first wh-phrases in multiple fronting constructions, are independent of a strong [wh] feature on C. Accordingly, Bošković (2002: 359–364) analyses the relevant constructions as instances of focus fronting. Hence, the interrogative interpretation arises locally, similarly to English, where there is no wh-movement in echo questions, indicating that there is no [wh] feature on the C head (cf. Bošković 2002: 363).

We saw earlier that Slavic languages may allow embedded echo questions, even though these configurations are marked compared to their matrix counterparts. That is, the clause can be taken by a predicate taking interrogative complements (e.g. *ask*), which is normally possible if the clause is typed as [wh]. I assume that in echo clauses this is related to feature percolation: namely, the features of the element in the specifier can percolate up and hence the interrogative property, which is interpretable on the wh-element itself, is visible to the matrix predicate.<sup>25</sup> However, there is no percolation downwards, and hence the echoed clause itself is not affected.

Consider now the structures for WH FIN sequences in Germanic (here: English) and Slavic (here: Czech), respectively:

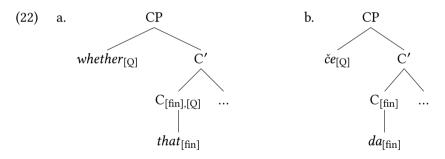
<sup>&</sup>lt;sup>24</sup>Note that the WH Q sequence is special in this respect because the clause is typed as a polar interrogative by the Q-element, just as the declarative clause is typed as declarative by the relevant element in C. However, this configuration is also regular in the sense that the wh-element itself does not type the clause. Importantly, there is no incompatibility between an interrogative clause type and an echo reading, provided that the interrogative is typed independently of the echoing wh-phrase.

<sup>&</sup>lt;sup>25</sup>The idea of feature percolation is well known in the syntactic literature and is subject to debates concerning its exact application and restrictions. As described by Heck (2008: 5–7), pied-piping has been treated in terms of feature percolation of the wh-feature since Chomsky (1973: 273), whereby the wh-feature projects to the DP-level and then percolates up to the PP level, that is, it is allowed to cross a phrase boundary. Essentially the same is proposed here in terms of the wh-feature percolating up to the CP, without causing changes in the C head itself (just like in the case of PPs, where feature percolation does not change the properties of the P). Naturally, this again raises the question how far a feature is allowed to percolate, the discussion of which clearly cannot be carried out in the present paper.



As can be seen, both configurations result in a doubly filled COMP pattern. However, the C is specified as [wh] only in (21a), which is a true interrogative, while the Slavic pattern in (21b) is an echo question. The complementizer is inserted in certain dialects in Germanic to lexicalize [fin], while Slavic complementizers are inserted to type the clause.<sup>26</sup>

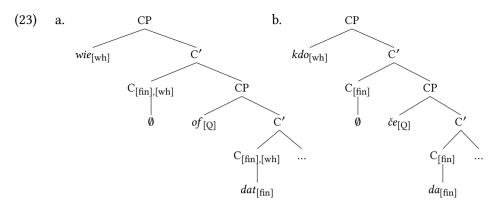
Consider now the structures for Q FIN sequences in Germanic (here: English) and Slavic (here: Slovenian), respectively:



Again, the surface doubling configuration results in doubly filled COMP patterns in both cases. The C is specified as interrogative, this time as [Q], only in Germanic, see (22a), while in Slavic the question is merely echo, see (22b). Further, the complementizer is inserted in certain dialects in Germanic to lexicalize [fin], while Slavic complementizers are inserted to type the clause.

Finally, consider the structures for WH Q FIN sequences, in Germanic (here: Dutch) and Slavic (here: Slovenian), respectively:

 $<sup>^{26}</sup>$ Note that this does not mean that the complementizer is always overt. Declarative complementizers tend to have zero counterparts cross-linguistically and the same applies to e.g.  $\ddot{z}e$  and da, too. This means that echo questions are possible without the insertion of an overt  $\ddot{z}e$ , too. This option has not been discussed in detail here because the present paper is devoted to doubling patterns in the CP-domain.



As can be seen, the CP is split in both cases,<sup>27</sup> yet the C head is specified as [wh] only in the Germanic case, see (23a), while the Slovenian configuration represents an echo, see (23b). In (23a), the [wh] feature of the lower C head is not checked off, since the polar operator in SpecCP is merely [Q], a subset of [wh]; hence, the CP projects further. In (23b), there is no feature checking associated with either of the operators; they are inserted to render the echo reading. Again, the finite complementizer is inserted in certain dialects in Germanic to lexicalize [fin], while Slavic complementizers are inserted to type the clause.

The differences between Germanic and Slavic essentially go back to differences in the requirement of lexicalising [fin]: since this requirement is present in Germanic, the finite complementizer is inserted merely due to this requirement, while its appearance in Slavic doubly filled COMP constructions contributes to the echo reading by way of typing the clause merely as [fin] but not as [wh] or [Q].

#### 6 Conclusion

This paper investigated doubly filled COMP effects in Germanic and Slavic (to be more precise, Czech and Slovenian). It was shown that while the two language groups represent similar surface configurations, they differ crucially in the distribution and the interpretation of these structures. In Germanic, doubly filled COMP arises due to a requirement on filling a C head specified as [fin]; this is in line with the general properties of V2 (e.g. in German) and T-to-C (English).

<sup>&</sup>lt;sup>27</sup>In the model adopted here, based on Bacskai-Atkari (2018b), the CP is split if certain features have to project further to be checked off but there is no predefined cartographic template in the sense of Rizzi (1997). However, the assumption that there can be multiple CPs (similarly to VPs) is widespread in the literature.

Importantly, the insertion of the finite complementizer takes place only in embedded questions and it brings interpretive differences from complementizer-less clauses. In Slavic, doubly filled COMP arises in echo questions and the complementizer is inserted to type the clause, while the element in the specifier does not check off its features with the head. The insertion of the complementizer involves an important interpretive difference from complementizer-less clauses, since the lack of the complementizer is associated with ordinary questions, while the presence of the complementizer triggers an echo interpretation. Taking all this into account, it can be concluded that the differences between Germanic and Slavic doubly filled COMP structures can be accounted for in a principled way.

## Abbreviations

3	third person	PTCP	participle
AUX	auxiliary	Q	question particle/marker
F	feminine	REFL	reflexive
М	masculine	SG	singular

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